

Research on the relationship of consumers' social capital, green trust and the continuous buying intention of green agricultural products

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Abstract: The advantages and characteristics of private domain traffic channels have not been fully demonstrated, nor have they solved the problem of insufficient consumer trust. The purpose of this study is to analyze the relationship between consumer social capital elements, green trust, and the continuous buying intention of green agricultural products. Building on previous research, this study constructs a conceptual framework of the influencing factors on the continuous buying intention of green agricultural products based on SOR theory and proposes research hypotheses. Quantitative research was selected as the methodology, utilizing a questionnaire to collect primary data. By constructing a structural equation model, the relationships among the variables were explored and validated. The findings indicate that social capital indirectly influences the repurchase behavior of green agricultural products through green trust, with relational social capital demonstrating significantly stronger effects. Future research should address limitations related to sampling and methodology, explore multi-dimensional social capital and contextual factors further, and provide empirical support for enterprises to develop trust-centric green marketing strategies.

Keywords: Continuous buying intention, Green agricultural products, Green trust, Private domain traffic, Social capital.

1. Introduction

The development of electronic platforms has promoted the change of residents' consumption scenarios and the diversification of consumer information channels, and residents' demand for the effectiveness and reliability of information has been greatly increased. At the same time, enterprises also need to improve the efficiency of traffic use and reduce traffic costs. This is where private domain traffic comes into play -- by helping brands maintain direct communication with target customers and engaging them directly to increase retention and retention [1]. As a result, private domain traffic becomes a choice for both businesses and consumers.

Private domain traffic is a method of "channeling" a brand's communication with its customers into a private channel, where it has complete control over how and when it communicates with these audiences. This is in contrast to the "public domain," which is a source of traffic that is not controlled or owned by the brand. 2020 is also known as the "First year of private domain traffic", and private domain traffic operation has attracted more and more attention from enterprises and brands [2].

Data from the Ministry of Agriculture and Rural Affairs showed that the online retail sales of agricultural products nationwide reached 587.03 billion yuan in 2023, an increase of 12.5% over the previous year, and the online retail sales of agricultural products nationwide reached 422.1 billion yuan after maintaining rapid growth for many consecutive years [3].

In this context, private domain traffic has formed a new supply of agricultural products to realize their commodity value at low cost, which can just meet the demand of agricultural products to realize

their commodity value at low cost. In other words, the economic characteristics of private domain traffic are highly consistent with the inherent needs of commercialization of agricultural products: to achieve a high frequency of daily buying at the lowest possible transaction cost.

The buying behavior and intention of green agricultural products is an important research direction in the field of green agricultural products. Scholars constructed a conceptual framework from the relevant factors affecting the buying intention, and used empirical methods to verify the effects of various influencing factors on the buying behavior and intention of green agricultural products [4].

The research finds that, food incident information resulted in a lower level of institutional trust. Negative information increased risk perception and behavioral changes [5]. Green agricultural products industry has the characteristics of "retail oriented, long production and marketing chain". Once a problem occurs in a certain link, it will affect the final quality of agricultural products to a large extent, resulting in a "trust break" for sellers and affecting the stability of the entire supply chain.

Cui and Wang [6] found that information quality and service quality can positively affect buying intention, but social interaction link, trust, common vision have no obvious impact on buying intention, indicating that in the social context, the application of internet technology does not necessarily mean that the relationship between enterprises and consumers is closer, and there is still a large distance between social networking and consumption transformation. This is mainly caused by the characteristics of green agricultural products, such as the information asymmetry between enterprises and consumers, the hidden attributes of green agricultural products, and consumers' green cognition, which all lead to the problem of weak continuous buying intention of green agricultural products [7].

However, no scholars have studied its impact on the buying intention of green agricultural products from the dimension of consumers' social capital, and there is a lack of systematic attention to the measurement of relevant paths. Only by focusing on enhancing consumers' social capital elements, promoting consumers' participation and interaction, and promoting consumers' trust and identity, can the benign development of private domain traffic channels be promoted.

Xu and Liu [8] found that consumers' cognition and trust in green agricultural products can positively affect consumers' buying intention of green agricultural products. Zhou and Sun [9] found that improving the predictability of consumers' green production behaviors of producers helps to promote the reconstruction of mutual trust between production and marketing parties. Morgan, et al. [10] used the semi-structured interview method to analyze and found that the sense of connection and trust between the production and marketing parties helped to rebuild the trust community of green agricultural products. It can be seen that consumers' lack of trust in green agricultural products will reduce their willingness to continue purchasing green agricultural products. Therefore, in order to promote the continuous buying of green agricultural products, we should pay attention to consumers' green trust in private domain merchants.

2. Objectives of Research

The related factors of social capital can help improve consumers' information cognition of products/services, help enterprises better carry out Social Customer Relationship Management (SCRM) under the background of private domain traffic. This study attempts to analyze the relationships between consumers' social capital, green trust and continuous buying intention of green agricultural products, and their influencing paths. The main objectives of this study are as follows:

1. To analyze the relationships of relational social capital, structural social capital on continuous buying intention of green agricultural products respectively.
2. To analyze the relationships of relational social capital, structural social capital on green trust respectively.
3. To analyze the relationships of green trust on continuous buying intention of green agricultural products.

3. Literature Review and Research Hypotheses

3.1. Social Capital and Continuous Buying Intention

Lin [11] believes that social capital is the ability of actors to deploy and mobilize scarce resources contained in social networks. The amount of social capital reflects the quantity and quality of resources that an individual can obtain from the social relationship network, and can measure the social value of an individual. The accumulation of social capital, especially the establishment of trust, can enhance consumers' confidence in goods and services. In social networks, consumers get more information about products and services through word-of-mouth recommendation, friend evaluation, etc., which increases their trust in product quality [12] thus increasing their willingness to continue buying. Based on relevant studies, social capital is divided into relational social capital and structural social capital, which have an impact on the continuous buying intention from different aspects.

Relational social capital mainly reflects the community members' recognition, trust and reciprocity of online communities or online organizations in the social media environment [13]. Relational social capital can create a real and trustworthy consumption atmosphere in the background of private domain traffic, form consumer trust, thus bringing sincere and pleasant feelings, narrowing the distance between consumers and products, and promoting their shopping behavior.

Structural social capital mainly refers to the interconnection of various resources among participants, and can measure the interaction effectiveness among network members [13]. Structural social capital is an important predictor of collective behavior [14]. Compared with other consumption scenarios, the density, level and fluency of the network structure that consumers are in determines the efficiency of obtaining more information and the flow and exchange of resources in the private domain traffic, thus affecting consumers' buying intention.

In private domain traffic channels, consumers are not only concerned about the product, but also about the relationships and interaction. In other words, it resonates with other consumer values and consumption views thus promoting consumers' buying. Therefore, the following research hypothesis was proposed:

H₁: There is a significant relationship between relational social capital and continuous buying intention of green agricultural products.

H₂: There is a significant relationship between structural social capital and continuous buying intention of green agricultural products.

3.2. Social Capital and Green Trust

Green trust refers to the degree of public trust in environmental protection, sustainable development and green policies and practices. Chen [15] believes that green trust is consumers' willingness to rely on green products or services. In the context of private domain traffic, social capital can be reflected as consumers' trust in the environment of private domain traffic, the activity of participating in private domain traffic, and the ability to obtain information and support from private domain traffic.

Consumers with high social capital usually have wider and closer social networks, which provide them with rich sources of information [16]. In a tightly structured and highly interactive social network, it is easier for members to form relationships of mutual knowledge and familiarity, which provides soil for the establishment of goodwill trust. At the same time, the structural characteristics of the network (such as centrality) may affect the spread and diffusion of trust [4].

Specifically, a tight private domain traffic environment facilitates the dissemination of information and knowledge about green agricultural products. When consumers communicate and share information frequently with each other, consumers' trust in enterprises can be enhanced. Through the social network in private domain traffic, individuals can observe the purchasing behavior of others and be influenced by positive or negative information, thus affecting the formation of their green trust [17]. Therefore, the following research hypothesis was proposed :

H₃: There is a significant relationship between relational social capital and green trust.

H₃: There is a significant relationship between structural social capital and green trust.

3.3. Green Trust and Continuous Buying Intention

Chen [18] argues that green trust refers to the willingness to rely based on beliefs and expectations about the trustworthiness, benevolence, and competence of products and services regarding environmental performance. According to Garbarino and Johnson [19] customer trust is a significant determinant of future buying intention. Chen [15] believes that green trust is consumers' willingness to choose to rely on green products or services. Previous studies have shown this Xu and Liu [8] and Chen [15] green trust is a factor that affects customers' transaction tendency in online networks.

According to Xu and Liu [8] goodwill is the initial key factor in fostering trust among merchants in online networks. goodwill trust is when one party trusts the other party for a goodwill reason, believing that the other party is reliable, upright and responsible. Ridings, et al. [20] points out that benign trust significantly enhances consumers' buying intention in the e-commerce environment. In the field of green agricultural products consumption, this confidence comes from consumers' recognition of the enterprise's ability and goodwill to provide qualified green agricultural products, so they are willing to continue to buy its green products. Therefore, the following research hypothesis was proposed:

H₄: There is a significant relationship between green trust and continuous buying intention of green agricultural products.

4. Research Methodology

4.1. Conceptual Framework

This study adopts the Stimulus-Organism-Response (SOR) theory as the meta-framework, structurally embedding the core dimensions of social capital theory within the private domain traffic consumption context. Specifically:

1. Stimulus Layer: The social capital construct serves as primary drivers of consumer decision-making.
 2. Organism Layer: Green trust represents the internal psychological transformation mechanism triggered by external stimuli.
 3. Response Layer: Continuous buying intention functions as the ultimate behavioral output.
- The conceptual framework is illustrated in Figure 1.

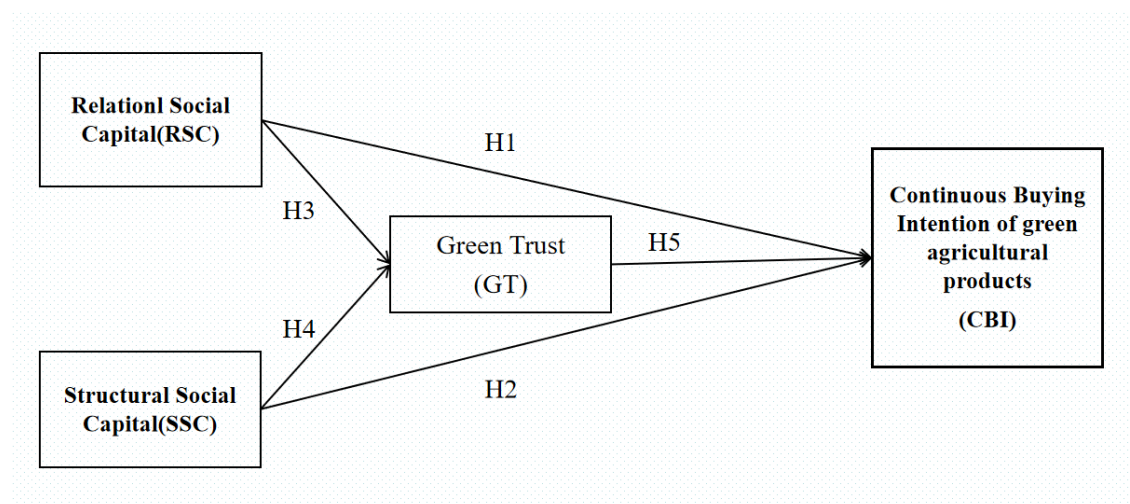


Figure 1.
Conceptual framework.

Source: Mehrabian and Russell [21]; Nahapiet and Ghoshal [22] and Xu and Liu [8].

4.2. Research Design

The core essence of private domain traffic is users, that is, consumers, which are also the research population of this study. The research population of this study is the consumers who have bought green agricultural products more than one time in the channels of private domain traffic in China.

All latent variables are measured by the Mature Richter scale (5-point scale) : social capital is divided into two dimensions: relational social capital (3 items), structural social capital (3 items); green trust (3 items); continuous buying intention (3 items). The scale was revised by relevant expert interviews, and the pilot study had been tested and adjusted before the official questionnaire was released.

According to Hasan and Kumar [23] the study population exceeds 100,000 and the sampling range is between 270 and 399. The maximum sample size of 400 was chosen.

This study used structured questionnaire survey as the core data collection tool. The data collection employed a mixed sampling method of non-random sampling methods combining targeted convenience sampling and snowball sampling within mainland China. Survey questionnaires were distributed electronically via "Wenjuanxing" (a popular Chinese online survey platform), which generated accessible links and QR codes. Trained research assistants facilitated data collection through WeChat group dissemination and personal network referrals to expand participant reach. The final effective sample target N=350 [23].

SPSS 26.0 was used for basic statistical analysis and AMOS 24.0 was used to perform structural equation modeling.

5. Research Results

5.1. Descriptive Statistics

To ensure that the sample data met the standard requirements of the research, this study first used SPSS 26.0 software to conduct descriptive statistical analysis on the 12 measurement items under the dependent variable (intention to re-buying) and independent variables (social capital, green trust). The assignment of each item, response frequency, mean, and standard deviation were analyzed in detail to comprehensively evaluate the distribution characteristics of the data.

Table 1.
Descriptive statistics of the sample.

Descriptive statistics of the sample.						
Variable	Measurement items	Options and assignments	Mean value		Standard deviation	Variance
Structural social capital	SSC1	Strongly disagree = 1; Disagree = 2; Neutral = 3; Agree = 4; Strongly Agree = 5	3.54	3.41	0.944	0.89
	SSC2		3.42		0.941	0.886
	SSC3		3.29		1.016	1.033
Relational social capital	RSC1		3.36	3.42	0.994	0.988
	RSC2		3.37		0.956	0.914
	RSC3		3.55		0.882	0.778
Green trust	AT1		3.61	3.60	0.834	0.695
	AT2		3.57		0.905	0.818
	AT3		3.64		0.829	0.688
Continuous Buying Intention	CBI1		3.75	3.68	0.806	0.649
	CBI2		3.6		0.867	0.752
	CBI3		3.69		0.819	0.671
Number of effective cases (listed)		335				

We evaluated the consumers' structural social capital, relational social capital, green trust, and the continuous buying intention through three scale items. Using the Likert 5-point scale for measurement, the option score range was from 1 to 5, where 1 represented "strongly disagree" and 5 represented "strongly agree".

The table 1 showed that the score for continuous buying intention (3.68) was the highest, followed by green trust (3.60). This indicates that in the private domain traffic channels, both the consumers' continuous buying intention and green trust showed relatively high levels. Additionally, the overall score for relational social capital (3.42) was higher, slightly higher than structural social capital (3.41).

5.2. Reliability Analysis

Reliability analysis is used to assess the consistency degree of different measurement items in the questionnaire in explaining the topic of the questionnaire. As can be seen from Table 2 below, the overall Cronbach's α value reaches 0.923. The Cronbach's α values of the latent variables, namely structural social capital, relational social capital, green trust, and continuous buying intention, are between 0.805 and 0.881. Among them, social norms have the highest value of 0.935; after deleting the observation variables, namely the 12 measurement items, the Cronbach's α values range from 0.927 to 0.932. All of the above Cronbach's α values exceed 0.8, indicating that the reliability of each scale and item is very good, and the overall reliability is also highly reliable [24].

Table 2.
Reliability analysis of the scale.

Latent variable	Observable variable	CITC	The cronbach's α after the deletion items	Clonbach's α of latent variables	Overall Cronbach's α
Social structural capital	SSC1	0.691	0.915	0.881	0.922
	SSC2	0.718	0.914		
	SSC3	0.674	0.916		
Social relational capital	RSC1	0.638	0.918	0.808	
	RSC2	0.694	0.915		
	RSC3	0.705	0.915		
Green trust	AT1	0.667	0.916	0.805	
	AT2	0.683	0.915		
	AT3	0.677	0.916		
Continuous buying intention	CBI1	0.623	0.918	0.812	
	CBI2	0.677	0.916		
	CBI3	0.675	0.916		

5.3 Validity Analysis

Validity analysis is used to assess the extent to which the questionnaire items can accurately measure a specific variable or concept. Before conducting exploratory factor analysis, the Kaiser-Meyer-Olkin(KMO) fit index and Bartlett's sphericity test are typically used to evaluate whether the data is suitable for factor analysis [25].

The KMO and Bartlett's sphericity tests using SPSS 26.0 yielded the following table 3. It can be seen that the KMO values of each latent variable in this study range from 0.689 to 0.732, and the overall KMO value is 0.934; the Bartlett's sphericity test is all significant. This indicates that the validity of each latent variable and the overall validity are acceptable, can accurately reflect the substantive content of the research variables, and is suitable for factor analysis.

Table 3.
KMO and Bartlett's sphericity test.

Latent variable	Number of items	KMO	Bartlett's sphericity test		
			Approximate chi-square	Degree of freedom	Significance
Structural social capital	3	0.732	906.594	3	0.000
Social relational capital	3	0.689	571.576	3	0.000
Green trust	3	0.707	541.035	3	0.000
Continuous buying intention	3	0.716	557.663	3	00.000
scale	12	0.934	3782.009	66	0.000

Based on the above data analysis, factor analysis was conducted. In SPSS 26.0, principal component analysis was used to perform factor analysis on the data, and through orthogonal rotation using the maximum variance method, 4 common factors were successfully extracted. The results are shown in Table 4. The cumulative variance contribution rate of these factors reached 75.332%, which exceeded the generally accepted standard of 70%, indicating that the loadings of the extracted factors were significant and highly explanatory. By extracting 4 common factors from 12 observed variables, it was found that the loadings of each observed variable on its corresponding common factor were significantly higher than those on other factors. That is, these observed variables can be effectively divided into 4 independent dimensions, and the composition of the factors is highly consistent with the expected theoretical model. Through exploratory factor analysis, the results showed that the scale had good construct validity, indicating that the scale could effectively measure the conceptual structure of the research.

Table 4.
Rotated component matrix ^a.

Latent variable	Observation variable	Factor loading				Variance cumulative contribution rate (%)
		1	2	3	4	
Social structural capital	SSC1	0.817				75.332%
	SSC2	0.825				
	SSC3	0.792				
Social relational capital	RSC1				0.788	
	RSC2				0.775	
	RSC3				0.528	
Green trust	AT1		0.746			
	AT2		0.760			
	AT3		0.621			
Continuous buying intention	CBI1			0.796		
	CBI2			0.710		
	CBI3			0.730		

Note: Extraction method: Principal component analysis.

Rotation method: cauchy normalization maximum variance method.

The rotation has converged after 5 iterations.

5.4. Model Construction

This study first established a theoretical framework based on the theory of social capital and the SOR theory to analyze the influence of consumers' social capital and green trust on their continuous buying intention. Based on this framework, the article proposed several research hypotheses, identified the potential variables to be studied and their corresponding observed variables, and divided some variables into dimensions. Subsequently, using the AMOS 26.0 software, a structural equation model (SEM) was constructed, as shown in Figure 2 below. The oval boxes in the figure represent the potential variables of relational social capital, structural social capital, green trust, and continuous buying intention. The rectangular boxes represent the measurement variables, including specific measurement items of SSC, RCS, AT, and CBI. The circular boxes indicate the error terms of each variable, such as e1, e2, etc.

The single arrows "→" in the figure indicate causal effects, such as the direct effect of structural social capital on green trust and continuous buying intention. The chain of multiple single arrows represents the mediating effect, such as "structural social capital → green trust → continuous buying intention" and "relational social capital → green trust → continuous buying intention", revealing how structural social capital and relational social capital indirectly affect continuous buying intention through green trust. The sum of direct effects and mediating effects is the total effect of social capital on continuous buying intention. The double arrows "↔" imply the correlation between these potential variables, such as the correlation between structural social capital and relational social capital.

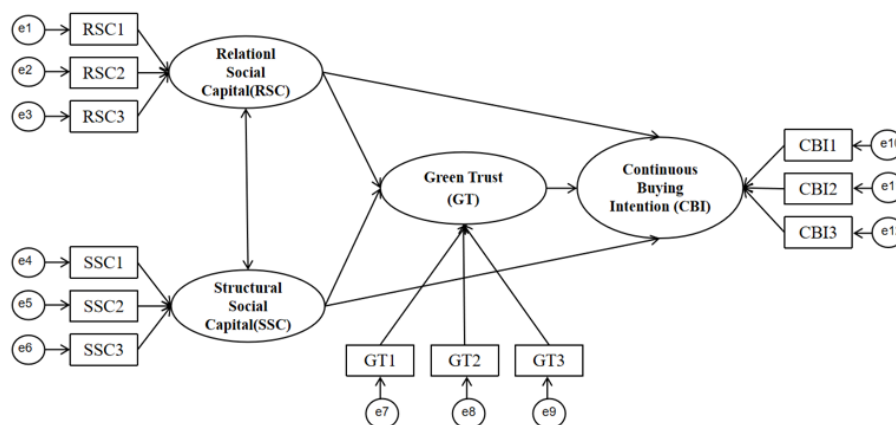


Figure 2.
SEM model diagram of consumers' continuous buying intention.

5.5. Model Hypothesis Testing

The hypotheses in the SEM model are tested. The aim is to verify whether the causal relationships between the latent variables set in the model are supported by the data. This process involves evaluating the causal effects between the latent variables within the model, including the direction, strength, and statistical significance of the influence of independent variables on dependent variables; furthermore, the direct and possible indirect effects of independent variables on dependent variables, thereby determining the validity of the research hypotheses in the model. The main indicators of concern include the magnitude, direction, and statistical significance of the standardized regression coefficient.

The size and direction of the standardized path coefficient (Standard Estimate) provide a quantitative description of the influence relationship between variables. The statistical significance level (usually represented by the p -value) verifies whether the causal relationships set in the model have sufficient statistical evidence support. Additionally, the critical ratio (C.R., Critical Ratio), which is the ratio of the path coefficient to its standard error, can be used to further confirm the significance level. Generally speaking, when $p < 0.05$ and $| \text{C.R.} | \geq 1.96$, it indicates that the path coefficient is statistically significant, thereby supporting the hypothesized paths in the model.

The data were imported into the SEM model drawn by AMOS 24.0 software, the calculation was run to test the hypotheses, and the results are shown in Table 5. "***" represents a p -value less than 0.001, "**" represents a p -value less than 0.01, and "*" represents a p -value less than 0.05. If the p -value is greater than 0.05, the "*" mark is not used, indicating that the interaction between variables does not reach statistical significance.

Table 5.
Summary of model regression coefficients.

Summary of model regression coefficients.

X	→	Y	Non-Standard Estimate	SE	C.R.	p	Standard Estimate	
Structural capital	social	→	Green trust	0.137	0.055	2.513	0.012*	0.175
Structural capital	social	→	Continuous buying intention	0.008	0.049	0.172	0.864	0.011
Relational capital	social	→	Green trust	0.593	0.070	8.523	0.000***	0.691
Relational capital	social	→	Continuous buying intention	0.148	0.084	1.768	0.077	0.174
Green trust		→	Continuous buying intention	0.720	0.096	7.477	0.000***	0.728
Structural capital	social	→	SSC3	1.047	0.048	21.811	0.000***	0.808
Structural capital	social	→	SSC2	1.076	0.044	24.619	0.000***	0.896
Structural capital	social	→	SSC1	1.000	-	-	-	0.831
Structural capital	social	→	RSC3	0.951	0.057	16.805	0.000***	0.774
Structural capital	social	→	RSC2	1.074	0.062	17.416	0.000***	0.806
Structural capital	social	→	RSC1	1.000	-	-	-	0.721
Green trust		→	AT2	1.155	0.066	17.620	0.000***	0.786
Green trust		→	AT1	1.000	-	-	-	0.738
Green trust		→	AT3	1.029	0.060	17.131	0.000***	0.763
Continuous buying intention		→	CBI3	1.034	0.059	17.408	0.000***	0.767
Continuous buying intention		→	CBI2	1.117	0.063	17.751	0.000***	0.783
Continuous buying intention		→	CBI1	1.000	-	-	-	0.755

Note: → indicates the regression influence relationship or measurement relationship; "****" represents a p-value less than 0.001, "***" represents a p-value less than 0.01, and "*" represents a p-value less than 0.05.

The dash '-' indicates that this item is a reference item.

As shown in the data of Table 5, the influence of social capital on continuous buying intention can be divided into three dimensions: namely, structural social capital ($SE = 0.011$, $C.R. = 0.172$, $p = 0.864 > 0.05$), relational social capital ($SE = 0.174$, $C.R. = 1.768$, $p = 0.077 > 0.05$), and green trust ($SE = 0.728$, $C.R. = 7.477$, $p = 0.000$). The results show that only green trust has a significant positive impact on the continuous buying intention ($p = 0.000 < 0.001$), and it has reached the statistical significance level. This is consistent with the expected research hypothesis, so hypothesis H5 is verified. However, hypotheses H1 and H2 have not been passed the test, that is, structural social capital and relational social capital have no direct impact on consumers' continuous buying intention.

At the same time, although H1 and H2 were rejected, structural social capital and relational social capital had a significant impact on green trust ($p = 0.012^* < 0.05$, $p = 0.012^* < 0.001$, and they reached the statistical significance level. Therefore, hypotheses H3 and H4 were verified.

5.6. Model Revision and Testing

5.6.1. SEM Model Revision

From the results of the significance tests of the assumed paths mentioned above, it can be observed that the influence of structural social capital and relational social capital on consumers' continuous

buying intention is not significant. In view of this, the two insignificant paths mentioned above are removed, thereby constructing the revised model as shown in Figure 3.

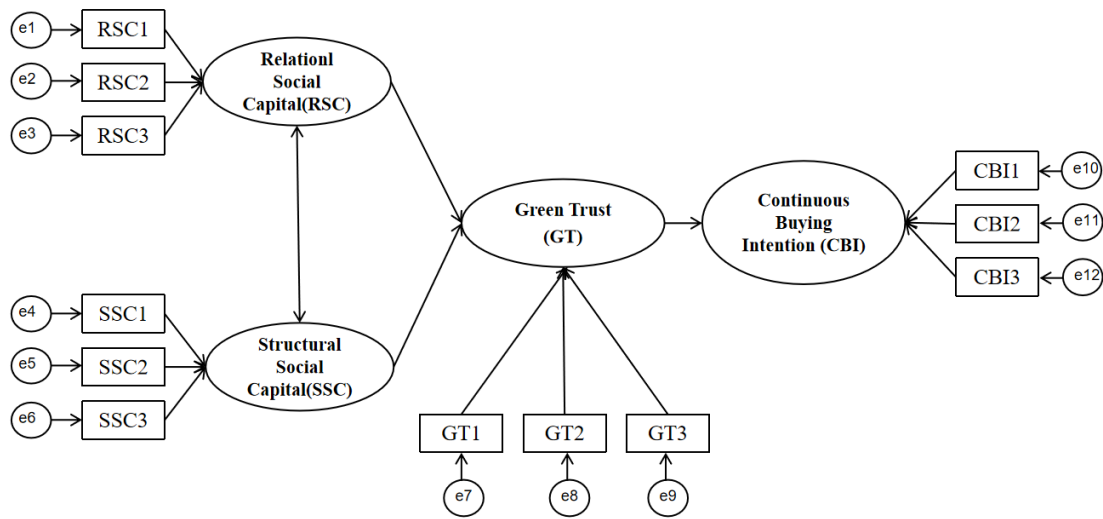


Figure 3.
Revised SEM model diagram.

5.6.2. Hypothesis Testing of the Revised SEM Model

All the path coefficients in the revised structural equation model were found to be significant, and all three research hypotheses were supported. The details are shown in Table 6 and Figure 4. The hypotheses retained in the revised model were further verified, and the results are presented in the table below. As shown in Table 6. This result not only validates the accuracy of the research hypotheses but also provides further evidence for the robustness of the theoretical framework.

Table 6.
Summary of revised model regression coefficients.

X	→	Y	Non-standardized regression coefficient	SE	z (C.R.)	p	Standardized regression coefficient
Social capital structural	→	Green trust	0.132	0.050	2.614	0.009**	0.169
Social capital structural	→	Continuous buying intention	0.610	0.067	9.155	0.000***	0.715
Social capital relational	→	Green trust	0.898	0.058	15.461	0.000***	0.898
Social capital relational	→	Continuous buying intention	1.047	0.048	21.809	0.000***	0.808
Green trust	→	Continuous buying intention	1.076	0.044	24.622	0.000***	0.896
Social capital structural	→	SSC3	1.000	-	-	-	0.831
Social capital structural	→	SSC2	0.953	0.057	16.763	0.000***	0.774
Social capital structural	→	SSC1	1.078	0.062	17.390	0.000***	0.807
Social capital relational	→	RSC3	1.000	-	-	-	0.720
Social capital relational	→	RSC2	1.149	0.066	17.456	0.000***	0.776
Social capital relational	→	RSC1	1.000	-	-	-	0.733
Green trust	→	AT2	1.030	0.060	17.070	0.000***	0.759
Green trust	→	AT1	1.027	0.059	17.445	0.000***	0.766
Green trust	→	AT3	1.108	0.062	17.786	0.000***	0.781
Continuous buying intention	→	CBI3	1.000	-	-	-	0.758

Note: → indicates the regression influence relationship or measurement relationship; "****" represents a p-value less than 0.001, "***" represents a p-value less than 0.01, and "**" represents a p-value less than 0.05.

The dash '-' indicates that this item is a reference item.

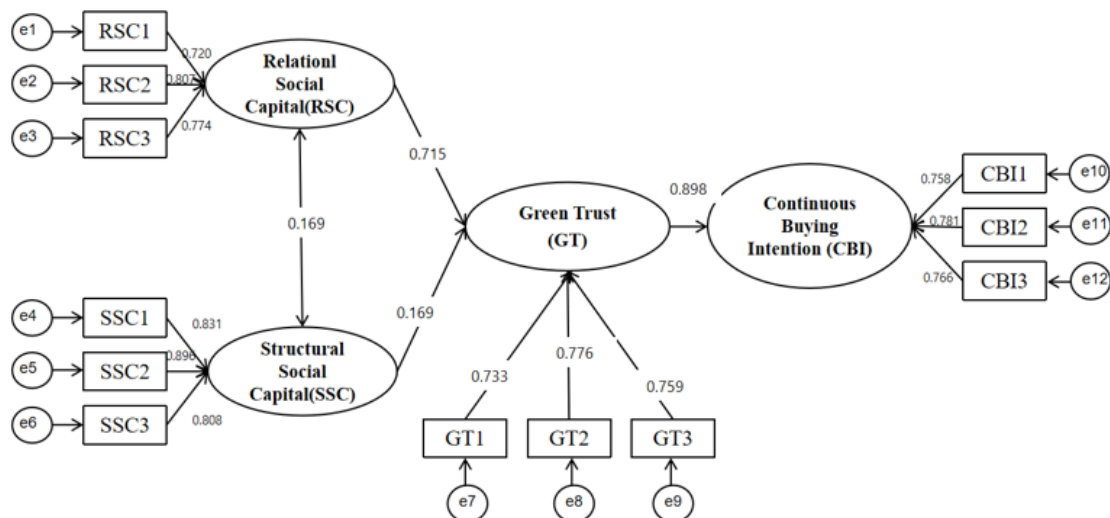


Figure 4.
Path test of the revised SEM model.

From Table 6 and Figure 4, it can be seen that relational social capital has a relatively strong and significant impact on green trust ($p = 0.009 < 0.01$), with a path coefficient of 0.169. Structural social capital has a strong and significant impact on green trust ($p = 0.000 < 0.001$), with a path coefficient of 0.715. Green trust has a strong and significant impact on continuous buying intention ($p = 0.000 < 0.001$), with a path coefficient of 0.898.

5.7. Model Result Analysis

After the previous empirical analysis, it can be observed that the SEM model constructed in this study shows good fit even after corrections, indicating the reliability and validity of the research conclusions. The research hypotheses were tested, and it was found that H3 out of H5 were verified. The following provides a more detailed and in-depth analysis of the model results to clarify the influence mechanisms of different variables

1. Social capital has no significant impact on the continuous buying intention of green agricultural products (H1, H2). The two dimensions of social capital have no direct impact on consumers' continuous buying intention. Hypotheses H1 and H2 were not supported, indicating that consumers in the private domain traffic channel, receiving external stimuli, cannot directly translate into attitude or behavioral responses. The series of external stimuli from the private domain traffic channel to consumers will have an impact on their behavior and intention, but this impact is not direct. Moreover, a series of external stimuli need to be internalized as the psychological experience of green trust before it can have an impact on the continuous buying intention.

2. Green trust significantly promotes the continuous buying intention (H5). Consumers' green trust mainly examines the external information received by consumers in the private domain traffic channel from enterprises, other consumers in the channel, etc., as well as their interactions and the position they are in, the external stimuli generated, and the internalized psychological state, which is manifested as green trust of the enterprise and products. The research proves that the influence of green trust on the continuous buying intention (0.898) is greater than the influence of social capital on green trust (0.715, 0.169). This indicates that consumers' judgment of whether the producer has the ability to provide green products, their analysis of the producer's motivation for participating in environmental protection and the prediction of the producer's benevolent behavior, and their subjective trust in the green attributes of the product, are the key elements that directly affect the consumers' continuous buying intention. Hypothesis H5 was supported, proving this influence relationship.

3. Social capital significantly promotes consumers' green trust (H3, H4). Consumers' social capital significantly affects green trust through influencing green trust. Hypotheses H3 and H4 were supported, proving this influence relationship. It indicates that in the private domain traffic channel, external stimulus information will have an impact on consumers' psychology, but this impact does not directly produce an effect on the consumers' continuous buying intention. Instead, it affects the factor of consumers' psychological feelings (green trust), indirectly influencing the continuous buying intention of green agricultural products.

At the same time, the influence effect of relational social capital on green trust (0.715) is greater than that of structural social capital (0.169). This indicates that in the private domain traffic channel, factors such as the role and status of consumers will affect the generation of green trust, but what matters more is the social relationships formed by consumers in the private domain channel, such as reciprocity, identification, and trust, which more affect the generation of consumers' green trust.

In summary, among the 5 hypotheses proposed in this study, 3 were supported. The specific results are shown in Table 7.

Table 7.
Summary of hypothesis testing results for the study.

Number	Research Hypothesis	Verification Result
H1	There is a significant relationship between relational social capital and continuous buying intention of green agricultural products.	Not supported
H2	There is a significant relationship between structural social capital and continuous buying intention of green agricultural products.	Not supported
H3	There is a significant relationship between relational social capital and green trust.	Supported
H4	There is a significant relationship between structural social capital and green trust.	Supported
H5	There is a significant significant relationship between green trust and continuous buying intention of green agricultural products.	Supported

6. Conclusions and Discussion

6.1. Conclusions

Based on the SOR theory and the social capital theory, and combined with the characteristics of private domain traffic and the influencing factors of consumers' continuous buying intention, the research found that consumers' social capital mainly includes two variables: structural social capital and relational social capital. They influence the continuous buying intention of green agricultural products through green trust.

Based on this, combined with 325 consumer survey questionnaires, an in-depth study was conducted on the impact of social capital on consumers' continuous buying intention for green agricultural products through a structural equation model. The results show:

1. Structural social capital and relational social capital have no significant impact on the continuous buying intention. 2. Structural social capital and relational social capital have a significant positive impact on green trust, and relational social capital has a more obvious impact. 3. Green trust has a significant positive impact on the continuous buying intention, and this effect is greater than the impact of structural social capital and relational social capital on green trust.

6.2. Discussion

The hypotheses proposed in this study regarding the relationship between social capital, green trust, and the continuous buying intention of green agricultural products were mostly verified in the SEM model test. However, due to the limitations of various factors such as the scope of social surveys, time, funds, and the author's theoretical analysis level, this study has certain limitations and defects. Specifically, it is manifested in the following aspects:

1. Data collection aspect. In terms of geographical scope, due to various conditions, the data collection of this study is limited to online survey questionnaires and fails to cover the form of offline survey questionnaires. Therefore, the extrapolation of the research results may be limited. Future research should expand the survey forms and eliminate the differences between the online questionnaire and the real situation. In terms of sample distribution, the samples of this study include a large number of young people (between 18 and 40 years old), which may cause the research results to be biased towards the specific viewpoints and behaviors of this group. This sample deviation may lead to an incomplete or biased analysis of the impact of social capital and continuous buying intention, limiting the universality and representativeness of the research results.

2. Research content analysis aspect. In terms of dependent variable analysis, this paper only explored the impact of the two dimensions of social capital on the continuous buying intention, and did not discuss the variable of social cognitive capital. Future research can conduct further research on the result variables. In terms of result interpretation, this study mainly relied on quantitative questionnaire data, and the result interpretation lacks the supplementation of qualitative data, limiting the in-depth understanding of background factors such as environment, policies, and motivations, and failing to fully reveal the complex inner feelings of consumers. Future research should integrate in-depth interviews to enhance the richness and accuracy of the research.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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