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Driving Green Trust: How Social Capital Shapes Repurchase Intention for Green Agricultural Products in the Context of Private Domain Traffic

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Abstract

With the rapid growth of China's digital economy, private domain traffic has become an essential marketing strategy for green agricultural products enterprises. While enhancing consumer-brand relationships, it has not fully resolved issues of consumer trust or translated interactive advantages into sustained purchasing behavior. Based on the SOR framework, this study examines how three dimensions of social capital (structural, relational, cognitive) influence repurchase intention, with green trust (ability trust and goodwill trust) as a mediator. Using questionnaire data and structural equation modeling, the findings indicate that structural social capital and both dimensions of green trust directly promote repurchase intention, whereas relational and cognitive social capital exert indirect effects through green trust. The research extends social capital theory into the context of private domain traffic and offers practical insights for marketing green agricultural products.

Keywords: *Social Capital, Green Trust, Repurchase Intention, Green Agricultural Products, Private Domain Traffic.*

Introduction

With the increasing social awareness of health and environmental protection, the market of green agricultural products is gradually becoming a consumption hotspot. Green agricultural products have become the first choice for consumers to pursue a healthy lifestyle because of their pollution-free, pollution-free, safe and nutritious characteristics. Data show that in 2024, the online retail sales of agricultural products in China reached CNY 679.78 billion, with a year-on-year growth of 15.8%, exceeding the growth target for three consecutive years (Dou & Li, 2024). Based on this, this paper analyzes the problems existing in the market of green agricultural products in China, and puts forward corresponding countermeasures.

In the green agricultural product market, the role of social capital cannot be ignored. Social capital refers to the formation of individuals or organizations in the process of interaction, which can bring non-economic assets such as social relations, trust, norms and resources. The accumulation and application of social capital can help promote the consumption of green agricultural products and improve consumers' purchase intention. Among them, green trust, as an important part of social capital, plays a key role in market transactions. Green trust refers to consumers' trust in the quality, source, production process and other aspects of green agricultural products (Marozzo, Costa & Abbate, 2024). In the market of green agricultural products, green trust helps to reduce consumers' purchase risk and enhance consumers' purchase confidence.

Private domain traffic is a new internet marketing model that has emerged in recent years. It refers to a relatively closed user group with high loyalty that enterprises build through social media, user communities and other channels. The impact of private domain traffic on the sales of green agricultural products is becoming increasingly significant. Its core lies in establishing green trust to enhance consumers' repurchase intention for green agricultural products (Tao & Chao, 2024).

However, behind the prosperity of the green agricultural products market, some problems that cannot be ignored have also been exposed. Firstly, there is an information asymmetry in the green

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agricultural products market, making it difficult for consumers to distinguish the true green level of agricultural products, which leads to a low level of trust in green agricultural products among consumers (Tao & Chao, 2024). Secondly, the production cost of green agricultural products is relatively high, especially the market trust cost remains high, resulting in weak market competitiveness and making it difficult for some green agricultural products to enter the market (Marozzo, Costa & Abbate, 2024). Moreover, the competition model in the green agricultural products market is highly homogeneous, with most platforms still focusing on traffic competition and lacking in-depth value exploration of the green attribute and differentiated service design (Dou & Li, 2024).

Although previous studies have explored aspects such as green agricultural product consumption, social capital, green trust, and private domain traffic, the existing literature has the following shortcomings: Firstly, the specific mechanism by which social capital empowers green trust is not yet clear. The role of social capital in the green agricultural product market has not been fully recognized, and research on the relationship between social capital and green trust is relatively scarce; Secondly, research on the formation mechanism of the re-purchase intention of green agricultural products under the private domain traffic is relatively limited; Finally, there is a lack of systematic analysis of the development trend of the green agricultural product market.

In view of this, this study is based on the perspective of social capital empowering green trust, and explores the formation mechanism of the repurchase intention of green agricultural products under the private domain traffic. It aims to provide new ideas for research in related fields. The research objective is to explore the influence of consumers' social capital on their repurchase intention, and to analyze the mediating role of green trust. Specifically, this study will collect relevant data and conduct an empirical analysis of the relationship among consumers' social capital, green trust, and the purchase intention of green agricultural products. By analyzing the direct effect of consumers' social capital on the purchase intention of green agricultural products and the mediating effect through green trust, the mechanism of consumers' social capital in green agricultural product consumption can be revealed.

The theoretical value of this research lies in enriching and developing the theoretical system in the field of green agricultural product consumption, providing new ideas for related research. The theoretical value of this research lies in enriching and developing the theoretical system in the field of green agricultural product consumption, providing new ideas for related research. At the same time, the practical significance of this research is to offer references for green agricultural product enterprises to formulate effective marketing strategies, which is conducive to promoting the healthy development of the green agricultural product market.

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Literature Review

Definition of Social Capital (SC)

Social capital (SC) refers to the total sum of resources, capabilities, and trust formed by individuals or groups through interaction and cooperation within the social relationship network. In the field of social sciences, social capital is regarded as an important factor influencing social structure, social relationships, and social actions. The significance of social capital lies in its ability to promote mutual cooperation among social members, enhance social cohesion, reduce transaction costs, and thereby drive social development and economic growth.

Nahapiet and Ghoshal (1998) proposed the classic three dimensions of social capital based on this: relational social capital, structural social capital, and cognitive social capital. This study also mainly adopts this dimension classification standard to measure the social capital of consumers. Social relationship capital refers to the trust and cooperative relationships established through the social relationship network. Structural social capital refers to the structural characteristics of the social relationship network, including network density, network centrality, etc. Cognitive social capital refers to the common knowledge, values, and norms among social members, including shared language, shared vision, etc.

Definition of Green Trust (GT)

Green Trust (GT) refers to the positive evaluation and trust attitude that consumers hold towards green agricultural products and their producers and sellers. This trust is not only reflected in consumers'

recognition of the quality and safety of green agricultural products, but also involves trust in the moral ethics and social responsibilities of producers and sellers. In the context of an increasingly complex agricultural product market and the continuous increase in consumers' attention to food safety and health, green trust plays a crucial role in consumers' purchase of green agricultural products (Sadiq, Adil & Paul, 2022). The higher the degree of consumers' trust in green agricultural products, the stronger their purchase intention will be, which also demonstrates the significant impact of green trust on consumers' purchase decisions.

This study divides green trust (GT) into two dimensions: ability trust (AT) and goodwill trust (GWT). Ability trust means that consumers believe that the products have the claimed green attributes and that the enterprises have the ability to guarantee them. Goodwill trust means that consumers believe that the enterprises operate green private channels sincerely and reliably, and care about consumers and the environment.

Definition of Repurchase Intention (RI)

Repurchase intention (RI) refers to the consumers' willingness to continue purchasing the same product or service in the future based on factors such as satisfaction and trust after making a purchase of green agricultural products or services. Repurchase intention is not only the result of individual consumer behavior choices but also an important manifestation of the interaction between enterprises and consumers. It is related to the long-term survival and development of the enterprise.

In consumer behavior research, the intention to continue purchasing is regarded as an important indicator for measuring consumer loyalty and brand relationship (Nguyen & Thanh, 2024). It is of great significance for the development of the green agricultural product market, as consumers with high repurchase intention help stabilize the market and promote the continuous development of the green agricultural product industry.

The Relationship between Social Capital (SC) and Repurchase Intention (RI)

The core viewpoint of the consumer social capital theory holds that consumers' interactions within social networks and their ability to acquire resources will influence their purchasing decisions. In recent years, the application of the consumer social capital theory in the study of green agricultural product purchasing behavior has become increasingly widespread. For instance, research has shown that individuals with higher social capital are more likely to purchase green agricultural products because they can more easily obtain information about green agricultural products within their social networks and have a higher level of trust in them. Moreover, during the promotion of green agricultural product brands, they can fully utilize consumer social capital by means of word-of-mouth dissemination to enhance consumers' awareness and trust in green agricultural products.

Specifically, relational social capital refers to the key psychological bond that transforms new users into loyal customers and converts single purchase behaviors into repeated purchase behaviors. Fu *et al*. (2023)'s research clearly states that the success of private domain operations lies in transforming the cold "transactional relationship" into a warm "kinship relationship". The study found that trust, emotional commitment, and group identity (relational social capital) significantly positively influence consumers' willingness to make repeated purchases.

The core value of structural social capital lies in its establishment of an efficient interaction network framework and infrastructure between users and brands, as well as among users themselves. Structural social capital is an important predictor of collective behavior. Research shows that social relationship networks can directly influence consumers' purchase intentions, and the centrality of the network, the size of the network, and the dimensions of relationships all have varying degrees of impact on consumers' purchase intentions. In the e-commerce live streaming network structure, the host holds a key and core position. The host uses their influence and popularity to introduce and promote products to the viewers in the live streaming room, thereby enhancing the persistence of purchase intentions (Zhang, 2024).

The core value of cognitive social capital lies in its ability to establish a "common context" and "meaning system" between brands and users, as well as among users themselves. Chen and Huang (2024)'s research focuses on KOL content marketing within the private domain. The study found that KOL's content is not merely about disseminating information; it is also about constructing a cognitive framework (such as an esthetic system or a parenting philosophy) that is shared with fans. This shared understanding and values serve as the cultural foundation that maintains community cohesion, enables efficient communication, and ultimately leads to brand loyalty and sustained consumption.

However, the consumer social capital theory also has certain limitations in the research on green agricultural product purchasing behavior. Firstly, this theory mainly focuses on the interaction of consumers within social networks and their ability to access resources, while neglecting the influence of individual consumer characteristics on purchasing intentions. Secondly, the measurement methods of consumer social capital are relatively simplistic, making it difficult to comprehensively reflect the complexity and dynamics of consumer social capital.

The Relationship between Green Trust (GT) and Repurchase Intention (RI)

The influence of green trust on consumers' repurchase intention for green agricultural products is manifested in its internal logic and action path. The higher the degree of consumers' trust in green agricultural products, the stronger their repurchase intention will be. Mayer *et al*. (1995) proposed in the model of causes and effects of green trust that green trust originates from ability, sincerity and goodwill. McKnight & Chervany (2001) constructed a green trust model that divides consumers' green trust into ability trust, integrity trust and goodwill trust. Some scholars also believe that in the Internet era, consumers' green trust mainly includes ability trust and goodwill trust.

This study holds that green trust can affect consumers' repurchase intention through the following ways: First, ability trust. Ability trust means that consumers believe that producers are willing and capable of providing green agricultural products and high-quality services in the transaction, which can have a positive and significant impact on consumers' behavioral responses and continuous participation behaviors. Second, goodwill trust. Goodwill trust means that consumers believe that producers can consider transaction issues from the consumers' perspective to ensure that consumers' interests are not infringed. When consumers believe that producers can abide by the agreement and provide green agricultural products honestly, they will actively establish a long-term stable relationship with producers and gradually enhance their goodwill trust in producers. Goodwill trust reflects an active attitude of consumers to cooperate with producers, which can reduce the defensive behaviors and negative concerns of both producers and consumers, and promote the establishment of an open and honest transaction relationship between both parties.

The Relationship between Social Capital (SC) and Green Trust (GT)

Trust is the core element of social capital and serves as the foundation for establishing and maintaining social relationships. Social capital plays a significant role in the formation of green trust. Social capital helps in the establishment and maintenance of trust because trust is an important component of social capital. In the green agricultural product market, social capital influences consumers' trust in green agricultural products through the following aspects:

Firstly, relational social capital, through the social relationship network, enables the establishment and strengthening of trust between consumers and producers. The formation of relational social capital often relies on long-term interactions and exchanges, through which the trust between consumers and producers deepens. Through relational social capital, consumers can obtain information about green agricultural products from social relationship networks, such as relatives and friends, and establish a trust relationship (Ortiz, 2016).

Secondly, structural social capital affects the formation of green trust through the structural characteristics of the social relationship network, such as network relationship strength and network centrality. A closely-knit social relationship network often enhances consumers' trust in green agricultural product producers or sellers (Ortiz, 2016). Finally, cognitive social capital promotes consumers' cognition and trust in green agricultural products through common knowledge, values, and norms. The formation of this cognitive capital often relies on the communication and interaction between consumers and producers (Zhao & Luo, 2017).

Theoretical Foundation

The SOR (Stimulus-Organism-Response) theory refers to the cognitive learning theory (Mehrabian & Russell, 1974). Here, S represents the stimulus that may originate from the external environment (Stimulus); O represents the cognitive organism, which forms a certain mental state after being stimulated; R represents the mental activity of the subject after receiving the stimulus, and ultimately results in a corresponding behavioral response (such as acceptance or rejection, adoption or avoidance), as shown in Figure 1. The core of the SOR theory framework lies in exploring the intermediary mechanism between behavior and external stimuli.

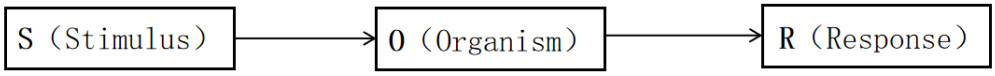

Figure 1: SOR Theoretical Model

(Source: Mehrabian & Russell, 1974)

Based on the SOR theoretical framework, which has a structured characteristic, it is highly suitable for exploring issues related to individual psychological reactions and their resulting behaviors. Its stimulus content extends to the influence of the network environment and atmosphere, the user's body extends to emotional and cognitive changes, and the user's behavioral responses also extend to usage behaviors, participation behaviors, and purchasing behaviors, etc. (Li *et al.*, 2021).

The SOR model is also widely applied in related research on online user behaviors. Li *et al.*, (2021) verified based on the SOR model theory the impact of value perception of cross-border e-commerce platforms on consumers' purchase intentions, and believed that enhancing consumers' value perception of the e-commerce platform is an important path to increase consumers' purchase intentions.

Conceptual Framework

This study adopts the Stimulus-Organism-Response (SOR) theory as the overarching framework and structurally embeds the core dimensions of the social capital theory into the private domain traffic consumption context.

Based on the systematic integration of existing theories and literature, this study proposes the following core propositions: In the private domain traffic channels, structural social capital, relational social capital, and cognitive social capital all have direct relationships with green trust (GT) and repurchase intention (RI). Given the key mediating attribute of green trust in the purchase decision, this study further establishes its dual-dimensional constructs - ability trust and goodwill trust - as the core transmission mechanism through which social capital influences the persistence of repurchase intention. The conceptual framework of this study is depicted as shown in Figure 2 below:

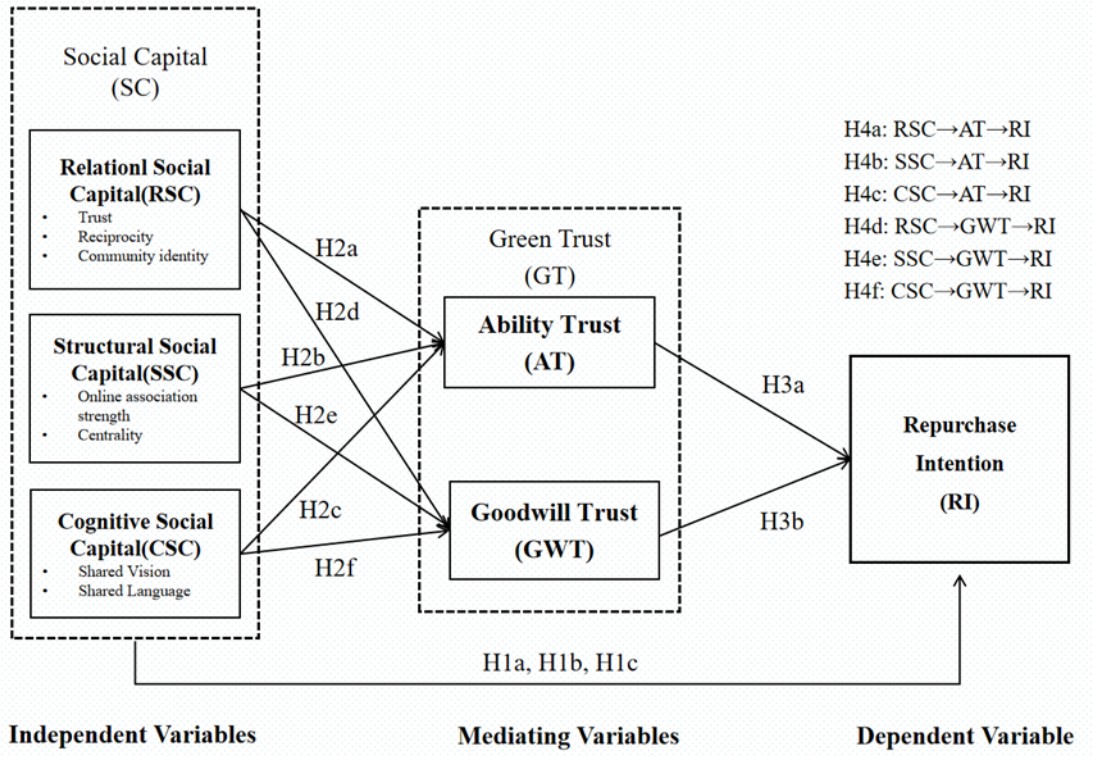

Figure 2: Conceptual Framework

Research Hypotheses

To achieve the objectives of this study, based on the proposed conceptual framework, we formulated seventeen hypotheses. These hypotheses will be used for testing to explore the influence of various dimensions of social capital and green trust on the repurchase intention. The research hypotheses are given below.

H1a There is a significant relationship between relational social capital and repurchase intention.

H1b There is a significant relationship between structural social capital and repurchase intention.

H1c There is a significant relationship between cognitive social capital and repurchase intention.

H2a There is a significant relationship between relational social capital and ability trust.

H2b There is a significant relationship between structural social capital and ability trust.

H2c There is a significant relationship between cognitive social capital and ability trust.

H2d There is a significant relationship between relational social capital and goodwill trust.

H2e There is a significant relationship between structural social capital and goodwill trust.

H2f There is a significant relationship between cognitive social capital and goodwill trust.

H3a There is a significant relationship between ability trust and repurchase intention.

H3b There is a significant relationship between goodwill trust and repurchase intention.

H4a Ability trust plays a mediating role between relational social capital and repurchase intention.

H4b Ability trust plays a mediating role between structural social capital and repurchase intention.

H4c Ability trust plays a mediating role between cognitive social capital and repurchase intention.

H4d Goodwill trust plays a mediating role between relational social capital and repurchase intention.

H4e Goodwill trust plays a mediating role between structural social capital and repurchase intention.

H4f Goodwill trust plays a mediating role between cognitive social capital and repurchase intention.

Research Methodology

This study conducted empirical research using the cross-sectional survey method. The sampling method employed was non-probability sampling, specifically targeted convenience sampling. Through the "Wenjuanxing" (an online questionnaire survey platform), electronic links and QR codes were generated, and data collection was carried out by distributing the questionnaires in WeChat groups and through word-of-mouth referrals. Eventually, 984 valid samples were collected.

The questionnaire was divided into four parts. The first part was about the demographic characteristics of the respondents. The second to fourth parts were latent variable sections. All the questionnaire items were referenced from previous studies to enhance the content validity of the scale. All latent variables were measured using the mature Likert scale (1 = strongly disagree, 5 = strongly agree). Social capital was divided into three dimensions: social relationship capital (5 items), social structure capital (4 items), and social cognitive capital (4 items); green trust was divided into two dimensions: ability trust (3 items), and kindness trust (3 items); repurchase intention (3 items).

Data analysis was conducted using SPSS 27.0 and AMOS 26.0. Preliminary analyzes included demographic characteristics, descriptive statistics, tests of normality. Subsequently, a structural equation modeling (SEM) approach was employed. Confirmatory factor analysis (CFA) was used to test the measurement model, evaluate model fit, and establish convergent validity (AVE > 0.50, CR > 0.70) and discriminant validity. Finally, the structural model was tested to examine the hypothesized relationships among latent variables.

Data Analysis and Results

Demographic Characteristics

Table 1 presents the gender distribution of 984 respondents. There were a total of 437 (44.4%) males, and 547 (55.6%) females as shown. The proportion of female consumers is higher than that of male consumers. It can be seen that the respondents aged between 26 and 40 accounted for the largest proportion, at 76.8%, followed by those aged between 41 and 60, accounting for 20.4%. The other two age groups (aged 18-25) and (aged 61 and above) had smaller proportions, at 2.6% and 0.1% respectively.

There were 587 people (59.7%) with non-agricultural household registration, and 397 people (40.3%) with agricultural household registration. The majority (55.5%) had completed bachelor's or associate's degree-level education, followed by 21.0% who had finished high school, technical secondary school or vocational high school. The next figure represents the proportion of junior high school education level at 16.6%. The largest income group falls within the ¥3,001–¥5,000 range, accounting for 39.8% of the sample. This is followed by those earning less than or equal to ¥3,000 per month (27.0%) and those earning between ¥5,001–¥8,000 (22.4%). A smaller proportion of respondents reported monthly incomes between ¥8,001–¥15,000 (8.9%), while only 1.8% earned ¥15,001 or more. Cumulatively, 89.2% of the respondents earned ¥8,000 or less per month.

Table 1: Demographic Characteristics

Variable	Category	Frequency (n)	Percent (%)
Gender	Male	437	44.40%
	Female	547	55.60%
Age	18–25 years old	26	2.60%
	26–40 years old	756	76.80%
	41–60 years old	201	20.40%
	≥61 years old	1	0.10%
Household Registration Status	Non-agricultural	587	59.70%
	Agricultural	397	40.30%
Education Level	Primary school or below (including semi-literate and never attended school)	35	3.60%
	Junior high school	163	16.60%
	High school / Technical secondary school / Vocational high school	207	21%
	Bachelor's / Associate's degree	546	55.50%
	Master's / Doctoral degree	33	3.40%
Monthly Income After-Tax	≤3,000	266	27.00%
	3,001–5,000	392	39.80%
	5,001–8,000	220	22.40%
	8,001–15,000	88	8.90%
	≥15,001	18	1.80%

Reliability Analysis

The internal consistency of each dimension was first analyzed through the Cronbach's Alpha coefficient reliability test method. It is widely believed that for a variable to have good reliability, its Cronbach's coefficient must be greater than 0.7.

If any of the items is deleted, the Cronbach's coefficient will be lower than the coefficient value of the corresponding variable. Therefore, all the question items have been retained. The above content indicates that the questionnaire in this study has good reliability.

Items with low discrimination (CITC < 0.30) need to be deleted (Nunnally, 1978). As can be seen from Table 2, all items` CITC values are greater than 0.3 (ranging from 0.339 to 0.491), and all are retained (Hair *et al.*, 2019).

Table 2: Reliability Analysis

Latent Variable	Item	CITC	Cronbach's α of Item-Deleted	Cronbach's α of Latent Variable	Cronbach's α of Overall
SSC	SSC1	0.416	0.838	0.772	0.844
	SSC2	0.471	0.835		
	SSC3	0.457	0.835		
	SSC4	0.43	0.837		
RSC	RSC1	0.366	0.84	0.824	
	RSC2	0.379	0.84		
	RSC3	0.379	0.839		
	RSC4	0.393	0.839		
	RSC5	0.346	0.841		
CSC	CSC1	0.418	0.837	0.713	
	CSC2	0.339	0.84		
	CSC3	0.441	0.836		
	CSC4	0.383	0.838		
AT	AT1	0.467	0.836	0.713	
	AT2	0.401	0.838		
	AT3	0.395	0.838		
GWT	GWT1	0.435	0.836	0.702	
	GWT2	0.491	0.834		
	GWT3	0.436	0.836		
RI	RI1	0.435	0.836	0.729	
	RI2	0.455	0.835		
	RI3	0.414	0.837		

Exploratory Factor Analysis (EFA)

In terms of validity, exploratory factor analysis (EFA) was used to explore construct validity, that is, whether the scale can accurately measure the expected theoretical construct. It can be seen from Table 3 that the KMO value is 0.854, which is greater than 0.7, and the value of Bartlett's Test of Sphericity is significant (Sig.<0.001). This indicates that the latent variables and the overall validity are acceptable, can accurately reflect the substantive content of the research variables, and are suitable for factor analysis (Shrestha, 2021).

Table 3: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.854
Bartlett's Test of Sphericity	Approx. Chi-Square	6315.498
	df	231
	Sig.	.000

Based on the above data analysis, factor analysis was conducted. The results are shown in Table 4. The cumulative variance contribution rate of these factors reached 60.816%, which exceeded the generally accepted standard of 60%.

Table 4: Total Variance Explained

Latent variable	Observation variable	Factor loading						Variance cumulative contribution rate (%)
		1	2	3	4	5	6	
SSC	SSC1		0.799					
	SSC2		0.843					
	SSC3		0.643					
	SSC4		0.689					
RSC	RSC1	0.745						
	RSC2	0.713						
	RSC3	0.849						
	RSC4	0.724						

Latent variable	Observation variable	Factor loading						Variance cumulative contribution rate (%)
		1	2	3	4	5	6	
	RSC5	0.714						60.816%
CSC	CSC1			0.674				
	CSC2			0.765				
	CSC3			0.637				
	CSC4			0.751				
Green Trust	AT1					0.679		
	AT2					0.829		
	AT3					0.759		
	GWT1						0.744	
	GWT2						0.723	
	GWT3						0.762	
RI	RI1				0.818			
	RI2				0.703			
	RI3				0.773			

Confirmatory Factor Analysis

The confirmatory factor analysis of the overall measurement model requires establishing the correlations among independent variables, mediating variables, and dependent variables, as well as the relationships between each latent variable and observed items.

The study found that the standardized factor loadings of the 22 measurement items were all greater than 0.6 (0.643 - 0.849), which was within the acceptable range (0.6). The composite reliability (CR) of all measurement items was above 0.7 (0.706 - 0.828), and the average variance extracted (AVE) was above 0.5 (0.545 - 0.693), indicating that the overall measurement mode had good convergent validity. All correlation coefficients were less than the corresponding AVE values, and the discriminant validity was good, confirming the independence of latent variables (Henseler *et al.*, 2015).

The skewness distribution range of the 22 measurement items in this study was from -1.946 to 305 (|2|), and the kurtosis value distribution range was from -0.943 to 4.052 (|7|)(Finney & DiStefano, 2006). The values of kurtosis and skewness met the threshold of the normality test requirements, meeting the requirements for constructing the structural model.

Structural Equation Model

Using the AMOS 26.0 software, a structural equation model (SEM) was constructed as shown in Figure 2.

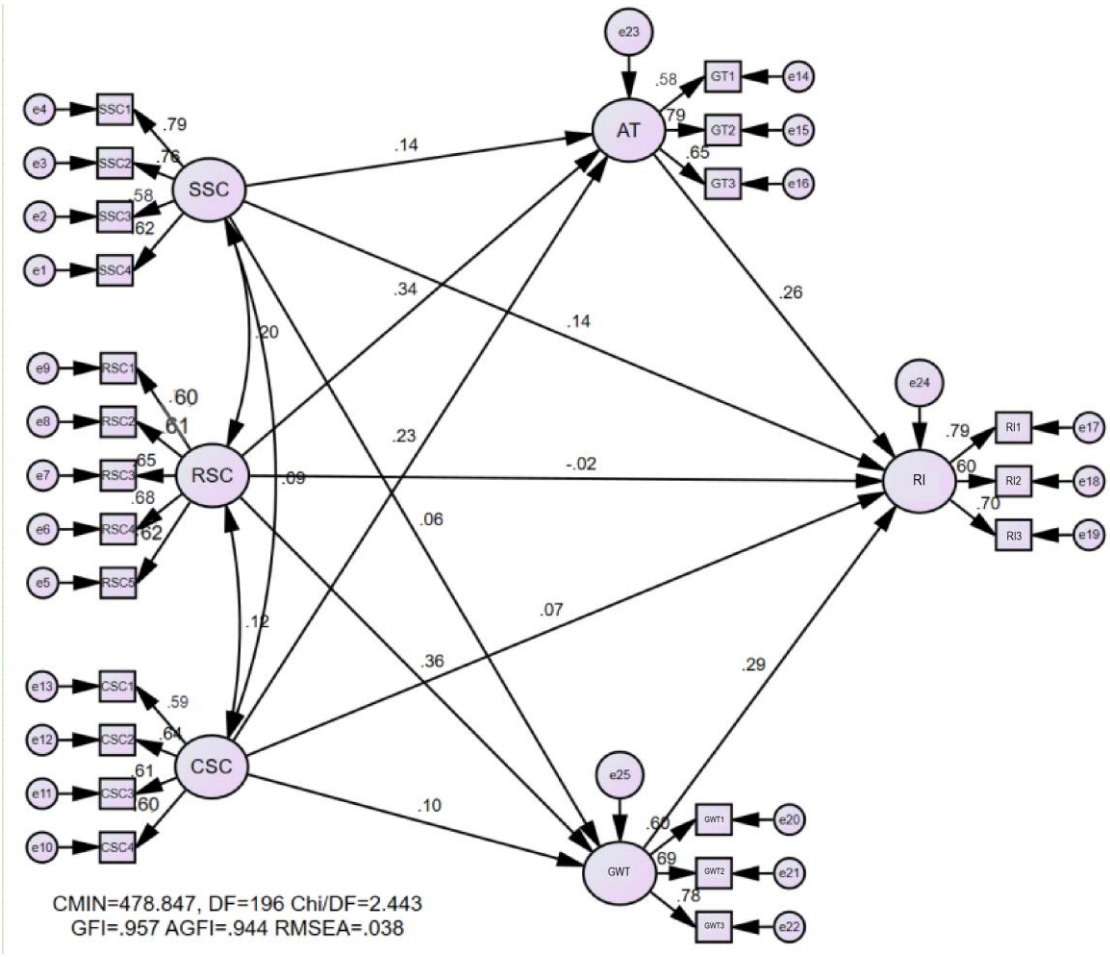

Figure 3: Structural Equation Model

The fit indices of the structural equation model are exported from the AMOS software, and the results are shown in Table 5. Several important model fit indices of the structural equation model, such as χ^2/df, RMSEA, AGFI, GFI, CFI, and TLI, all have fit statistics values that meet the fitting standard indicators (Schumacker & Lomax, 2016). The fit of the structural equation model is relatively ideal.

Table 5: Test Table for Appropriate Fit of SEM

Fitting Index	Statistical Value of Fitting	Fit Situation
RMSEA < .08	.022	Relatively Ideal
AGFI > .90	.940	Relatively Ideal
GFI > .90	.954	Relatively Ideal
CFI > .90	.947	Relatively Ideal
TLI > .90	.937	Relatively Ideal
χ^2/df < 3	2.661	Relatively Ideal

Path Coefficients of the SEM

Based on Table 6, among the three dimensions of social capital, only structural social capital (SSC) exerted a significant direct effect on repurchase intention (standardized estimate [SE] = 0.143, critical ratio [C.R.] = 3.509, p = 0.000 < 0.001***), hypothesis H1b is accepted.The other two variables: relational social capital (RSC) (SE = -0.017, C.R. = -0.308, p = 0.758 > 0.05) and cognitive social capital (CSC) (SE = 0.067, C.R. = 1.486, *p* = 0.137 > 0.05) did not exhibit significant direct effects on repurchase intention (Byrne, 2016). Hypothesis H1a and H1c is rejected.

Regarding green trust, both dimensions significantly influenced repurchase intention. Ability trust (AT): SE = 0.258, C.R. = 4.91, p = 0.000 < 0.001***, goodwill trust (GWT): SE = 0.29, C.R. = 6.039, p = 0.000 < 0.001***. The results confirm that both dimensions of green trust directly and significantly enhance consumers' repurchase intention for green agricultural products, aligning with theoretical expectations. Hypothesis H3a and H3b is accepted.

The impact of social capital on green trust manifests in three aspects: Structural social capital (SSC) significantly influenced ability trust (SE = 0.138, C.R. = 3.197, p = 0.001 < 0.01**) but not goodwill trust (SE = 0.06, C.R. = 1.439, p = 0.15 > 0.05) (Byrne, 2016). Relational social capital (RSC) exerted significant effects on both ability trust (SE = 0.34, C.R. = 4.96, p = 0.000 < 0.001***) and goodwill trust (SE = 0.361, C.R. = 5.283, p = 0.000 < 0.001***) (Byrne, 2016). Cognitive social capital (CSC) significantly enhanced both ability trust (SE = 0.227, C.R. = 9.399, p = 0.000 < 0.001***) and goodwill trust (SE = 0.105, C.R. = 2.338, p = 0.019 < 0.05) (Byrne, 2016). Hypotheses H2a, H2b, H2c, H2d, H2f are accepted, and H2e is rejected.

Table 6: Summary Table of Regression Coefficients for SEM

Hypothesis	Y	Path direction	X	Standardized Estimate	S.E.	C.R.	p	Hypothesis Test
H2b	AT	<---	SSC	0.138	0.023	3.197	0.001**	Accepted
H2a	AT	<---	RSC	0.34	0.134	4.96	***	Accepted
H2d	GWT	<---	RSC	0.361	0.203	5.283	***	Accepted
H2e	GWT	<---	SSC	0.06	0.034	1.439	0.15	Not significant / Rejected
H2c	AT	<---	CSC	0.227	0.021	9.399	***	Accepted
H2f	GWT	<---	CSC	0.105	0.059	2.338	0.019*	Accepted
H1b	RI	<---	SSC	0.141	0.037	3.492	***	Accepted
H1c	RI	<---	CSC	0.067	0.066	1.486	0.137	Not significant / Rejected
H3a	RI	<---	AT	0.258	0.089	4.91	***	Accepted
H3b	RI	<---	GWT	0.29	0.054	6.039	***	Accepted
H1a	RI	<---	RSC	-0.017	0.185	-0.308	0.758	Not significant / Rejected

Mediation Analysis

From Table 7, it can be seen that there are significant mediating effects in the five mediating paths of SSC→AT→RI, RSC→AT→RI, RSC→GWT→RI, CSC→AT→RI, and CSC→GWT→RI. Firstly, relational social capital can enhance the repurchase intention by increasing goodwill trust (Estimate = 0.346, p = 0.000* < 0.05), and this mediating path is the strongest significant. Secondly, relational social capital can enhance the repurchase intention by increasing ability trust (Estimate = 0.289, p = 0.000* < 0.05). Thirdly, cognitive social capital can enhance the repurchase intention by increasing ability trust (Estimate = 0.085, p = 0.000* < 0.05). Fourthly, cognitive social capital can enhance the repurchase intention by increasing goodwill trust (Estimate = 0.044, p = 0.000* < 0.05). Finally, structural social capital can enhance the repurchase intention by increasing ability trust (Estimate = 0.032, p = 0.003* < 0.05), and this mediating path has the weakest significance. In the bias-corrected percentile and percentile method tests, the upper and lower limits of the confidence intervals of the above five paths do not contain zero, and the p-values all meet the statistical significance standard of less than 0.05 (Preacher & Hayes, 2008). Hypotheses H4a, H4b, H4c, H4d, and H4f can all be accepted.

On the contrary, structural social capital cannot significantly affect the repurchase intention through goodwill trust (Estimate = 0.016, p = 0.179 > 0.05), indicating that this mediating effect path is not significant. In the bias-corrected percentile and percentile method tests, the upper and lower limits of the confidence intervals contain zero, and the p-value is greater than the statistical significance standard of 0.05 (Preacher & Hayes, 2008). Hypothesis H4e is rejected.

Table 7. Test of Mediating Effect in SEM

Hypothesis	Path Relationship	Mediating Effect		Bias-corrected Percentile		Percentile Method		Hypothesis Test
		Estimate	P	Lower	Upper	Lower	Upper	
H4b	SSC→AT→RI	.032	.003*	.012	.064	.01	.061	Accepted
H4e	SSC→GWT→RI	.016	.179	-.006	.042	-.007	.04	Not significant / Rejected

H4a	RSC→AT→RI	.289	.000*	.146	.534	.139	.514	Accepted
H4d	RSC→GWT→RI	.346	.000*	.196	.585	.193	.577	Accepted
H4c	CSC→AT→RI	.085	.000*	.049	.129	.048	.127	Accepted
H4f	CSC→GWT→RI	.044	.028*	.007	.092	.005	.087	Accepted
"*" indicates that p < 0.5, reaching statistical significance.								

Hypotheses Testing

Based on the path coefficients and significance tests, the test results of the research hypotheses can be obtained. As can be seen from Table 6 and Table 7, among the 17 original hypotheses, 13 of them were accepted. Among the 11 direct effect hypotheses, 8 were accepted, and among the 6 mediating effect hypotheses, 5 were accepted. This proves that the preset relationship of the model is largely valid.

Discussion and Implications

Discussion

Firstly, this study clarifies the independent action path of structural social capital in the digital instrumental network, bridging the gap in the classic theory when explaining the phenomenon of "network position resources prioritize over emotional connection" in the online domain.

Secondly, the study finds that the driving effect of goodwill trust on purchase intention exceeds that of ability trust, providing empirical support for the "moral priority" hypothesis in the green consumption field, and indicating that information transparency is a key bottleneck, which promotes the evolution of the consumer behavior theory model to the "moral-capability dual-channel" framework.

Implications

For enterprises, their operations should focus on building a "trust-driven" private ecosystem: enhance the trust in capabilities through digital empowerment (such as granting key users traceability privileges); design mechanisms to purify relationship capital, for instance, visualizing mutual benefits with "trust points" and using technical means to suppress promotional noise; and strive to address the shortcoming of information transparency, visualizing moral commitments.

For policymakers, they should promote the establishment of institutionalized trust infrastructure, such as encouraging platforms to connect with national traceability systems, setting mandatory regulations for advertising and dispute resolution, and through collaboration with enterprises to establish industry benchmarks such as "green trust index" to guide the orderly development of the market.

References

[1] Byrne, B. M. (2016). Structural equation modeling with AMOS (3rd ed.). Routledge.
[2] Chen, J., & Huang, Q. (2024). Leveraging key opinion consumers (KOCs) in private traffic pools: The interplay of parasocial interaction, trust, and purchase intention. Psychology & Marketing, 41(3), 345–359.
[3] Dou, L., & Li, X. (2024). Examining the influence of technology-enhanced information on purchase of green food in the context of live streaming commerce. NJAS: Impact in Agricultural and Life Sciences, 96(1). https://doi.org/10.1080/27685241.2024.2350583
[4] Finney, S. J., & DiStefano, C. (2006). Non-normal and categorical data in structural equation modeling. In G. R. Hancock & R. O. Mueller (Eds.), Structural equation modeling: A second course (pp. 269–314). Information Age Publishing.
[5] Fu, S., Ma, R., He, G., Chen, Z., & Liu, H. (2023). A study on the influence of product environmental information transparency on online consumers' purchasing behavior of green agricultural products. Frontiers in Psychology, 14. https://doi.org/10.3389/fpsyg.2023.1168214
[6] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Cengage Learning.
[7] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43, 115–135.
[8] Li, C., Ye, L. L., & Wang, L. P. (2021). The impact of new energy vehicle consumption promotion policy on potential consumers' purchase intention. Chinese Journal of Management Science, 29(10), 151–164.

[9] Marozzo, V., Costa, A., & Abbate, T. (2024). The relationship between the perceived product sustainability of organic food and willingness to buy: A parallel mediation effect of product traceability and consumers' environmental concerns. Italian Journal of Marketing, 2024(4), 375–393. https://doi.org/10.1007/s43039-024-00102-w

[10] Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. Academy of Management Review, 20(3), 709–734. https://doi.org/10.5465/amr.1995.9508080335

[11] McKnight, D. H., & Chervany, N. L. (2001). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. International Journal of Electronic Commerce, 6(2), 35–59.

[12] Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology. The MIT Press.

[13] Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. Academy of Management Review, 23(2), 242–266.

[14] Nguyen-Viet, B., & Thanh Tran, C. (2024). Sustaining organizational customers' consumption through corporate social responsibility and green advertising receptivity: The mediating role of green trust. Cogent Business & Management, 11(1). https://doi.org/10.1080/23311975.2023.2287775

[15] Ortiz, B., Donate, M. J., & Guadamillas, F. (2016). Relational and cognitive social capital: Their influence on strategies of external knowledge acquisition. Procedia Computer Science, 99, 91–100. https://doi.org/10.1016/j.procs.2016.09.103

[16] Sadiq, M., Adil, M., & Paul, J. (2022). Organic food consumption and contextual factors: An attitude–behavior–context perspective. Business Strategy and the Environment, 32(6), 3383–3397. https://doi.org/10.1002/bse.3306

[17] Schumacker, R. E., & Lomax, R. G. (2016). A beginner's guide to structural equation modeling (4th ed.). Routledge.

[18] Shrestha, N. (2021). Factor analysis as a tool for survey analysis. American Journal of Applied Mathematics and Statistics, 9(1), 4–11.

[19] Tao, Z., & Chao, J. (2024). The impact of a blockchain-based food traceability system on the online purchase intention of organic agricultural products. Innovative Food Science & Emerging Technologies, 92, 103598. https://doi.org/10.1016/j.ifset.2024.103598

[20] Zhang, M. Y. (2024). The impact of e-commerce anchor social capital on consumers' continuous purchase intention: From the perspective of perceived value and perceived trust. Journal of Business Economics, (08), 85–88.

[21] Zhao, S., & Luo, X. (2017). Building trust through social capital: A study of Chinese consumers' perceptions of green food. Journal of Cleaner Production, 149, 349–357.