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Factors that Affect Consumers' Willingness to Buy Organic Food—Using Teenagers as an Example

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Abstract: With the rise of people's living standards and quality to pursue a healthier lifestyle, the purchase of organic food has gradually increased, thus becoming more and more common. Some people now care more about the quality of food rather than the price. Teenagers (between13-19) could be one of the majorities of needing to buy healthy food. So it is essential to know teenagers' attitudes toward organic food. Based on the planned behavior model, this paper studies three dimensions of behavior attitude, subjective norms, and perceptual behavior control, including three factors: consumers' love for organic food, subjective social norms for organic food, and consumers' perceived ability to control the behavior of purchasing organic food. This paper obtains valid data through questionnaires, then analyses the data and verifies that the hypothesis is valid. According to the study results, young consumers' willingness to buy organic food is influenced by their classmates and friends and spending power. Finally, some suggestions are given for the purchasing behavior of young people.he data were obtained through the questionnaire survey, quantified, tested the hypotheses, and made an analysis and suggestions, according to the study's findings, for young consumers' inclination to purchase organic food.

Keywords: Planning behavior model, Young people buy intention, Organic food

1. Introduction

In recent years, many food safety incidents have occurred in China. For example, there are many food quality and safety problems, such as pesticide residues, excessive heavy metals, opaque processing environment and process, which directly threaten the environmental safety of public consumption and human health. These problems have aroused wide concern of the public, and the public's awareness of food safety has been continuously enhanced. As The Times has advanced and people's living standards have improved, organic food has gained popularity due to its wonderful qualities, including its superior health, lack of pollution, use of chemical fertilizers, and purity of the natural world. Relying on people's requirements for food quality have become higher, and the production scale and sales of organic food have gradually increased. For a sizable customer category like young people, this article will evaluate the factors influencing consumers' propensity to purchase organic food.

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2. Literature Review

In recent years, both at home and abroad have raised the importance of food safety and organic food. The research on agricultural product consumption behavior by domestic and foreign scholars is mainly based on two main lines.One is psychological behavior research, which primarily examines how psychological elements including behavior, regulation, and control affect many aspects of rational behavior theory (Theory of Reasoned Action, TRA) and planned behavior theory (Theory of Planned Behavior, TPB) [1-2].The other is the empirical study of economics, where economic variables such as income and price are added, and the aforementioned behavioral variables are combined. The standardized process of research is usually to propose hypotheses, and then design questionnaires to build statistical models for empirical research, where structural equation models and discrete selection models dominate the empirical method. Ajzen，I and Driver BLwere the first to apply TPB to the study of leisure consumer behavior intention, verification behavior, specification and control specifically studied the influence of approach motivation in consumer motivation on consumer purchase behavior, by constructing a three-level "motivation model" to simulate the influence process of consumption motivation on purchase behavior [3-4]. According to the problem of how consumption motivation affects purchasing behavior, Han et al compared different mechanisms of approach motivation and avoidance motivation, and concluded that approach motivation promotes people to pay more attention to the problem, while avoidance motivation prompted people to pay more attention to emotional coping mode [5]. Mr. Huang added economic factors such as price, and studied the intermediary effect of behavioral attitude on health food purchasing behavior [6]. Luo Cheng et al. the theory of planned behavior may successfully expose the psychological aspects and affect mechanisms of the purchasing intention of safe agricultural goods [7]. This was demonstrated through research on the consumption behavior of agricultural products based on TPB. Laukov and Wu Jia used TPB to analyze the consumption of agricultural items, showed that there was an interaction between consuming attitude, subjective norms, and perceptual behavior control in addition to establishing the direct effect of these factors on buy behavior [8]. When studying the purchasing behavior of consumer fresh eggs, Jiang Baichen et al. concluded that their cognitive level significantly affected consumers' purchasing behavior [9]. Gao Jian uses the structural equation model to study how consumers' purchasing motivation affects the purchasing behavior of their agricultural products, and the influence of different intensity purchasing motivation on the purchasing behavior of agricultural products is different [10]. Zhang Bei et al. introduced psychological variables such as marketing stimulus and psychological response as external factors to establish a Logistic model of consumers' purchasing intention and behavior of organic agricultural products, and accordingly studied the key influencing factors of purchasing intention and behavior [11]. In order to explore the willingness and behavior of consumers to participate under the quality and safety supervision of agricultural products, Su Xin et al. introduced the willingness to participate as an intermediary variable on the basis of external factors such as behavior attitude, subjective norms and quality perception ability, as ell as empirically verified the rationality of the intermediary role [12].

3. Research Method

The following presumptions are put out in accordance with the notion of planned behavior.

H1: Consumers 'love of organic food has a positive impact on consumers' willingness to buy it.

H2: The subjective norms of organic food for organic food have a positive impact on consumers' willingness to buy organic food.

H3: consumers 'perceived ability to control organic food purchases was positively correlated with consumers' willingness to buy.

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4. Results and Data Analysis

4.1. Descriptive Data Analysis

Collect questionnaire 215 screening questions deleted 45 questionnaires returned 79%. Men accounted for 43.26%, and women accounted for 55.81%, indicating that women are more concerned about organic food than men. Among the respondents aged 18-24 years, we divided them into 15-18 and 18-24, with 39.53% in the lower age group and 60.47% in the other stage. We can see that organic food-related problems were more emphasized in the 18-24 age group.。 Based on the above findings, the three hypotheses hold. [Without an analysis, where are the results coming from?] The degree of consumers for organic food is positively correlated with their purchase intention, social subjective norms for organic food are positively correlated with consumers 'purchase intention, and consumers' perceived ability to control the behavior of buying organic food is also positively correlated with their purchase intention.

4.2. Verification Results of Hypothesis 1

As shown in Table 1, the unitary regression analysis method was used. The adjusted R side is set at 0.606, which means that the interpretation of the purchase intention is 60.6%. The significant P-value of liking is less than 0, and the regression coefficient is 0.78, which means that liking has a positive impact on the user's purchase intention, so assume that H1 is true.

Table 1: Unitary regression analysis of H1.

	Non-standardized coefficients		Standardization coefficient	t	p	VIF	R^2	adjust R^2	F
	B	standard error	Beta						
constant	1.444	0.176	-	8.202	0.000	-	0.609	0.606	F=261.448***
Love degree	0.571	0.035	0.78	16.169	0.000	1.000			
Dependent variable: purchase intention									

Note: * p <0.05, * * p <0.01, * * * p <0.001

4.3. Verification Results of Hypothesis 2

As shown in Table 2, the adjusted R party was 0.565, which means that the subjective attitude explained the purchase intention by 56.5%. The significance P-value of subjective attitude is 0.000 and less than 0.001, and the regression coefficient is 0.753, meaning that is, subjective attitude has a positive effect on the user's purchase intention to buy, so H2 is assumed to hold.

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Table 2: Unitary regression analysis of H2.

	Non-standardized coefficients		Standardization coefficient	t	p	VIF	R^2	adjust R^2	F
	B	standard error	Beta						
constant	0.911	0.226	-	4.025	0.000	-	0.567	0.565	F= 220.322 ***
Subjective attitude	0.77	0.052	0.753	14.843	0.000	1.000			
Dependent variable: purchase intention									

Note: * p <0.05, * * p <0.01, * * * p <0.001

4.4. Verification Results of Hypothesis 3

As shown in Table 3, the adjusted R party is 0.474, which means that the ability to control organic food purchases explains 47.4% of the purchase intention. The significance P value of the ability to control organic purchasing behavior is 0.000 less than 0.001, and the regression coefficient is 0.691, that is, the ability to control organic purchasing behavior has a positive impact on the user's intention to buy, so assume H3 is true.

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Table 3: Unitary regression analysis of H3.

	Non-standardized coefficients		Standardization coefficient	t	p	VIF	R^2	adjust R^2	F
	B	standard error	Beta						
constant	1.116	0.254	-	4.389	0.000	-			
The ability to control the behavior of buying organic foods	0.725	0.059	0.691	12.386	0.000	1.000	0.477	0.474	F=153.408 ***
Dependent variable: purchase intention									

Note: * p <0.05, * * p <0.01, * * * p <0.001

4.5. Data Analysis

As shown in Table 4, dimension scores are averaged (liking: five points are averaged, seven points are averaged, and two averages are averaged).The Cronbach's α system values to control the organic food purchasing beh avior, liking, subjective attitude, purchase intention and the total questionnaire were all above 0.85, indicating that the reliability of the questionnaire was good.

Table 4: Reliability analysis.

variable	The Cronbach's α coefficient of the
The ability to control the behavior of buying organic foods	0.872
Love degree	0.929
Subjective attitude	0.908
willingness to buy	0.920
Total questionnaire	0.958

Table 5-6 shows the sex ratio, age distribution and some basic data of the questionnaire.

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Table 5: Describe statistics.

variable	N	crest value	least value	average value	standard deviation	median	variance
The ability to control the behavior of buying organic foods	170	5	1	4.251	0.884	4.5	0.781
Love degree	170	6	1	4.825	1.268	5.25	1.608
Subjective attitude	170	5	1	4.269	0.907	4.667	0.824
willingness to buy	170	5	1	4.199	0.928	4.5	0.861

Table 6: Basic data of the questionnaire survey.

project	option	frequency	percentage (%)	Accumulated percentage of (%)
sex	woman	89	52.353	52.353
	man	79	46.471	98.824
	other	2	1.176	100.000
age group	18-24 Years old	106	62.353	62.353
	15-18 Years old	64	37.647	100.000
Education level	senior middle school	54	31.765	31.765
	junior college	43	25.294	57.059
	special school	39	22.941	80.000
	undergraduate course	34	20.000	100.000

As shown in Table 7, sex testing results on its ability to control organic buying behavior showed a p-value of 0.143> 0.05, indicating that sex had no significant difference in its ability to control organic buying behavior. The p-value of sex in liking was 0.008 <0.05, indicating that sex was significantly higher than that for girls. Effect size Cohen's d value is: 0.418. The test result p-value for gender in subjective attitudes was 0.224> 0.05, indicating that gender did not differ significantly different in subjective attitudes. The test result p-value for gender on purchase intention was 0.036 <0.05, indicating that gender was significantly different in purchase intention, and boys had significantly higher scores than girls. The Cohen's d value is 0.327.

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Table 7: Independent sample T-test for sex differences in the four variables.

variable	sex	N	average value	standard deviation	t	p	Cohen's d
The ability to control the behavior of buying organic foods	man	79	4.377	0.811	1.471	0.143	0.227
	woman	89	4.183	0.889			
Love degree	man	79	5.121	0.945	2.706	0.008***	0.418
	woman	89	4.608	1.433			
Subjective attitude	man	79	4.367	0.737	1.222	0.224	0.189
	woman	89	4.199	1.011			
willingness to buy	man	79	4.377	0.702	2.118	0.036**	0.327
	woman	89	4.081	1.046			

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Table 8: Independent sample T-test for age differences across the four variables.

variable	age	N	average value	standard deviation	t	p	Cohen's d
The ability to control the behavior of buying organic foods	15-18 Years old	64	4.305	0.854	0.609	0.543	0.096
	18-24 Years old	106	4.219	0.904			
	amount to	170	4.251	0.884			
Love degree	15-18 Years old	64	4.876	1.233	0.413	0.680	0.065
	18-24 Years old	106	4.793	1.294			
	amount to	170	4.825	1.268			
Subjective attitude	15-18 Years old	64	4.349	0.762	0.896	0.371	0.142
	18-24 Years old	106	4.22	0.985			
	amount to	170	4.269	0.907			
willingness to buy	15-18 Years old	64	4.211	0.801	0.135	0.893	0.021
	18-24 Years old	106	4.191	1.000			
	amount to	170	4.199	0.928			

As shown in Table 8, age tested the resulting p-value on the ability to control organic buying behavior with a value of 0.543> 0.05, indicating that age was not significantly different in the ability to control organic purchasing behavior. The test result p-value of age in liking was 0.680> 0.05, indicating that there was no significant difference in liking for age. The test result p-value of age on subjective attitudes was 0.371> 0.05, indicating that age was not significantly different in subjective attitudes. The test result p-value of age in purchase intention was 0.893> 0.05, indicating that age was not significant in purchase intention.

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Table 9: One-way ANOVA was performed for the educational background differences of the four variables.

variable	record of formal schooling	N	average value	standard deviation	F	p
The ability to control the behavior of buying organic foods	senior middle school	54	4.093	0.915	1.376	0.252
	undergraduate course	34	4.191	0.985		
	junior college	43	4.320	0.832		
	special school	39	4.449	0.785		
Love degree	senior middle school	54	4.503	1.396	2.142	0.097
	undergraduate course	34	4.895	1.373		
	junior college	43	4.872	1.114		
	special school	39	5.156	1.077		
Subjective attitude	senior middle school	54	4.222	0.969	0.495	0.686
	undergraduate course	34	4.186	1.067		
	junior college	43	4.256	0.822		
	special school	39	4.419	0.764		
willingness to buy	senior middle school	54	4.051	0.968	1.416	0.240
	undergraduate course	34	4.074	1.063		
	junior college	43	4.314	0.861		
	special school	39	4.385	0.790		

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As shown in Table 9, The ANOVA results on the ability to control the behavior of purchasing organic food showed a p-value of 0.252> 0.05, indicating that there was no significant difference in the ability to control the organic food purchasing behavior. The ANOVA results of liking degree was 0.097> 0.05, indicating that there was no significant difference in liking degree among different degrees. The ANOVA results on subjective attitudes showed a p-value of 0.686> 0.05, indicating that there was no significant difference in subjective attitudes among different academic qualifications. The p-value was 0.240> 0.05, indicating that there was no significant difference in the purchase intention of the different academic qualifications.

Table 10: Correlation analysis.

	The ability to control the behavior of buying organic foods	Love degree	Subjective attitude	willingness to buy
The ability to control the behavior of buying organic foods	1.000			
Love degree	0.776***	1.000		
Subjective attitude	0.575***	0.685***	1.000	
willingness to buy	0.691***	0.780***	0.753***	1.000

(Note: * p <0.05, * * p <0.01, * * * p <0.001)

As shown in Table 10, the correlation analysis showed that the pairwise correlation between the four variables were significant and all showed strong positive associations.

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Table 11: Multiple returns.

	Non-standardized coefficients		Standardization coefficient	t	p	VIF	R^2	adjust R^2	F
	B	standard error	Beta						
constant	0.375	0.216		1.737	0.084	-			
Love degree	0.274	0.055	0.374	5.002	0.000	3.207			
Subjective attitude	0.407	0.059	0.398	6.91	0.000	1.903	0.710	0.705	F= 135.698 ***
The ability to control the behavior of buying organic foods	0.18	0.07	0.171	2.576	0.011	2.539			
Dependent variable: purchase intention									

Note: * p <0.05, * * p <0.01, * * * p <0.001

As shown in Table 11, through the regression analysis of the three independent variables and purchase intention, it can be seen that the adjusted R square of the independent variable interpretation in the whole purchase intention model is 0.705, that is, the degree of explanation for liking, subjective attitude and ability to control the purchase of organic food is 70.5%. Within the acceptable range.Meanwhile, the significant P values of the three independent variables were all less than 0.05, and the standardization coefficient is greater than zero, indicating that the three independent variables can significantly affect the purchase intention, and the effect is positive.

5. Conclusion

According to the above study results, all three hypotheses are valid. Using the planning behavior theory, this study investigates and examines the variables influencing customers' decision to purchase organic food. The study found that consumers 'degree of love for organic food was positively correlated with their intention to buy it, social subjective norms for organic food were positively correlated with consumers' purchase intention, and consumers' perceived ability to control the behavior of buying organic food was also positively correlated with their purchase intention.

Based on three hypotheses, the verification of this hypothesis not only explains why young people buy organic food, which can promote their awareness of healthy eating, but also provides ideas on how to ensure a balanced diet for students. For example, strengthen the publicity of the benefits of organic food, standardize the intensive production of organic food to reduce prices. This study for young people, especially students for the understanding of organic food about health concerns, combined with the plan behavior theory of innovation, through the empirical analysis

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method, study the influencing factors of young people to buy organic food willingness, to enrich related research, and provide guidance for practical problems. Consumers still have a lot of willingness to buy organic food, It shows that individuals are becoming more conscious of eating well. On the other hand, relevant enterprises should increase the standardized production of organic food and strengthen the supervision of food production and processing. The deficiency of this study is more obvious. First, there are few sample data, and the argument is not convincing. In addition, the proportion of men and women in the sample was relatively unbalanced due to the questionnaire distribution form and other reasons.

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