Research on the Influencing Factors of Purchasing Intention of Brand Agricultural Products from the Perspective of Perceived Value

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Abstract—According to the theory of customer perceived value and brand agricultural characteristics, this paper puts forward that customer perceived value of the brand agricultural products has a functional value, economic value, emotional value, social value and image value of five dimension. Through empirical analysis, it is proved that the existence of five dimensions of perceived value and the five dimensions have significant positive effects on the purchase intention of brand agricultural products, among them, the effect of social value is the largest. And product involvement has a moderating effect on perceived value and purchase intention. Finally, based on the above steps, this paper puts forward the ranking of consumers' attention to the perceived value dimension, and accordingly provides more accurate marketing countermeasures for enterprises.

1 Introduction

The no.1 document of the central government in 2019, "Several Opinions of the State Council on Giving Priority to the Development of Agriculture and Rural Areas and Doing a Good Job in the Work of Agriculture, Rural areas and Farmers", puts forward: improving the quality standard system of featured agricultural products, strengthening the protection of geographical indications and trademarks of agricultural products, and creating a number of "local brand" and "township brand" featured product brands [1]. Branding of agricultural products is an inevitable requirement for the transformation and upgrading of traditional agriculture, as well as the goal and direction of the development of modern agriculture [2]

With the development of market economy and the improvement of people's living standard, the quantity and quality of people's demand for brand agricultural products are increasing. In the process of selling brand agricultural products to consumers, however, there are often sales difficulties caused by consumers' weak brand recognition of agricultural products. On the other hand, agricultural products are convergent in packaging, marketing and other aspects, and the quality information of agricultural products is extremely asymmetric between consumers and producers. However, when consumers purchase agricultural products, due to the restrictions of sensory conditions, they often only make

purchase decisions based on their feelings or past consumption experience. Therefore, when consumers buy agricultural products, they often need to pay more search costs if they want to obtain certain quality products. Consumers need a sign that can easily identify the quality of produce, and this sign can only be a brand. Brand is the most important sign for consumers to identify product quality [3].

According to the theory of customer perceived value, customer perceived value is the most important factor driving customer purchase behavior [4].

Exploring and discovering the most important "customer" factor in the path of agricultural product brand cultivation from the perspective of consumers can provide certain inspiration and guidance for the current agricultural product brand construction in China.

2 LITERATURE REVIEW AND HYPOTHESIS PRESENTATION

Foreign scholars have conducted a series of studies on the connotation of perceived value. Zeithaml found that customer perceived value is a relatively subjective evaluation of perceived benefits minus perceived costs when customers purchase products (or services) [5]. The definition given by Zeithaml has been widely accepted and recognized at home and abroad. Woodruff defines customer perceived value from a multidimensional perspective as "customer's preference for product

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features, personality functions and any value that can promote (prevent) customer goals" [6].

Scholars at home and abroad have defined the dimension of perceived value. Sweeney et al. believe that when customers pay more attention to the situational and experiential aspects of products, customer perceived value includes price value, quality value, social value and emotional value [7]. According to Zhengfang Wang et al., the perceived value of consumers in purchasing generally comes from two aspects, that is, the product purchased and Situation of purchase, and the customer perceived value should generally include product value and channel value [8]. In the process of studying green cosmetics, Xiaoyan Yang and others found that customers also value whether products can help reduce environmental damage and pollution, and help customers improve the consciousness of environmental protection. On the basis of functional value, emotional value, social value and perceptual pay, this paper puts forward the hypothesis of green value [9]. It can be seen that the customer perceived value of products with different attributes and characteristics, based on the core dimension of customer perceived value of products, adds new dimensions of perceived value with different characteristics according to product characteristics.

In the field of agricultural products, scholars also put forward some opinions on the dimension division of customer perceived value of agricultural products. Dengfeng Cui et al. believed that featured agricultural products were in a unique geographical region or had a long history or characteristic culture, so they added regional value as a new dimension to the customer perceived value model of featured agricultural products [10]. Guozheng Zhang et al. believed that safety perception is an important factor affecting consumer perceived value, so they added safety value into the dimension of customer perceived value, and constructed a five-dimensional model of economic value, functional value, safety value, emotional value and environmentally friendly value of consumer perceived value of agricultural products [11]. According to Zongshui Wang, although there is no unified view on the composition of the customer perceived value model, the essence of the model is explained in terms of customer perception and customer demand, and with the increasing change of customer demand, perceived value will also show different components [12].

Based on the above research, this paper believes that brand agricultural products have distinctive quality and characteristic symbols and signs that are different from ordinary agricultural products. The image of and the brand and the enterprise will greatly affect consumers' purchase intention, so the customer perceived value of brand agricultural products should also include image value. According to the existing research results, the customer perceived value of brand agricultural products can be divided into five dimensions: functional value, emotional value, social value, economic value and image value. H1: consumers' perception of the functional value of brand agricultural products will positively affect consumers' purchase intention; H2: consumers' perception of the emotional value of brand agricultural

products will positively affect consumers' purchase intention; H3: consumers' perception of the social value of brand agricultural products will positively affect consumers' purchase intention; H4: consumers' perception of the economic value of brand agricultural products will positively affect consumers' purchase intention; H5: consumers' perception of the image value of brand agricultural products will positively affect consumers' purchase intention.

The term "involvement" originated from Sherif and Cantril's paper "self-involvement", referring to the degree to which an individual is self-involved in something. Zaichkowsky first applied the concept of involvement to the study of consumer behavior. He believed that consumer involvement is the internal correlation degree of a commodity perceived by consumers based on their own values, interests and needs. It can stimulate consumers' continuous attention to the characteristics of a commodity, which can be divided into high involvement degree and low involvement degree [13]. Zhengfang Wang et al. believed that product involvement had a moderating effect on perceived value, perceived risk and channel selection [8]. Yang Jiali believed that the introduction of product involvement would adjust the effect intensity of regional brand of agricultural products on consumers' perceived value, and the conclusion indicated that the influence of individual consumer factors should be considered in regional brand construction of agricultural products [14]. Based on the above research, this paper proposes the following hypothesis: H6: product involvement has a moderating effect on the value perception of brand agricultural products and consumers' purchase intention; H6a: product involvement plays a moderating role between the perceived functional value of brand agricultural products and consumers' purchase intention; H6b: product involvement has a moderating effect on the emotional value perception of brand agricultural products and consumers' purchase intention; H6c: product involvement plays a moderating role between the social value perception of brand agricultural products and consumers' purchase intention; H6d: product involvement plays a moderating role between brand agricultural products' economic value perception and consumers' purchase intention; H6e: product involvement plays a moderating role between the image value perception of brand agricultural products and consumers' purchase intention.

According to the above, the influence model of consumers' purchase intention is built, as shown in figure

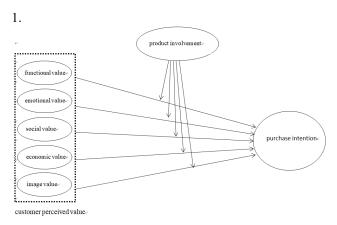


Figure 1. Impact model of perceived value of brand agricultural products on consumers' purchase intention.

3 The empirical analysis

3.1 scale and questionnaire design

By studying the scales of previous scholars and innovating accordingly, a preliminary scale was formed. The measurement method of the questionnaire mainly adopts Likert five-component scale to find the corresponding items for the five dimensions of perceived value, product involvement and purchase intention. In addition, the reliability test was used to eliminate unqualified items, and the validity test was used to test whether the variables had good construction validity, then the scale was modified and improved to form the final scale

The items of functional value in the final scale are as follows: brand agricultural products are more secure, brand agricultural products are more fresh and health, agricultural products taste better, agricultural products are greener and more natural, brand agricultural products are more reliable in quality, buying brand agricultural products can help alleviate my concerns about food safety and quality; Emotional value is: buying brand agricultural products makes me feel more happy, buying brand agricultural products makes me feel better, buying brand agricultural products makes me feel more relaxed, buying brand agricultural products is an interesting thing, buying brand products makes me feel more confident, buying brand agricultural products makes me feel more a sense of accomplishment; Items of economic value are: pricing of brand agricultural products is more reasonable, brand agricultural products provide value in line with the price, brand agricultural products are more economical; Social value is: to buy brand agricultural products can help me make a good impression to others, to buy brand agricultural products can help me win more praise, to buy brand agricultural products help me set up positive and healthy personal image, to buy brand agricultural products can show my social status, to buy brand of agricultural products can help me get approval; Image value items are as follows: brand agricultural products are generally

characteristic agricultural products, brand agricultural products have strong local cultural atmosphere, brand agricultural products with certification information make people feel trustworthy, brand agricultural products are easier to identify, brand agricultural product enterprises are more active to fulfill social responsibility (e.g., charity, disaster relief, etc.), brand agricultural product enterprises are in a leading position in the industry of agricultural products.

Respondents were asked to score the perceived value of brand agricultural products based on their own needs and preferences. This questionnaire is mainly divided into three parts, which are the basic consumption situation of customers, their attitude towards brand agricultural products, and consumer perception of the value of brand agricultural products.

3.2 data collection

In order to make the data source coverage wider, this survey mainly adopts online and offline snowball way to send questionnaires. The questionnaire is mainly from Sichuan. The effective rate of the questionnaires was 94.5%. Among the 328 valid questionnaires collected in this study, the male to female ratio is about 1:1.8, with more women than men. In terms of age distribution, the majority of respondents were young people aged 19-34, accounting for more than half. In terms of the distribution of occupations, the survey objects are mainly students, and the survey objects have a variety of occupational types. In terms of monthly consumption level, the monthly consumption level of 1001-2500 accounts for the largest proportion.

3.3 reliability and validity test

SPSS 23.0 software was used for reliability analysis, and the results of reliability values of 6 variables including functional value, emotional value, economic value, social value, image value, product involvement and purchase intention were 0.86, 0.90, 0.72, 0.89, 0.91, 0.91 and 0.88. The reliability value of each variable is above 0.8, so it is considered that the internal consistency of the scale measurement data is relatively high.

In terms of validity, the questionnaire data were tested by KMO and sphericity test, and the KMO value of the sample was 0.918, significance probability value was 0.000, less than 0.05, which was suitable for factor analysis.

Five common factors were extracted, namely functional value, emotional value, economic value, social value and image value, and their cumulative explanatory ability was 64.090%. Factor rotate through the method of maximum variance, the indicators of "brand agricultural products have higher cost performance" and "the cost of brand agricultural products is more worthwhile" in the dimension of "economic value" are eliminated, and then a total of 27 indicators are left. The indicator of "purchasing brand agricultural products can help alleviate my concerns about food safety and quality" is removed from the

dimension of emotional value and incorporated into the dimension of functional value. Finally, the factor load coefficient of each item is greater than 0.60, and the questionnaire data shows good validity.

3.4 correlation analysis and regression analysis

From the data results of the correlation analysis, it can be seen that the five independent variables of functional value, emotional value, economic value, social value and image value are significantly positively correlated with the purchase intention, and the Pearson correlation coefficients are 0.476, 0.552, 0.582, 0.539 and 0.576.

In order to further explain the relationship between functional value, emotional value, economic value, social value and image value and purchase intention, the multiple linear regression model is adopted. According to the regression results, the statistical value F is 67.298 with a significance of 0.000, the regression effect is significant, indicating that there is a causal relationship between the five dimensions of customer perceived value and customer purchase intention. In addition, the regression coefficients of functional value, emotional value, economic value, social value, image value, were 0.147 (T = 3.024, P < 0.05), 0.192 (T = 3.763, P < 0.001), 0.127 (T = 2.423, P < 0.05), 0.23 (T = 4.485, P < 0.001), 0.215 (T = 4.123, P < 0.001), sig. Value is less than 0.05. So each factor of the customer perceived value is positively related with the customer's purchase intention, among them, the influence of social value is greatest, and image value is the second.

3.5 stratified regression analysis

TABLE I. HIERARCHICAL REGRESSION ANALYSIS RESULTSS

| | model | Non standardized regression coefficient | | Standardized regression coefficient | t | Sig. | Square of adjusted R |
|------------------------|---|---|-------------------|-------------------------------------|--------|-------|----------------------|
| | | В | Standard error | | | | |
| The moderating | functional value | 0.608 | 0.063 | 0.493 | 9.695 | 0.000 | |
| effect of product | product | 0.072 | 0.059 | 0.063 | 1.236 | 0.217 | 0.269 |
| involvement on | involvement | | | | | | |
| functional value | functional value | 0.545 | 0.061 | 0.441 | 8.881 | 0.000 | |
| and purchase | product | 0.210 | 0.062 | 0.182 | 3.403 | 0.001 | |
| intention | involvement | | | | | | 0.328 |
| | functional value×product involvemen | 0.332 | 0.062 | 0.269 | 5.370 | 0.000 | 0.328 |
| The moderating | emotional value | 0.570 | 0.050 | 0.531 | 11.303 | 0.000 | |
| effect of product | product | 0.131 | 0.054 | 0.114 | 2.425 | 0.016 | 0.323 |
| involvement on | involvement | | | | | | |
| emotional value | emotional value | 0.565 | 0.048 | 0.526 | 11.665 | 0.000 | |
| and purchase | product | 0.235 | 0.056 | 0.204 | 4.223 | 0.000 | |
| intention | involvement | | | | | | 0.377 |
| | emotional value×product involvemen | 0.254 | 0.048 | 0.249 | 5.294 | 0.000 | 0.377 |
| The moderating | economic value | 0.530 | 0.050 | 0.525 | 10.624 | 0.000 | |
| effect of product | product | 0.068 | 0.057 | 0.059 | 1.202 | 0.230 | 0.300 |
| involvement on | involvement | | | | | | |
| economic value | economic value | 0.547 | 0.049 | 0.541 | 11.206 | 0.000 | |
| and purchase intention | product involvement | 0.178 | 0.061 | 0.155 | 2.915 | 0.004 | 0.338 |
| | economic value×product involvemen | 0.198 | 0.046 | 0.219 | 4.282 | 0.000 | 0.338 |
| The moderating | social value | 0.570 | 0.047 | 0.555 | 12.187 | 0.000 | |
| effect of product | product | 0.149 | 0.053 | 0.130 | 2.846 | 0.005 | 0.353 |
| involvement on | involvement | | | | | | |
| social value and | social value | 0.517 | 0.046 | 0.503 | 11.145 | 0.000 | |
| purchase intention | product involvement | 0.233 | 0.053 | 0.202 | 4.368 | 0.000 | 0.399 |
| | social value×product involvemen | 0.266 | 0.053 | 0.229 | 4.988 | 0.000 | 0.399 |

| The moderating | image value | 0.540 | 0.045 | 0.558 | 12.007 | 0.000 | |
|-------------------|---------------|-------|-------|-------|--------|-------|-------|
| effect of product | product | 0.107 | 0.054 | 0.093 | 1.999 | 0.046 | 0.347 |
| involvement on | involvement | | | | | | |
| image value and | image value | 0.424 | 0.045 | 0.438 | 9.530 | 0.000 | |
| purchase | product | 0.255 | 0.054 | 0.221 | 4.756 | 0.000 | |
| intention | involvement | | | | | | 0.441 |
| | image | 0.383 | 0.052 | 0.342 | 7.383 | 0.000 | 0.441 |
| | value×product | | | | | | |
| | involvemen | | | | | | |

It can be seen from table 1 that the significance coefficients of the interaction items of each dimension of customer perceived value and product involvement are all 0.000, so product involvement has a moderating effect on customer perceived value and purchase intention.

4 Conclusions

Through the empirical analysis, this article verifies the existence of the five value dimensions, analyzes the influence of five perceived value dimensions of brand agricultural products on consumers' purchase intention. For the brand agricultural products, customer perceived value consists of functional value, emotional value, economic value, social value and image value. In the perceived value structure of brand agricultural products, social value has the greatest impact on customers' purchase intention, which indicates that the main consideration of customers' purchase of brand agricultural products is the social benefits and the degree of recognition by society and others that the products can bring to them. In theory, according to the judgment of the influence degree of each perceived value dimension of brand agricultural products on consumers' purchase intention, different and key marketing schemes can be formulated for each perceived value dimension. From the perspective of brand agricultural product marketing, when formulating and implementing brand agricultural product marketing strategy, we should take the satisfaction of consumers' social value as the core, and rank them according to their importance, in order of social value, image value, emotional value, functional value and economic value. Among them, due to the small impact of functional value and economic value, consumers pay less attention to the functional characteristics and expenditure costs of products compared with other perceived value dimensions when purchasing brand agricultural products, and pay more attention to the attached social recognition and brand characteristics of products.

Through hierarchical regression analysis, it is verified that product involvement has a moderating effect between perceived value and purchase intention. The higher the involvement of consumers, the more important the product is to consumers, and the more it can promote the formation of consumers' purchase intention. This indicates that there are individual differences in purchasing intention of brand agricultural products. Therefore, agricultural products enterprises should increase the value of products and effectively

meet different needs of consumers. At the same time, they should pay attention to individual experience and customer relationship.

References

- Suggestions of the CPC central committee and the state council on giving priority to agricultural and rural development and doing a good job in the work of "agriculture, rural areas and farmers" [J]. Agricultural Technology Services,2019,36(02):1-6.
- 2. Chenhui Wang. Brand building and management of agricultural products in the era of big data [J]. Research on Industrial Innovation, 2019(02): 34-36.
- 3. Jinhuo Huang, Wenjun huang. Analysis on brand marketing of agricultural products in China [J]. Qinghai Social Sciences, 2007(05): 38-42.
- Andreas Eggert, Wolfgang Ulaga. Customer perceived value: a substitute for satisfaction in business markets? [J]. Journal of Business & Industrial Marketing, 2002, 17(2/3): 107-118.
- 5. Zeithaml V A. Consumer perceptions of price, quality, and value: a means-end model and short of evidence. Journal of Marketing, 1988, 52 (3): 2-22
- Woodruff R b. Customer Value: The Next Source for Competitive Advantage. Journal of The Academy of Marketing Science, 1997, 25(2): 139-153
- 7. Jillian C Sweeney, Geoffrey N Soutar. Consumer perceived value: The development of a multiple item scale[J]. Journal of Retailing, 2001, 77(2): 203-220.
- 8. Zhengfang Wang, du bi-sheng, qu jia-ying. Research on consumers' online shopping channel selection based on perceived value -- the moderating effect of product involvement [J]. Consumer Economy, 2016, 32(04): 91-97.
- 9. Xiaoyan Yang, Yijin Zhou. Green value: a new dimension of customer perceived value [J]. China Industrial Economy, 2006(07): 110-116.
- Dengfeng Cui, Shumei Li. Research on the influence of customer perceived value of characteristic agricultural products on customer purchase behavior tendency -- based on multi-group structural equation model [J]. Journal of Agrotechnical Economics, 2018(12): 119-129.
- 11. Guozheng Zhang, Chengyu Peng, Fangfang Zhang, et al. Perceived value of agricultural products and its

- impact on purchase intention: An Empirical Analysis Based on certified agricultural products [J]. Journal of Hunan Agricultural University (social science edition), 2017, 18(02): 24-28.
- 12. Zongshui Wang, Hong Zhao, Xuzhong Qin. Research on customer perceived value and promotion strategy of China's household automobile [J]. China Management Science, 2016, 24(02): 125-133.
- 13. Zaichkowsky, j. k. Conceptualizing Involvement [J]. Journal of Advertising, 1986, 15(2): 4-14, 34.
- 14. Jiali Yang. The influence of regional brand of agricultural products on consumers' perceived quality -- taking consumer product knowledge, involvement and source as moderating variables [J]. Journal of Hunan Agricultural University (social science edition), 2017, 18(01): 15-22.