

Analysis of Influencing Factors on Consumers' Willingness to Purchase Anhua Dark Tea Based on Perceived Value Model

Shihua Zuo^{1, 2}

¹ Hunan Mechanical and Electrical Polytechnic, Changsha, Hunan, 410151, China

² Philippine Christian University Center for International Education, Manila, 1004, Philippines.

Email: zuoshihua2005@126.com; 109269780@qq.com

Abstract: Anhua dark tea, a rapidly growing industry since 2006, has played a pivotal role in poverty alleviation and economic prosperity for Anhua County. However, recent years have witnessed a decline in sales volume, raising concerns among scholars due to changing shopping environments, business models, and consumer demographics. Drawing upon consumer behavior theory and the perceived value model, this study proposes hypotheses to explore the factors influencing consumers' purchase decisions regarding dark tea, focusing on perceived functional value, social value, income value, and cultural value. By collecting Likert-scale data and basic information, the study employs SPSS and Amos for data analysis, aiming to validate the proposed hypotheses. The results indicate that perceived functional value, social value, and cultural value have a significantly positive impact on consumers' intention to purchase Anhua dark tea. Building on the empirical findings, this study suggests strategies such as standardized production, product structure adjustments, diversified product offerings, and the promotion of value-added and culturally enriched dark tea products. Furthermore, the study emphasizes the importance of establishing a comprehensive black tea industry chain, integrating tea culture with local communities, and enhancing product value and reputation through the creation of "product IP," "geographical IP," and "cultural IP" for Anhua dark tea. By fostering consumer loyalty, Anhua dark tea can emerge as a representative of Hunan Province and a symbol of Chinese tea culture, carrying its therapeutic potential to a global audience.

Keywords: perceived value; value acceptance model; Anhua dark tea; purchase intention

Introduction

Anhua dark tea, recognized as one of the top ten renowned teas in China, holds a rich history of production, processing, and sales. Dating back to the Ming Dynasty, it was designated as the esteemed "official tea" and became revered as the "elixir of life" among ethnic minorities residing in border regions. Renowned for its exceptional tea quality and notable health benefits, Anhua dark tea has earned the monikers of "tea of life" and "the mystical tea of the ancient Silk Road." The Anhua dark tea industry has experienced rapid growth since 2006, emerging as a significant pillar industry driving poverty alleviation and prosperity in Anhua County.

Nevertheless, the unforeseen challenges of the global COVID-19 pandemic in 2020 severely impacted the world economy, resulting in a decline in the market demand for Anhua dark tea. However, the downward trend in sales growth had already been evident since 2019, indicating underlying challenges beyond the immediate impact of the pandemic. Factors such as high transportation and sales costs, influenced by the region's terrain and environment, have constrained the expansion of the Anhua dark tea brand. Furthermore, evolving consumer preferences and the emergence of online marketing models like C2C, B2C, and O2O have necessitated a shift in focus towards factors beyond basic utility, emphasizing shopping environments and meeting the experiential needs of consumers. Consequently, products lacking personal care and distinct identities have gradually lost their emotional connection with consumers.

Despite existing studies focusing on network marketing strategies, marketing improvements, and supply chain optimization within the Anhua dark tea industry, few have conducted comprehensive investigations into the influencing factors affecting consumer purchase intentions. To address this gap, this study aims to explore the factors influencing consumers' willingness to purchase Anhua dark tea through empirical analysis, drawing upon relevant consumer behavior theories. Subsequently, based on the findings, practical improvement measures will be proposed to enhance the development and market positioning of Anhua dark tea.

Literature Review

The consumer-perceived value theory was first proposed by Zaithaml from the perspective of consumers in 1988. She defines customer perceived value as the overall evaluation of the utility of the product or service after weighing the

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perceived gains against the cost incurred in acquiring the product or service. When designing, creating and providing products for consumers, we should start with consumers-oriented and take consumers' perception of value as the decisive factor^[1]. The multi-dimensional structure research represented by Park et al. points out that functional value, symbolic value and experiential value are combined to become the three-dimensional structure of consumers' perceived value^[2]. Sweeney And Soutar, etc., can draw from the four dimensions of emotion, society, quality and price value, which will affect consumers' purchasing behavior^[3]. Li Ying et al. discussed and verified the negative impact of consumers' perceived profit loss on their willingness to use from the perspective of risk, confusion and cost. It can be seen that when consumers use a consumption mode, they should first consider the income aspect^[4]. The research of Yu Xinhe and others shows that consumers generally hope to establish a good impression and improve their status in a certain social environment. The higher the social value perceived by consumers, the stronger their purchase intention will be^[5].

Model construction:

This paper focuses on the existing tea market heated competition scenario consumers, we black tea will choose and buy (CUI) the influencing factors, according to the relevant research and the actual situation of black tea, the introduction of value "benefit" this dimension, considering the value of social and cultural dimensions, according to the product value theory, the functional value in the most basic position. Therefore, the above four dimensions are included in the VAM model to measure consumer perceived value (Fig. 1), establish hypotheses with reference to existing studies, and then test them^[6].

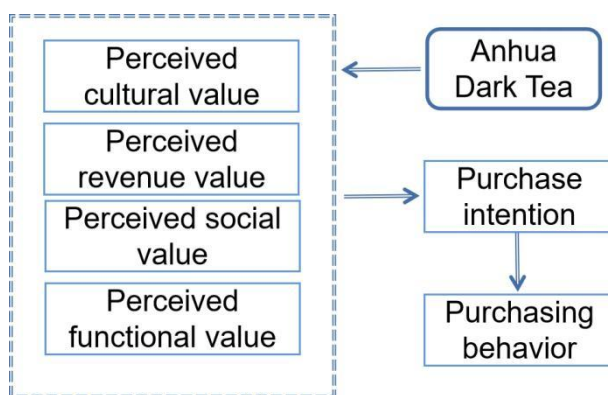


Fig. 1: Value acceptance model Fig

The Study Hypotheses:

(1) Perceived Functional Value (PFV): Within the theoretical framework of value acceptance, consumers' perceived functional value refers to the functionality of goods or services experienced during consumption. However, due to the common upgrade in consumption patterns, individuals now expect products to fulfill not only their basic functions but also provide additional value. Maros' needs theory suggests that individuals have requirements for meeting their survival and physiological needs, as well as their functional needs such as health and safety. In the context of tea's functional value, this study focuses on its medicinal value and sensory attributes (e.g., color, aroma, and taste of tea infusion). Based on this, the following hypothesis is proposed:

H1: Perceived functional value significantly influences consumers' purchase intention.

(2) Perceived Social Value (PSV): Social value pertains to consumers' ability to establish friendships, form emotional connections, enhance their social status, and fulfill self-esteem needs. Scholars studying consumer psychology and behavior emphasize the importance of active communication and relationship maintenance in fostering consumer behavior and establishing customer loyalty. As user needs continue to evolve, there is an increasing inclination towards products that provide "spiritual value." For instance, a restaurant's appeal lies not only in its delicious food but also in its social atmosphere, which satisfies users' self-realization aspirations. In Chinese traditional culture, tea is promoted as a means to foster interpersonal relationships, embodying ideals of mutual love, respect, and assistance. Tea's social attributes facilitate the development of consumers' emotional identification and dependence. Based on this, the following hypothesis is proposed:

H2: Perceived social value influences consumers' purchase intention.

(3) Perceived Monetary Value (PMV): Factors affecting consumers' perceived value of monetary interests include product quality, cost, time, safety, and information reliability, which can generate uncertainties and gains/losses for consumers. With the increasing decentralization of media and communication channels, obtaining product information has become easier and more transparent. Consequently, consumers face higher decision-making costs due to increased choices, leading to a reduced willingness to pay. To counteract this, suppliers must focus on the unique benefits that their products provide, aiming to differentiate themselves from competitors in the homogenized market. Given Anhua dark tea's characteristic of potential appreciation, certain consumers anticipate its value appreciation, making the

perceived monetary value a significant factor influencing purchase intentions. Based on this, the following hypothesis is proposed:

H3: Perceived monetary value affects consumers' purchase intention.

(4) Perceived Cultural Value (PCV): Cultural value represents the edification and cultivation experience that consumers derive from purchasing and using products. Consumers often aspire to establish a positive impression within a particular social context, pursuing specific emotional or spiritual experiences to enhance their social standing. The higher the perceived cultural value, the stronger the purchase intention becomes. When consumers engage in tea consumption, they particularly value the tea ceremony associated with tea. The tea ceremony represents the integration and sublimation of tea and Taoism, showcasing cultural and aesthetic sensibilities. Consequently, the derived tea ceremony exerts a certain impact on consumers' purchase intentions. Based on this, the following hypothesis is proposed:

H4: Perceived cultural value influences consumers' purchase intention.

Empirical Analysis:

(1) Questionnaire Design and Survey

Data collection for this study primarily relied on a questionnaire consisting of two main sections: a Likert five-level scale and a collection of basic demographic information. The questionnaire underwent expert consultation and pre-testing, and subsequent modifications were made based on the feedback received. The formal survey was conducted in mid-December 2022. The survey was administered through the WeChat platform, where questionnaires were distributed randomly in various WeChat groups. To incentivize participation, a red envelope incentive mechanism was implemented, encouraging group members to voluntarily complete the questionnaire.

(2) Sample Descriptive Statistics

A total of 613 questionnaires were collected through the questionnaire survey platform. After excluding incomplete or improperly filled questionnaires, 577 valid questionnaires were obtained, yielding an effective response rate of 94.1%. The sample composition revealed that 59.32% of respondents were male, while 40.68% were female. The majority of respondents fell into the middle-aged category (30-50 years old) with a proportion of 69.46%. In terms of monthly disposable income, 72.58% of respondents reported an income range of 3000-5000 yuan. Both age and income distributions exhibited a normal distribution pattern. Regarding personal tea consumption, respondents reported an average monthly consumption frequency of approximately 2 times, with the average monthly expenditure on tea concentrated around 300 yuan. Specifically, the average monthly consumption frequency of Anhua dark tea was 0.39 times.

(3) Reliability and Validity Testing

Data analysis for reliability and validity was conducted using SPSS 26.0. Reliability was primarily assessed using Cronbach's α coefficient, revealing a high level of reliability with a coefficient of 0.825 for the overall scale and individual subscales exhibiting coefficients greater than 0.8. This suggests that both the items and the entire questionnaire demonstrate high internal consistency. Structural validity was assessed through exploratory factor analysis, with the Kaiser-Meyer-Olkin (KMO) measure yielding a value of 0.802 and a significant approximate chi-square value of 2941.261 (Sig.=0.000). The total variance explained by the factors was 71.203%, indicating suitability for confirmatory factor analysis. Convergent validity and discriminant validity were assessed at two levels. Convergent validity was evaluated using composite reliability (CR) and average variance extracted (AVE) values. Confirmatory factor analysis was conducted using AMOS 22.0. The results indicated that all variables demonstrated CR values exceeding 0.7, and AVE values exceeding 0.5, indicating good convergent validity. Additionally, the AVE values for all variables exceeded the correlation coefficients with other variables, indicating good discriminant validity. Detailed statistical data are presented in Table 1 and Table 2.

variable	Results of the reliability and convergence validity tests		
	Cronbach's α	CR	AVE
PPV	0.863	0.867	0.592
PFV	0.825	0.853	0.586
PSV	0.875	0.846	0.605
PEV	0.843	0.817	0.565
CUI	0.832	0.835	0.632

Table 1 Reliability analysis and confirmatory factor analysis

Note: overall scale Cronbach's α : 0.824; KMO value: 0.801.

	PPV	PFV	PSV	PEV	CUI
PPV	0.787	-	-	-	-
PFV	0.446	0.747	-	-	-

PSV	0.255	0.113	0.712	-	-
PEV	0.312	0.353	0.486	0.764	-
CUI	0.422	0.217	0.278	0.325	0.824

Table 2: Differentiating validity tests

Note: The values on the upper left to bottom right diagonal in the table are the AVE square root values.

(4) Goodness of fit test

In this paper, Amos 22.0 was used to test the fit of the proposed model (Figure 1). The results show that the ratio of chi-square and degree of freedom is 3.127, meeting the reference standard; the test results of RMSEA, GFI and CFI are within the reference value range; although AGFI does not enter the reference value range, there is little difference. It is generally believed that the key parameters χ^2 / df and RMSEA values are within the reference range values, so that the constructed model has a good goodness of fit, so the model constructed herein in this paper performs well in the structural equation model SEM analysis. Detailed parameters are detailed in Table 3.

Fitting the index	reference value	result
χ^2/df	< 5	3.127
GFI	> 0.9	0.912
AGFI	> 0.9	0.876
RMESA	> 0.08	0.062
CFI	> 0.9	0.906

Table 3 Results of model fitting

(5) Hypothesis test and result analysis

Through standardized path coefficient analysis and significance test using structural equation model SEM, The research hypothesis test results presented in this paper are as follows (see Table 4 for details): In terms of consumers' willingness to buy Anhua dark tea, The perceived functional value of consumers significantly positively influences the willingness to use of their purchasing behavior, Consumers' perceived social value significantly positively influences the intention to purchase behavior, The perceived revenue value of consumers positively affects their intention to purchase behavior ($\beta = 0.284$, $P < 0.001$, The impact is relatively less pronounced), The perceived cultural value of consumers significantly and positively affects the purchase intention. Therefore, hypothesis 1,2,3, and 4 are verified to show that the assumed influence path is related, and the degree of influence (significant or influence) and direction of influence (positive effect) in each path are specified.

way	β	S.E.	C.R.	P price	conclusion
H1: PPV \rightarrow CUI	0.461	0.081	4.278	**	support
H2: PFV \rightarrow CUI	0.352	0.073	3.141	***	support
H3: PSV \rightarrow CUI	0.284	0.071	2.056	***	support
H4: PEV \rightarrow CUI	0.389	0.078	3.853	**	support

Table 4 Model standardized pathway coefficients and significance analysis

Note: ** and *** indicate the significance levels of 0.001 and 0.05, respectively, and β is the standardized path coefficient.

Results and Discussion

The research conducted in this study demonstrates that consumers' perceived functional value, social value, and cultural value significantly influence their purchase intention. Based on these findings, the following strategies can be implemented to enhance the intrinsic value and reputation of Anhua dark tea, ultimately fostering consumer loyalty.

(1) Cultivate the "product IP" of Anhua dark tea

Efforts should be focused on adjusting the product structure, diversifying product offerings, creating popular products, and increasing the overall value proposition. Establishing a comprehensive industry chain for Anhua dark tea, supported by a large-scale database, is crucial. This entails managing every stage of the supply chain, from tea cultivation, harvesting, production, and processing to storage, transportation, sales, and recycling, while prioritizing green ecological practices. Strengthening collaboration among enterprises and implementing green design, procurement, manufacturing, packaging, materials, and recycling will render Anhua dark tea production more transparent. Leveraging sensor technology and big data analytics can provide insights into consumer usage habits and purchase preferences, thereby enhancing the sales efforts of enterprises. By adopting a consumer-centric approach and aligning with their desires, Anhua dark tea can position itself as a product that satisfies various functional attributes, thus establishing a unique standard.

(2) Cultivate the "geographical IP" of Anhua dark tea

Anhua boasts a distinctive geographical environment and natural conditions, which can be leveraged to integrate the local tea culture and natural landscapes. By focusing on tea production and promoting a symbiotic relationship between tea and tourism, Anhua dark tea can evolve into a comprehensive and integrated product. Emphasizing the "tea brigade" culture as a medium for promoting local heritage and combining it with captivating narratives and innovative development models can create a series of exceptional attractions.

(3) Cultivate the "cultural IP" of Anhua dark tea

Anhua, as the birthplace of Chinese dark tea, possesses a rich historical and cultural heritage. Leveraging short video communication platforms, efforts should be made to nurture fan communities and encourage active sharing of product experiences through photos, videos, and personal anecdotes. Tapping into the creative potential of grassroots content creators is essential, as their ideas often resonate strongly with the majority of internet users^[10]. By enabling the transfer of marketing discourse power and fostering viral word-of-mouth spread, Anhua dark tea can become an iconic representation of Hunan Province and Chinese culture, elevating the status of black tea culture on the global stage.

Limitations and Suggestions for Future Research

While this study provides valuable insights into the influencing factors on consumers' willingness to purchase Anhua Dark Tea based on the perceived value model, it is important to acknowledge the limitations of the research. These limitations present opportunities for future research to further expand our understanding in this area.

Firstly, the data collection in this study was primarily based on a questionnaire survey. Although questionnaires are a commonly used research instrument, they have inherent limitations such as response bias and reliance on self-reported data. Future research could employ alternative methods, such as interviews or observational studies, to gather more diverse and objective data sources. Secondly, the sample size of this study was relatively small, with 577 valid questionnaires collected. While efforts were made to ensure the representativeness of the sample, a larger and more diverse sample could enhance the generalizability of the findings. Future research should aim to include a larger and more diverse participant pool, encompassing different demographic groups and geographical regions, to capture a broader perspective on consumers' willingness to purchase Anhua Dark Tea. Additionally, this study focused on the perceived functional value, social value, and cultural value as influencing factors. There may be other factors that were not explored in this research but could significantly impact consumers' behavior intention. Future studies could consider incorporating additional variables, such as price perception, brand image, and environmental sustainability, to provide a more comprehensive understanding of the factors influencing consumer behavior. Lastly, this study mainly focused on the Chinese market and the cultural context surrounding Anhua Dark Tea. Future research could explore the cross-cultural differences in consumers' willingness to purchase dark tea and examine the applicability of the perceived value model in different cultural settings.

In summary, while this study contributes to the understanding of consumers' willingness to purchase Anhua Dark Tea, it is essential to recognize its limitations to provide valuable insights for the tea industry and marketing practitioners.

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