

The Customer's Satisfaction in Marketing Mix of Guangxi Wuzhou Ou Shu Liubao Tea Industry Co., Ltd.

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Liubao tea has a long history in Wuzhou, Guangxi. With its unique process and high quality, Liubao tea has become a favorite commodity of Wuzhou people. At present, Guangxi Wuzhou Ou Shu Liubao Tea Co., Ltd. into the Nanning market has many problems; based on the analysis and research of the Liubao tea market, a sample of customer satisfaction of Liubao tea marketing was analyzed according to the current situation of market research. Through comprehensive data analysis, it provides theoretical data and data support for Ou Shu Liubao Tea Co., Ltd. and provides data reference for the development of Nanning marketing system. The research object selected in this study is the customers who have purchased Guangxi Wuzhou Ou Shu Liubao Tea in Nanning, China in 2020. Firstly, it studies and analyzes the factors that affect employee satisfaction, and comprehensively uses the relevant theories of consumer behavior (6W1H) and marketing mix (4P). Then, taking 350 consumers of Guangxi Wuzhou Ou Shu Liubao Tea in Nanning, China as the survey object, a set of scale to measure consumer satisfaction is designed. SPSS reliability and validity analysis, descriptive analysis, and other analysis methods were used to analyze the results, and hypothesis test was carried out. At the same time, on the basis of this conclusion, it provides reference for Guangxi Wuzhou Ou Shu Liubao Tea Co., Ltd. and puts forward specific countermeasures and suggestions.

Keywords: Liubao tea, customer satisfaction, recommendation, marketing mix

Introduction

Background of the study: Liubao tea has a long history in Wuzhou, Guangxi. With its unique process and high quality, Liubao tea has become a favorite commodity of Wuzhou people. In recent years, with the development of social economy, Liubao tea has been rising rapidly in Guangxi tea market. More and more people know and like to drink Liubao tea, which brings a huge market space and opportunities for development. As the economically prosperous capital of Guangxi, bordering with ASEAN, with strong market strength behind ASEAN members, Liubao tea has great development space and potential. Kotler and Armstrong (2011) suggested that Chinese tea product companies combine modern marketing theories with the real tea product marketing market situation in the new era of market competition environment to develop targeted marketing strategy countermeasures suitable for the Chinese market and in line with Chinese national conditions. Zhang Guandi (2018) argued that nowadays, the sales of tea products in China still adhere to a single traditional business model, i.e., the use of offline brick-and-mortar stores to launch promotions. With the explosive

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development of mobile Internet, more tea products open up online sales channels and use the Internet application of big data for higher commercial value of tea products sales. Mao Like (2015) pointed out that China's tea brands have little influence, and that policy opportunities should be seized to expand the scale of the tea industry, unify brands, unify standards, and to promote tea products and tea culture to create high-profile tea brands. Shehata, Cox, Fujii, and Dickson's (2004) research field in Hawaii found that tea is a product with high added value, and the construction of online marketing channels is an important prerequisite for improving the overall marketing system. The addition of online sales channels can not only increase the sales volume of tea, but also help companies create brand advantages and let more consumers know about the brand. In turn, enterprises can also analyze consumer habits, preferences, and needs through the big data collected by the online sales platform, so as to provide consumers with accurate services and facilitate the creation of tea enterprise brands.

At present, due to the high profit of Liubao tea market, the number of enterprises operating has increased significantly in recent years, the homogenization of Liubao tea products has become more and more serious, the market competition has become more and more fierce, the development of high-end market is insufficient, and the sales volume has been very small since entering Nanning market. Most of them rely on old customers and chamber of commerce customers for purchase, and their purchasing power is relatively single. Generally, it is insiders of the tea industry, not end consumers, and does not spread to consumers. This mode of communication can only create popularity in the tea industry, but cannot connect consumers with tea brands and cannot improve consumers' awareness of tea brands, and is difficult to form a brand effect, which makes the enterprise's sales sluggish, the product market cannot be expanded, and the growth of sales revenue and profit is slow. This thesis focuses on the customer satisfaction analysis of Guangxi Wuzhou Ou Shu Liubao Tea Industry Co., Ltd. through the questionnaire to the customer census to understand the customer satisfaction of Guangxi Wuzhou Ou Shu Liubao Tea, to draw data and conclusions to provide Guangxi Wuzhou Ou Shu Liubao Tea Industry Co., Ltd. as an important data for the development of marketing strategies.

Based on the analysis and research of the Liubao tea market, a sample of customer satisfaction of Liubao tea marketing was analyzed according to the current situation of market research. Through comprehensive data analysis, it provides theoretical data and data support for Guangxi Wuzhou Ou Shu Liubao Tea Co., Ltd. and provides data reference for the development of Nanning marketing system.

Methodology

The Population and Group Example

The population will be the customers who bought Guangxi Wuzhou Ou Shu Liubao Tea in Nanning, China in the year 2020 which have the total number of 2,817 customers. According to Yamane's formula, the sample size is 350.

The Research Instrument

Session 1: Personal information. The participants' personal information. This section contains five multiple-choice questions, including gender, age, Education, occupation, and income.

Session 2: Customer behavior. Customer behavior of Guangxi Wuzhou Ou Shu Liubao Tea in Nanning, China. This section contains seven multiple-choice questions, including who, what, where, when, why, whom, and how.

Session 3: Customer's satisfaction. There are 31 questions asking for survey about customer satisfy of Guangxi Wuzhou Ou Shu Liubao Tea in Nanning, China which are divided into four factors use a Likert five-point scale to measure the respondents' degree of how satisfied with each description, namely: 1 = very dissatisfied, 2 = dissatisfied, 3 = somewhat, 4 = satisfied, 5 = very satisfied.

Research Validity/Reliability

The Cronbach's Alpha is 0.919 which indicates a high level of interval consistency which is considered reliable for the questions tested. This questionnaire is in full conformity with English and Chinese.

Cronbach's Alpha	N of items
0.919	31

Results

The results revealed the frequency and percentage of the respondents' personal information. From the Table 1: (1) About the age, the majority of the respondents 38.9% are 36-45 years old and 33.7% are 26-35 years old. (2) About the gender, the majority of the respondents 73.14% are male and 26.86% are female. (3) About the education, the majority of the respondents 64.57% are bachelor's degree and 24.00% are high school graduate and below. (4) About the income, the majority of the respondents 45.71% are 6,001-10,000 yuan and 23.71% are 10,001-14,000 yuan. (5) About the occupation, the majority of the respondents 31.71% are clerk, 14.00% are teacher, and 14.00% are student.

Table 1

Frequency Table for the Personal Information

Personal information	Frequency	Percentage
19-25 years old	43	12.29
26-35 years old	118	33.71
36-45 years old	136	38.86
Over 45 years old	53	15.14
Total age	350	100.00
Male	256	73.14
Female	94	26.86
Total gender	350	100.00
High school graduate and below	84	24.00
Bachelor's degree	226	64.57
Master's degree	28	8.00
Doctor's degree	12	3.43
Total education	350	100.00
Less than 6,000 yuan	17	4.86
6,001-10,000 yuan	160	45.71
10,001-14,000 yuan	83	23.71
14,001-18,000 yuan	60	17.14
More than 18,000 yuan	30	8.57
Total income	350	100.00
Teacher	49	14.00
Student	49	14.00

Table 1 to be continued

Clerk	111	31.71
Entrepreneur	15	4.29
Businessman	16	4.57
Government officer	21	6.00
Private company employee	43	12.29
Other	46	13.14
Total occupation	350	100.00

The results revealed the frequency and percentage of the customer behavior. From the Table 2: (1) About the purchase object, the majority of the respondents 31.14% are for family and 27.71% are for other. (2) About the type of purchase, the majority of the respondents 51.1% are aged Liubao tea and 41.1% are areca fragrant Liubao tea. (3) About the channel of purchase, respondents can choose more than one channel. There are 189 respondents, accounting for 54.00%, who bought from tea-leaf counter, following by 171 respondents, accounting for 48.86%, who bought from online channel. (4) About the frequency of purchase, the majority of the respondents 31.71% are more than 10 months and 21.71% are less than one month. (5) About the purpose of purchase, the majority of the respondents 49.43% are for household consumption and 32.86% are for present. (6) About the purchase influencers, the majority of the respondents 27.71% choose friend and 21.71% choose staff of a tea shop. (7) About the average expense of purchase every time, the majority of the respondents 38.57% are less than 100 yuan and 26.29% are 100-200 yuan.

Table 2

Frequency Table for the Customer Behavior

Customer behavior	Frequency	Percentage
For themselves	58	16.57
Family	109	31.14
Parent	55	15.71
Friend	20	5.71
Colleague	11	3.14
Other	97	27.71
Total purchase object	350	100.00
Aged Liubao tea	179	51.14
Areca fragrant Liubao tea	144	41.14
Jasmine Liubao tea	27	7.71
Total type of purchase	350	100.00
Tea-leaf counter	189	54.00
Supermarket	127	36.29
Tea wholesale	96	27.43
Fresh market	41	11.71
Branded tea store	108	30.86
Online channel	171	48.86
Grocery store	25	7.14
Total channel of purchase	757	216.29
Less than 1 month	76	21.71
1-3 months	70	20.00

Table 2 to be continued

4-5 months	48	13.71
6-10 months	45	12.86
More than 10 months	111	31.71
Total frequency of purchase	350	100.00
For household consumption	173	49.43
Present	115	32.86
Souvenir	11	3.14
Other	51	14.57
Total purpose of purchase	350	100.00
On their own	59	16.86
Staff of a tea shop	76	21.71
Actress	5	1.43
Famous person	11	3.14
Friend	97	27.71
Professional	27	7.71
Parent	28	8.00
Other	47	13.43
Total purchase influencers	350	100.00
Less than 100 yuan	135	38.57
100-200 yuan	92	26.29
201-400 yuan	58	16.57
401-600 yuan	29	8.29
More than 600 yuan	36	10.29
Total the average expense of purchase every time	350	100.00

The results revealed the summary of difference level of agreement on marketing mix factors. From the Table 3: (1) The respondents are very satisfied with product totally, which averaged between 4.05-4.33. Among them, “the average of the quality of Liubao tea in term of taste”, “the safety food of this product is approved by Government Agency”, and “the variety of the product” are 4.33. (2) The respondents are satisfied with price totally, which averaged between 3.78-3.89. Among them, “the average of the payment process is convenient and honest” is 3.89, “the product value for money in terms of quantity” is 3.86, and “the product value for money in terms of quality and the fair price of this product” is 3.83. (3) The respondents are very satisfied with place totally, which averaged between 4.23-4.50. Among them, “the number of branches provided” is 4.50, “convenience online channel to buy Liubao tea” is 4.37, and “the variety of the channel to buy the Liubao tea” is 4.36. (4) The respondents are satisfied with promotion totally, which averaged between 3.74-4.40. Among them, “registered members receive vouchers” and “the variety of the advertising” are 4.40, “premium product sales” is 4.33, and “member feedback day” is 4.29.

Table 3

The Summary of Difference Level of Agreement on Marketing Mix Factors

Marketing mix	X	S.D.	Meaning
The quality of Liubao tea in term of taste.	4.33	0.732	Very satisfaction
The quality of Liubao tea in term of color.	4.32	0.978	Very satisfaction
The quality of Liubao tea in term of smell.	4.27	0.829	Very satisfaction

Table 3 to be continued

The variety of the product.	4.33	0.833	Very satisfaction
The variety of product sizes.	4.19	0.771	Satisfaction
The quality of Liubao tea in term of guarantee.	4.29	0.771	Very satisfaction
The safety food of this product is approved by Government Agency.	4.33	0.993	Very satisfaction
The reflections of expired date, instruction, ingredients.	4.32	0.830	Very satisfaction
The packaging serves to protect the product inside.	4.32	0.846	Very satisfaction
The beautiful, clear, data/information show on packaging.	4.05	0.833	Satisfaction
The product has expired date clearly.	4.30	1.007	Very satisfaction
Total product	4.28	0.657	Very satisfaction
The product value for money in terms of quality.	3.83	1.096	Satisfaction
The product value for money in terms of quantity.	3.86	1.081	Satisfaction
The fair price of this product.	3.83	1.070	Satisfaction
The variety of product price.	3.78	1.081	Satisfaction
The payment process is convenient and honest.	3.89	1.081	Satisfaction
The payment process is accurate.	3.91	1.022	Satisfaction
Total price	3.85	1.0267	Satisfaction
Convenience to buy the Liubao tea.	4.28	0.824	Very satisfaction
The variety of the channel to buy the Liubao tea.	4.36	0.847	Very satisfaction
The number of branches provided.	4.50	0.811	Very satisfaction
Convenience online channel to buy Liubao tea.	4.37	0.819	Very satisfaction
Distribution service on-time and accurate.	4.23	0.734	Very satisfaction
Total place	4.35	0.577	Very satisfaction
Obtaining the correct information about the product.	3.74	0.908	Satisfaction
The variety of the promotion.	4.03	0.886	Satisfaction
The trade discount.	3.98	0.883	Satisfaction
Twenty percent off for designated products online.	4.15	0.850	Satisfaction
The interest of the advertising.	4.15	0.856	Satisfaction
The variety of the advertising.	4.40	0.829	Very satisfaction
Premium product sales.	4.33	0.790	Very satisfaction
Member feedback day.	4.29	0.849	Very satisfaction
Registered members receive vouchers.	4.40	0.873	Very satisfaction
Total promotion	4.16	0.569	Satisfaction

Hypothesis Test

Hypothesis Test and Difference Analysis of Age

H1: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different by age

H1₀: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is not different between groups of age

H1₁: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different between groups of age

The age was analyzed by one-way ANOVA with SPSS statistical software. The results of one-way ANOVA are shown in Table 4. As can be seen from the above table, we use analysis of variance (ANOVA) to study the differences of age on product, price, place, and promotion, a total of four items. All of them showed

significance ($p < 0.05$) for four items of product, price, place, and promotion, which means that samples with different ages have differences in product, price, place, and promotion. So the H_{10} in product, price, place, and promotion is rejected.

Table 4

Analysis of Variance for Age

Factor	Age (Years) (Mean \pm Std Deviation)				ANOVA	
	19-25 (n = 43)	26-35 (n = 118)	36-45 (n = 136)	45 and above (n = 53)	F	Sig.
Product	4.27 \pm 0.47	4.47 \pm 0.55	4.06 \pm 0.78	4.42 \pm 0.46	10.246	0.000**
Price	4.05 \pm 0.77	4.05 \pm 1.05	3.67 \pm 1.01	3.72 \pm 1.11	3.823	0.010*
Place	4.55 \pm 0.39	4.43 \pm 0.57	4.23 \pm 0.63	4.31 \pm 0.51	4.607	0.004**
Promotion	4.37 \pm 0.26	4.24 \pm 0.55	4.03 \pm 0.60	4.16 \pm 0.63	5.557	0.001**

Notes. * $p < 0.05$, ** $p < 0.01$.

It is necessary to conduct multiple comparative analysis on product, price, place, and promotion. One-way ANOVA shows that the variance of age on product, price, place, and promotion is non-homogeneous, so the Post Hoc test using Tamhane is used for multiple comparative analysis. The specific statistical results are shown in Table 5: (1) In product, the comparison results of the average scores of the groups with obvious differences are "26-35 years old/Over 45 years old > 36-45 years old". (2) In price, the comparison results of the average scores of the groups with obvious differences are "26-35 years old > 36-45 years old". (3) In place, the comparison results of the average scores of the groups with obvious differences are "19-25 years old > 36-45 years old". (4) In promotion, the comparison results of the average scores of the groups with obvious differences are "19-25 years old/26-35 years old > 36-45 years old".

Table 5

Multiple Comparison Test of Age on Product, Price, Place, and Promotion

Research variables	Age		Mean Difference (I-II)	Sig.
	I	II		
Product Tamhane	26-35 years old	36-45 years old	0.418	0.000**
	Over 45 years old		0.365	0.001**
Price Tamhane	26-35 years old		0.386	0.023**
Place Tamhane	19-25 years old		0.316	0.001**
Promotion Tamhane	19-25 years old	26-35 years old	0.344	0.000**
	26-35 years old		0.219	0.016*

Hypothesis Test and Difference Analysis of Gender

H₂: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different by gender.

H₂₀: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is not different between groups of gender.

H₂₁: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different between groups of gender.

Independent sample t-test was conducted for gender by SPSS statistical software. The results of t-test are shown in Table 6. T-test (independent sample t-test) is used to study the differences of gender for a total of four

items of product, price, place, and promotion. It can be seen from the below table that the samples of different genders in price, place, and promotion do not show significance ($p > 0.05$); the samples of different genders in product show significance ($p < 0.05$). So the satisfaction in price, place, and promotion is not different by gender; the Hypothesis 2₀ in price, place, and promotion is accepted. The satisfaction in product is different by gender; the Hypothesis 2₀ in product is rejected.

Table 6

Analysis of Variance for Gender

Factor	Gender (Mean \pm Std Deviation)		t	T-test for equality of means	
	Male (n = 256)	Female (n = 94)		Mean Difference (male-female)	Sig.
Product	4.21 \pm 0.70	4.47 \pm 0.48	4.884	-0.25567	0.000**
Price	3.84 \pm 1.04	3.88 \pm 1.01	3.935	-0.04444	0.717
Place	4.33 \pm 0.60	4.39 \pm 0.50	8.045	-0.05924	0.353
Promotion	4.16 \pm 0.58	4.16 \pm 0.53	1.741	-0.00890	0.897

Notes. * $p < 0.05$, ** $p < 0.01$.

Hypothesis Test and Difference Analysis of Education

H3: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different by education.

H3₀: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is not different between groups of education.

H3₁: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different between groups of education

The education level was analyzed by one-way ANOVA with SPSS statistical software. The results of one-way ANOVA are shown in Table 7. As can be seen from the below table, we use analysis of variance (ANOVA) to study the differences of education level on product, price, place, and promotion, a total of four items. A total of three items of price, place, and promotion will not show significance ($p > 0.05$), which means that samples of different education levels show consistency for price, place, and promotion, and there is no difference, and no Post Hoc test analysis is required. However, the education level samples show significance ($p < 0.05$) for one items of product, which means that samples with different education levels have differences in product. So the one items mentioned above should be tested by Post Hoc test. So the H3₀ in product is rejected and in price, place, and promotion is accepted.

Table 7

Analysis of Variance for Education

Factor	Education (Mean \pm Std Deviation)				ANOVA	
	High school graduate and below(n = 84)	Bachelor's degree (n = 226)	Master's degree (n = 28)	Doctor's degree (n = 12)	F	Sig.
Product	4.20 \pm 0.76	4.25 \pm 0.61	4.54 \pm 0.62	4.79 \pm 0.47	4.591	0.004**
Price	3.93 \pm 0.98	3.79 \pm 1.03	3.79 \pm 1.12	4.51 \pm 0.89	2.130	0.096
Place	4.43 \pm 0.61	4.32 \pm 0.57	4.29 \pm 0.54	4.48 \pm 0.55	0.981	0.402
Promotion	4.28 \pm 0.56	4.11 \pm 0.56	4.14 \pm 0.62	4.31 \pm 0.62	2.079	0.103

Notes. ** $p < 0.01$.

It is necessary to conduct multiple comparative analysis on product. One-way ANOVA shows that the variance of education level on product is homogeneous, so the Post Hoc test using LSD is used for multiple comparative analysis. The specific statistical results are shown in Table 8: In product, the comparison results of the average scores of the groups with obvious differences are “Master’s degree/Doctor’s degree > High school graduate and below/Bachelor’s degree”.

Table 8

Multiple Comparison Test of Age on Product

Research variables	Education		Mean Difference (I-II)	Sig.
	I	II		
Product LSD (L)	Master’s degree	High school graduate and below	0.339	0.017*
		Bachelor’s degree	0.296	0.023*
	Doctor’s degree	High school graduate and below	0.584	0.004**
		Bachelor’s degree	0.542	0.005**

Hypothesis Test and Difference Analysis of Average Monthly Household Income

H4: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different by income.

H4₀: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is not different between groups of income

H4₁: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different between groups of income

The income level was analyzed by one-way ANOVA with SPSS statistical software. The results of one-way ANOVA are shown in Table 9. As can be seen from the below table, we use analysis of variance (ANOVA) to study the differences of income level on product, price, place, and promotion, a total of four items. A total of two items of price and promotion will not show significance ($p > 0.05$), which means that samples of different income levels show consistency for price and promotion, and there is no difference, and no Post Hoc test analysis is required. However, the income level samples show significance ($p < 0.05$) for two items of product and place, which means that samples with different income levels have differences in product and place. So the two items mentioned above should be tested by Post Hoc test. So the H4₀ in product and price is rejected and in place and promotion is accepted.

Table 9

Analysis of Variance for Average Monthly Household Income

Factor	Income (Yuan) (Mean ± Std Deviation)					ANOVA	
	Less than 6,000 yuan (n=17)	6,001-10,000 (n=160)	10,001-14,000 (n=83)	14,001-18,000 (n=60)	18,000 and above (n=30)	F	Sig.
Product	4.62±0.50	4.34±0.51	3.92±0.90	4.28±0.48	4.72±0.45	12.657	0.000
Price	4.22±0.59	3.82±1.08	3.67±1.06	3.82±0.93	4.34±0.85	2.994	0.019
Place	4.34±0.46	4.35±0.52	4.27±0.74	4.40±0.51	4.51±0.52	1.007	0.368
Promotion	4.09±0.42	4.15±0.57	4.09±0.61	4.27±0.51	4.27±0.62	1.259	0.286

Notes. * $p < 0.05$, ** $p < 0.01$.

Therefore, it is necessary to conduct multiple comparative analysis on product and price. One-way ANOVA shows that the variance of average monthly household income on product is non-homogeneous, so the Post Hoc test using Tamhane is used for multiple comparative analysis. The variance of average monthly household income on price is homogeneous, so the Post Hoc test using LSD is used for multiple comparative analysis. The specific statistical results are shown in Table 10: (1) In product, the comparison results of the average scores of the groups with obvious differences are “less than 6,000 yuan/6,001-10,000 yuan/14,001-18,000 yuan > 10,001-14,000 yuan”. (2) In price, the comparison results of the average scores of the groups with obvious differences are “less than 6,000 yuan/10,001-14,000 yuan” and “more than 18,000 yuan > 6,001-18,000 yuan”.

Table 10

Multiple Comparison Test of Average Monthly Household Income on Product and Price

Research variables	Average monthly household income		Mean Difference (I-II)	Sig.
	I	II		
Product Tamhane	Less than 6,000 yuan		0.696	0.001**
	6,001-10,000 yuan	10,001-14,000 yuan	0.424	0.004**
	14,001-18,000 yuan		0.364	0.022*
Price LSD (L)	Less than 6,000 yuan	10,001-14,000 yuan	0.541	0.046*
		6,001-10,000 yuan	0.524	0.010**
	More than 18,000 yuan	10,001-14,000 yuan	0.700	0.002**
		14,001-18,000 yuan	0.522	0.022*

Notes. * $p < 0.05$, ** $p < 0.01$.

Hypothesis Test and Difference Analysis of Occupation

H5: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different by occupation

H5₀: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is not different between groups of occupation

H5₁: Mean level of satisfaction in the marketing mix of Guangxi Wuzhou Ou Shu Liubao Tea is different between groups of occupation

The occupation was analyzed by one-way ANOVA with SPSS statistical software. The results of single factor analysis were as shown in Table 11. As can be seen from the below table, we use analysis of variance (ANOVA) to study the differences of occupations on product, price, place, and promotion, a total of four items. A total of one items of promotion will not show significance ($p > 0.05$), which means that samples of different income levels show consistency for promotion, and there is no difference, and no Post Hoc test analysis is required. However, the occupation samples show significance ($p < 0.05$) for three items of product, price, and place, which means that samples with different occupations have differences in product, price, and place. So the three items mentioned above should be tested by Post Hoc test. So the H5₀ in product, price, and place is rejected and in promotion is accepted.

Table 11

Analysis of Variance for Occupation

Factor	Occupation(Mean±Std Deviation)								ANOVA	
	Teacher (n=49)	Student (n=49)	Clerk (n=111)	Entrepreneur (n=15)	Businessman (n=16)	Government officer (n=43)	Private company employee (n=46)	Other (n=30)	F	Sig.
Product	4.43±0.70	4.33±0.47	4.09±0.70	4.50±0.43	4.80±0.33	4.52±0.54	4.40±0.58	4.03±0.73	5.315	0.000**
Price	3.60±1.33	4.14±0.71	3.70±0.93	3.96±0.97	4.10±0.76	3.67±1.28	4.26±0.80	3.74±1.18	2.689	0.010*
Place	4.25±0.67	4.50±0.43	4.22±0.60	4.45±0.36	4.35±0.54	4.45±0.58	4.47±0.56	4.42±0.58	2.076	0.046*
Promotion	4.13±0.57	4.29±0.34	4.04±0.61	4.44±0.40	4.03±0.65	4.19±0.53	4.23±0.61	4.24±0.60	2.021	0.052

Notes. * $p < 0.05$, ** $p < 0.01$.

Therefore, it is necessary to conduct multiple comparative analysis on product, price, and place. One way ANOVA shows that the variance of occupation to product and place is homogeneous, so the Post Hoc test using LSD is used for multiple comparative analysis. The variance of occupation to price is non-homogeneous, so the Post Hoc test using Tamhane is used for multiple comparative analysis. The specific statistical results are shown in Table 12: (1) In product, the comparison results of the average scores of the groups with obvious differences are “Teacher/Student/Entrepreneur/Businessman/Government officer/Private company employee > Clerk/Other”. (2) In price, the comparison results of the average scores of the groups with obvious differences are “Student/Private company employee > Clerk”. (3) In place, the comparison results of the average scores of the groups with obvious differences are “Student > Teacher” and “Student/Private company employee/Other > Clerk”.

Table 12

Multiple Comparison Test of Occupation on Product, Price, and Place

Research variables	Occupation		Mean Difference (I-II)	Sig.
	I	II		
Product LSD (L)	Teacher	Clerk	0.333	0.002**
	Student		0.236	0.030*
	Entrepreneur		0.403	0.021*
	Businessman		0.707	0.000**
	Government officer		0.425	0.005**
	Private company employee		0.308	0.007**
	Teacher	Other	0.397	0.002**
	Student		0.301	0.021*
	Entrepreneur		0.467	0.013*
	Businessman		0.771	0.000**
	Government officer		0.490	0.003**
	Private company employee		0.372	0.006**

Table 12 to be continued

Price Tamhane	Student	Clerk	0.435	0.043*
	Private company employee		0.555	0.011*
Place LSD (L)	Student	Teacher	0.249	0.032*
		Clerk	0.284	0.004**
	Private company employee	Clerk	0.252	0.015*
	Other	Clerk	0.204	0.043*

Notes. * $p < 0.05$, ** $p < 0.01$.

Discussion

In order to further understand the influencing factors and relationship between customer satisfaction and marketing mix, and whether there are significant differences, we compared the results of this study with those of previous studies, so as to be able to put forward targeted recommendations. Corresponding countermeasures and suggestions help Guangxi Wuzhou Ou Shu Liubao Tea Industry Co., Ltd. improve their customer satisfaction.

The non economic factors affecting tea consumption mainly include consumer habits and hobbies, consumer population, age distribution, income distribution, education status, consumers' understanding of product quality, consumers' knowledge and awareness, etc. (Pi & Yuan, 2010). As studied by Sheth (1974) mentioning that demographic factors are very important in conducting research, the find out in this research also suggested that demographic factors represent the statistically significance to both consumer behavior and consumer satisfaction. When Syed and Shahid (2011) concluded that demographic characteristics have major impact on consumer's purchase decision, this research also find out the similar result that demographics influence the choice of product purchase, reason of purchase, time of purchase, and influence of products attributes. Demography has an impact on what products consumers buy, through what channels, when they choose to buy, why they buy, for whom they buy, and who influences the purchase decision and the purchase cost. Chen, Jiang, and Jiang (2018) found that at present, the traditional physical channel is still the mainstream channel of tea market sales, and e-commerce has not occupied the dominant position of tea circulation. This conclusion is consistent with the research results of this paper. Only 171 of the 350 respondents chose the online purchase channel, and the highest purchase channel is tea leaf counter. The result in this study also related to the result from Akbar, Hassan, and Bakar (2011) that lifestyles and opinion from other people and from family and friends influence the buying decision of consumers.

Conclusion

1. Demographic profile of respondents: Ages of respondents are between 36 and 45 (38.86%), 26 to 35 (33.71%), over 45 (15.14%), and 19 to 25 (12.29%), with 73.14% of males and 26.86% of females. The majority of respondents have bachelor's degree (64.57%), high school graduate and below (24.00%), master's degree (8.00%), and Doctor's degree (3.43%). The income is mostly in the range of 6,001 to 10,000 yuan (45.71%) followed by 10,001 to 14,000 yuan (23.71%), 14,001 to 18,000 yuan (17.14%), more than 18,000 yuan (8.57%), and less 6,000 yuan (4.86%). Respondent's occupations are clerk (31.71%), teacher (14.00%), student (14.00%), other (13.14%), private company employee (12.29%), government officer (6.00%), businessman (4.57%), and entrepreneur (4.29%).

2. Consumer behavior: The purchase objects are ranked from family (31.14%), other (27.71%), for themselves (16.57%), parent (15.71%), friend (5.71%), and colleague (3.14%). The most bought products are aged Liubao tea (51.14%), followed by areca fragrant Liubao tea (41.14%) and jasmine Liubao tea (7.71%). In the multiple choice of purchase channels, 189 respondents, accounting for 54.00%, chose to buy in tea-leaf counter, 171 respondents, accounting for 48.86%, chose to buy in online channel, 127 respondents, accounting for 36.29%, chose to buy in supermarket, 108 respondents, accounting for 30.86%, chose to buy in branded tea store, 96 respondents, accounting for 27.43%, chose to buy in tea wholesale, 41 respondents, accounting for 11.71%, chose to buy in fresh market, and 25 respondents, accounting for 7.14%, chose to buy in grocery store. The frequencies of purchase are ranked from more than 10 months (31.71%), less than one month (21.71%), 1-3 months (20.00%), 4-5 months (13.71%), and 6-10 months (12.86%). Purposes of purchase are for household consumption (49.43%), present (32.86%), other (14.57%), and souvenir (3.14%). The purchase influencers are ranked from friend (27.71%), staff of a tea shop (21.71%), on their own (16.86%), other (13.43%), parent (8.00%), professional (7.71%), famous person (3.14%), and actress (1.43%). The average expenses of Guangxi Wuzhou Ou Shu Liubao Tea in Nanning, China consumption every time are with 38.57% less than 100 yuan, 26.29% 100-200 yuan, 16.57% 201-400 yuan, 10.29% more than 600 yuan, and 8.29% 401-600 yuan.

3. Customer's satisfaction: product satisfaction with the level of very satisfaction (total mean = 4.28), price satisfaction with the level of satisfaction (total mean = 3.85), place satisfaction with the level of very satisfaction (total mean = 4.35), and promotion appreciation with the level of satisfaction (total mean = 4.16).

Limitations

Due to the limitations of research funds, researchers, and other factors, the survey object of this paper mainly focuses on the Guangxi Wuzhou Ou Shu Liubao Tea consumption market in Nanning, but does not study the consumer samples of other cities in Guangxi. Consumer satisfaction may vary due to different research time. This paper only selects the cross-sectional data as the research object, without considering the change process of consumers over time.

Recommendation

From the Perspective of Product

1. Change the structure of tea products, meet the renewal of consumers' consumption ideas, and develop the female market.

2. Increase the development of ancillary products of Liubao tea to meet the needs of different groups for Liubao tea.

From the Perspective of Price

1. Implement differentiated price strategy.
2. Strengthen price supervision.

From the Perspective of Place

1. Build sales channels correctly. The traditional physical channel of Guangxi Wuzhou Ou Shu Liubao Tea is still of great significance.

2. Broaden traditional channels and carry out network channels.

3. Increase incentives to channel providers and establish a good partnership with them.

From the Perspective of Promotion

1. Innovate promotion methods to deepen consumers' impression.

References

- Akbar, S., Hassan, A., & Bakar, A. (2011). Factors affecting the consumer's decision on purchasing power. *Journal of Economics and Behavioral Studies*, 2(3), 108-116.
- Chen, F. Q., & Jiang, A. Q. (2013). Product preference of urban residents' tea consumption and its influencing factors—Micro demonstration based on MNL model. *Food and Nutrition in China*, 19(10), 36-41.
- Chen, F. Q., Du, P., Jiang, R. H., & Jiang, A. Q. (2018). An empirical study on the choice of tea purchase channels and its influencing factors of urban residents. *Journal of Tea*, 44(1), 25-29.
- Crowell, J. F. (1901). *Report of the industrial commission on the distribution of farm products*. Washington, DC: Government Printing Office Inc.
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Everitt Bryant, B. (1996). The American customer satisfaction index: Nature, purpose, and findings. *Journal of Marketing*, 60(4), 7-18.
- Herve, C., & Mullet, E. (2009). Age and factors influencing consumer behaviour. *International Journal of Consumer Studies*, 33(3), 12-19.
- Johnson, M. D., & Fornell, C. (1998). A framework for comparing customer satisfaction across individuals and product categories. *Journal of Consumer Research*, 12(2), 267-286.
- Kinoshita, S., & Kinoshita, Y. (2016). The 6W1H model as a basis for systems assurance argument. *Journal of Springer International Publishing*, 21(3), 189-211.
- Kotler, P. (2001). *Marketing management, analysis, planning, implementation and control*. Hoboken: Prentice-Hall.
- Kotler, P., & Armstrong, G. (2011). *Principles of marketing*. China: Tsinghua University Press.
- Mao Like (2015). Study on the Sustainable Development Strategy of China's Ecological Tea Industry -- Taking the Tea Industry in Qiandongnan Prefecture of Guizhou as an Example. *Commercial modernization*. Issue 25, 36-38.
- Pi, L., & Yuan, L. Y. (2010). Countermeasures for expanding domestic tea consumption market. *Journal of Tea Business*, 32(1), 28-29.
- Siddik, N. A., & Kabiraj, S. (2018). Factors influencing consumer's decision making towards selecting credit cards: An exploratory study. *International Journal of Business Innovation and Research*, 16(3), 372-387.
- Shehate, S., Cox, L. J., Fujii, J. K., & Dickson, C. A. (2004). Factors affecting development of a tea industry in Hawaii. *Current Genetics*, 44(4), 202-210.
- Sheth, J. N. (1974). A theory of family buying decisions. In J. N. Sheth (Ed.), *Models of buyer behavior: Conceptual, quantitative, and empirical* (pp. 17-33). New York: Harper & Row, Publishers, Inc.
- Syed, M. H., & Shahid, I. (2011). Effects of demographic characteristics on consumer's choice of buying green products: An empirical study of Swedish electricity market (Master's thesis, Malardalen University, 2011).
- Zhang, G. D. (2018). SWOT analysis on selling tea products through Internet channels. *Accounting Learning*, 13(35), 154-155.