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A CONSUMER BEHAVIOR ANALYSIS OF TAE-BRAND IN CHINESE MARKET

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ABSTRACT

Yunan's Pu'er tea has a very long history in China, partly due to the unique geographical climate, unique big leaf species tea and the world-famous "tea ma gu dao" which makes the contemporary pu'er tea. This study explores how customers of Tae brand perceive and react to their products and services, and thus can use the finding to suggest a structured consumer-oriented strategy for the tea markets in China. Tae brand is widely recognized in China for the supply of quality pu'er tea which is the focus of this research. The present study develops a conceptual framework which adapts the "general" and "specific" domains of stimuli in the study of consumer behavior and brand perceptions, being motivated towards a more holistic view. The "general" domain studies the roles played by tea-consumption benefits and consumer decision-making styles. By "specific", this research focuses on both marketing and brand stimulus factors. Samples were drawn conveniently from customers who have had purchased Tae brand. Structural equation modeling (SEM) is used for the multivariate statistical analysis.

Keywords: Tea, brand, consumer style, customer satisfaction, brand loyalty, China.

1. INTRODUCTION

According to Euromonitor (2018), "although unpackaged tea sales in China still dominate the markets, the packaged tea is growing in popularity in the retail channel as increasing disposable incomes are enabling consumers to buy better quality products. In addition, government policies are supporting branded packaged tea, with the aim being for five tea manufacturers to achieve annual revenues of over CNY5 billion by 2020." Indeed, when market becomes actives, driven partly by larger number of tea-package sales players, brand loyalty has become a strategically critical factor for companies to sustainably thrive in today's marketplace (Han et al. 2018). As argued in Han et al. (2018), "given the crucial role of customer loyalty, it is not surprising that a substantial amount of research has been devoted to investigating the antecedents of customer loyalty" (p. 87). Judging by the significantly important role of brand value of the tea markets in China (CARD, 2011), and due to lacks of empirical research and generalizable theoretical models to describe the consumer behaviors and brand perceptions structure in the China market, this research thus aims to fill this gap. To accomplish this, a particularly recognized brand of packaged tea production and trading enterprise located in Yunnan is chosen. Yunnan is a major tea production area in China. Thus, the following is the research objective:

"The purpose of this study is to explore how customers of Tae brand perceive and react to their products and services, and thus can use the finding to suggest a structured customer-oriented strategy for the tea markets in China."

2. LITERATURE REVIEW

Although there are many ways to approach studying consumer behaviors and brand perceptions of consumers, such as by use of socio-psychological theories (Tan, 2018), the stimulus-organism-response (SOR) model is a suitable initiative for exploration when consumer behaviors are yet relatively unknown (Tan et al. 2018; Tan, 2018). SOR theory has been conceptualized as the basis of most marketing research study (Vieira, 2013), partly because consumers often form perceptions and attitudes toward what the products and services they experienced, which in return cause brand loyalty. The perceptions and attitudes are known as the "organism," which refers to the consumers' affective and cognitive intermediary states that occur when they interact with the stimuli known as the triggers that arouse the consumers (Tang, Warkentin and Wu, 2019). As such, a hypothetical structure, configured as S → O, and O → R, is suggested for this study:

H1. Stimuli will significantly explain the variance in organism.

H2. Organism will significantly explain the variance in response.

SOR model was originated by environmental psychologists Mehrabian and Russel (1974), but since then has been acknowledged as one of the most powerful consumer behavior models, with applications found, for instance, in retails (Goi, Kalidas and Zeeshan, 2014) and community-based tourism (Tan, 2018).

Based on the above understanding of SOR, this study proposes four types of stimuli, namely (1) tea benefit, (2) consumer's decision-making style, (3) marketing strategy and (4) social interaction on Pu'er tea topic. Among them, the former two are "general type" of stimuli and the latter two are tea-oriented "specific" nature of stimuli. Tea-benefit perception is a stimulus source of attention, which is "the focusing and concentration of mental effort" (Hill, 2001, p. 113) on important product features such as tea benefits. Another general-type stimulus is consumer decision-making styles which refer to the mental shopping orientation of consumers (Prakash et al. 2018). On tea-specificity aspect, marketing strategy and social interaction on Pu'er tea topic are considered. While the former is company- or brand-controlled factor, the latter is contributable to social influences, which share the ability to create the attention of consumers (Hill, 2001).

Once the stimulus-triggers are initiated, consumers start to form the cognitive and emotional reactions to the tea-products, of which customer value, customer satisfaction and brand image are considered. Satisfaction is often regarded to be "one of the most vital factors in generating individual's purchasing decision and intention and behavior in consumer behavior and marketing" (Han et al. 2018, p. 94). Customer value often explains the reason for consumers to purchase the products in the first place, which could be of both utilitarian (functional) and hedonic (emotional) in

nature (Kang, Tang and Fiore, 2014). Lastly, brand image is the perceptions of the products formed, which represents the brand in the consumer's mind (Tan et al. 2018).

3. METHOD

In order to empirically examine the research model SOR and the two hypothesis structures known to be S→O, O→R, this study resolved to questionnaire-based survey. The questionnaire items of the constructs were adapted from prior studies with suitable revisions to suit the tea-based consumer behavioral context. Stimuli (S) was of four types, of tea benefits adapting the aspects of good health, concentration and refreshing, tasks responses and happiness states (Huang et al. 2018). For consumer style inventory (CSI) – the decision-making style – a definition is referred to when the construct is operationalized. According to Sproles and Kendall (1986), consumer styles inventory (CSI) may be defined as "mental shopping orientation characterizing a consumer's approach of making choices." In this study, eight dimensions are adapted from Prakash et al. (2018), of which brand orientation consumers as reflected in "novelty, brand conscious" and "perfectionistic, high-quality conscious" are shown important predictors for explaining the organism in H2 (S → O) (see the Data Analysis section). On the organism domains, both functional (utilitarian) and emotional (hedonic values) are adapted (Tan et al. 2018) to operationalize customer value, while brand image, which represents the brand in the consumer's mind (Tan et al. 2018), asks respondents on their perceptions on the brand assessments of Tae brand. On the customer satisfaction aspect, the overall evaluation and judgment of the product is adapted, while brand loyalty measures both the behavioral and attitudinal responses (Tan, 2018).

4. DATA ANALYSIS

The 423-collected data were first subjected to reliability, convergent and discriminant validity analysis of the constructs. Table 1 indicates that the constructs met the threshold requirement (Hair et al. 2006), with reliability indexes over 0.80 on Cronbach's Alpha, the discriminant validity as evidenced in the square-root of total variance extracted (TVE, obtained from the data reduction) exceeding the cross-correlations coefficients, and convergent also shown by TVE over 0.50 with reliability exceeding 0.70 threshold.

Table 1: Reliability, convergent and discriminant validity analyses

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	TVE	Reliability Index
V1	0.82072													0.67358	0.832
V2	0.778	0.9329												0.8703	0.851
V3	0.639	0.581	0.89214											0.79592	0.739
V4	0.484	0.445	0.535	0.89843										0.80717	0.751
V5	0.38	0.37	0.542	0.314	0.79605									0.6337	0.855
V6	0.354	0.44	0.439	0.35	0.505	0.72509								0.52576	0.688
V7	0.154	0.154	0.138		0.258	-	0.91099							0.82991	0.795
V8	0.323	0.373	0.365	0.268	0.425	0.317	0.151	0.88028						0.77489	0.854
V9	0.597	0.517	0.671	0.317	0.525	0.422	0.148	0.463	0.85621					0.73309	0.926
V10	0.528	0.504	0.617	0.367	0.474	0.379	0.151	0.39	0.811	0.84813				0.71933	0.934
V11	0.515	0.495	0.63	0.285	0.501	0.391	0.186	0.42	0.773	0.796	0.91441			0.83614	0.9
V12	0.514	0.478	0.66	0.324	0.487	0.381	0.149	0.468	0.779	0.767	0.86	0.91929		0.84509	0.908
V13	0.794	0.88	0.898	0.553	0.516	0.494	0.164	0.415	0.671	0.633	0.635	0.644	0.88903	0.79037	0.733

V1 = tea benefit, V2 = functional value, V3 = emotional value, V4 = social interaction on Pu'er tea topic, V5 = novelty, brand conscious consumer.
V6 = perfectionistic, high-quality conscious, V7 = confused by over choice style, V8 = recreational, hedonistic conscious style.
V9 = brand image, V10 = marketing strategy, V11 = customer satisfaction, V12 = brand loyalty, and V13 = customer value
Note: The cross-correlation coefficients are significant to 0.001 level (2-tailed). The diagonal is the square-root of total variance extracted (TVE).

The general data profiles are summarized in Table 2. Besides, Table 2 also presents the results of the cross-comparative analyses of the demographic and psychographic variables, by means of ANOVA and t-tests. The dark-color coded boxes highlight the areas of significant differences. In particular, consumers above 50 years of age show higher level of perceptions on all the constructs than the other age-categories. Income between 6-12,000 RMB also shows higher agreements on the stimuli, organism and also with higher level of brand loyalty than other groups. On education, the high-school holders show higher than other educational categories in the SOR constructs. Another very important finding is that when consumers purchase teas frequently, they have better perceptions on all SOR terms than without. The consumers who buy for gifting purpose has lower perceived tea benefit than those purchased for individual and corporate usages. The customers who purchase raw tea are more brand loyal than those buying ripe tea. Coffee is an important product complement, which leverages the perceptions of the consumers towards the tea across all SOR terms. Consumers who drink tea on dairy basis shows higher perceptual value of SOR than without. Tea exhibition tends to yield better customer perceptions on all SOR terms.

Table 2: General data and ANOVA, t-test analyses

	Frequency	Percentage	Brand Loyalty	Brand Image	Customer Satisfaction	Customer Value	Social Interaction on Pu'er Tea Topic.	Tea Benefit	Marketing Strategy	Perfectionistic, High Quality Conscious	Novelty, Brand Conscious
Construct			3.86	3.92	3.87	3.92	3.93	4.05	3.97	3.88	3.32
			0.74	0.62	0.7	0.63	0.68	0.62	0.57	0.58	0.79
Gender											
Male	178	41.1	3.89	3.88	3.92	3.94	3.98	4.04	3.95	3.94	3.39
Female	245	57.9	3.84	3.94	3.82	3.91	3.88	4.05	3.98	3.82	3.26
Age											
Under 20	13	3.1	3.69	3.73	3.76	3.71	3.42	3.71	3.78	3.74	3.17
20-Less than 35	212	50.1	3.87	3.93	3.88	3.93	3.95	4.04	3.98	3.9	3.27
35-50	162	38.3	3.78	3.86	3.77	3.86	3.92	4.02	3.9	3.83	3.34
Above 50	36	8.5	4.24	4.14	4.2	4.19	4	4.31	4.22	3.95	3.53
Income											
Less than 3,00 RMB	80	18.9	3.72	3.82	3.74	3.91	3.74	3.92	3.84	3.83	3.42
3,000 - <6,000	165	39	3.86	3.86	3.78	3.85	3.93	4.01	3.94	3.8	3.17
6,000 - < 12,000	103	24.3	4.06	4.08	4.03	3.97	4.09	4.13	4.12	3.97	3.34
12,000-15,000	41	9.7	3.89	3.94	3.95	4.09	3.95	4.26	3.88	3.91	3.68
Above 15,000	34	8	3.96	3.87	3.95	3.94	3.86	4.05	3.98	4	3.22
Education											
High-school	116	27.4	4.03	4.11	4.02	4.09	3.98	4.18	4.13	3.94	3.52
Bachelor	153	36.2	3.73	3.77	3.71	3.8	3.89	3.99	3.88	3.84	3.26
Master	24	5.7	3.93	4	4.15	3.98	3.79	4.2	4.07	4.04	3.55
Other	130	30.7	3.85	3.89	3.85	3.9	3.94	3.96	3.9	3.83	3.16
Living in Yunnan											
Yes	331	78.3	3.87	3.92	3.85	3.91	3.96	4.06	3.97	3.86	3.31
No	92	21.7	3.82	3.88	3.93	3.96	3.83	4.03	3.95	3.95	3.33
Purchase Frequency											
Yes	280	66.2	4.04	4.04	4.01	4.09	4.06	4.23	4.08	3.98	3.45
No	143	33.8	3.52	3.68	3.58	3.59	3.67	3.69	3.74	3.66	3.05
Customer Type											
As individual consumer	288	68.1	3.88	3.93	3.87	3.96	3.96	4.11	3.98	3.88	3.32
Corporate buyer	22	5.2	3.78	3.94	3.65	3.94	3.75	4.1	3.95	3.86	3.49
Gifting purpose	113	26.7	3.82	3.88	3.88	3.85	3.81	3.89	3.94	3.86	3.27
Pu'er Tea Type											
Raw tea	282	66.7	3.91	3.92	3.89	3.95	4.01	4.09	3.99	3.9	3.31
Ripe tea	141	33.3	3.76	3.91	3.82	3.88	3.77	3.96	3.9	3.82	3.33
Coffee											
Yes	221	52.2	3.99	4.01	3.96	4	3.99	4.11	4.05	3.9	3.43
No	202	47.8	3.72	3.81	3.76	3.84	3.86	3.97	3.87	3.85	3.19
Drinking Tea Daily											
Yes	307	72.6	3.95	3.98	3.94	4.02	4.08	4.17	4.03	3.92	3.36
No	116	27.4	3.63	3.73	3.66	3.66	3.53	3.74	3.8	3.76	3.21
Consumption each month											
Less than one cake (357g)	279	66	3.77	3.87	3.81	3.81	3.75	3.93	3.93	3.81	3.26
One to 3 cakes	92	21.7	3.84	3.82	3.8	4.04	4.16	4.2	3.89	3.86	3.24
More than 3 cakes	52	12.3	4.38	4.33	4.29	4.33	4.49	4.39	4.29	4.27	3.73
Purchase location											
Retail store	346	81.8	3.86	3.91	3.85	3.92	3.96	4.06	3.97	3.85	3.25
Online	66	15.6	3.82	3.89	3.93	3.84	3.79	3.9	3.9	3.94	3.6
Tea exhibition	11	2.6	4.18	4.25	4	4.43	3.82	4.38	4.29	4.12	3.76

Besides, the structural equation model (SEM) analysis shows a perfect fit of the model, evidenced in Chi-square 6.964, at p = 0.223 (not significant). Also, the incremental and absolute fits met the

requirement of good fit, with GFI = 0.996, AGFI = 0.967, NFI = 0.998, RFI = 0.982, IFI = 0.992, TLI = 0.996, CFI = 0.999, and RMSEA = 0.031 (less than 0.05), and the standardized RMR = 0.0057 (see Hair et al. 1998; Tan). The SEM configuration depicts and confirms the SOR model conceptualized in the Literature Review, which takes root in two hypotheses S → O and O → R.
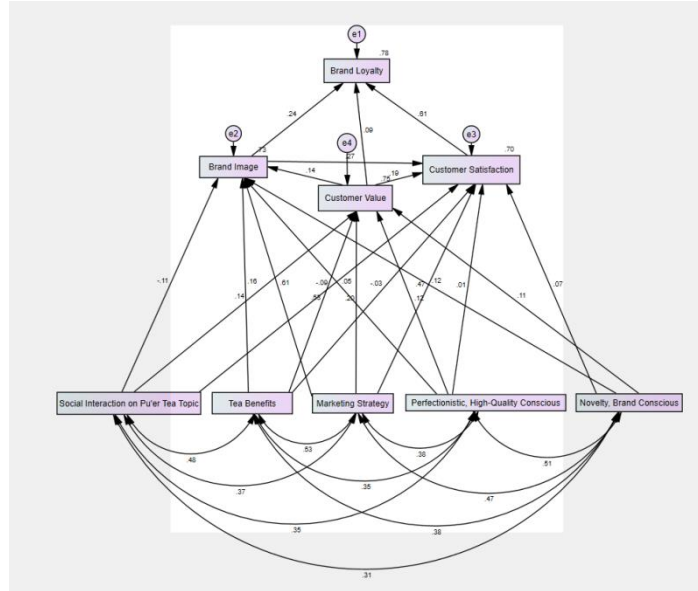

Figure 1: Structural equation modeling

Table 3 below depicts the hypothesis structure of the SOR model. Specifically, both hypothetical structure S → O and O → R are supported, with the details given in Table 3.

Table 3: Hypothesis structure

Dependent Variable	R^2	Independent Variables	Standardized Coefficient (Beta)	t-value	Sig.
Brand loyalty	0.776	Brand image	0.244	6.24	0.000
		Customer satisfaction	0.614	16.325	0.000
		Customer value	0.09	2.789	0.000
Customer value	0.747	Social interaction on Pu'er tea topic	0.143	4.932	0.001
		Tea benefit	0.534	16.933	0.000
		Marketing strategy	0.198	6.351	0.000
		Perfectionistic, high-quality consciou	0.124	4.161	0.000
		Novelty, brand conscious	0.112	3.653	0.000
Brand image	0.727	Social interaction on Pu'er tea topic	-0.114	-3.672	0.000
		Tea benefit	0.159	3.74	0.000
		Marketing strategy	0.607	17.829	0.000
		Perfectionistic, high-quality consciou	0.048	1.511	0.132
		Novelty, brand conscious	0.116	3.572	0.000
		Customer value	0.141	2.759	0.006
Customer satisfaction	0.701	Social interaction on Pu'er tea topic	-0.087	-2.62	0.009
		Tea benefit	-0.034	-0.745	0.457
		Marketing strategy	0.467	9.86	0.000
		Perfectionistic, high-quality consciou	0.01	0.296	0.767
		Novelty, brand conscious	0.075	2.16	0.031
		Customer value	0.189	3.506	0.001
		Brand image	0.271	5.276	0.000

5. CONCLUSION

The results of this study point out the suitability of the SOR model for explaining how consumers react to both general and specific domains of stimuli, as manifested in the perceptual organisms represented by brand image, customer value and customer satisfaction. The "general" type of stimuli are tea benefits and the decision-making style of consumers. Decision-making style refers to a mental orientation describing how a consumer makes choices (Prakash et al. 2018), which is shown in the SEM as a powerful and descriptive ability to influence the perceptions of consumers on the products' functions and hedonic features. In particular, the novelty, brand conscious consumers show significant ability to influence brand image.

Apart from supporting the S → O and O → R hypothesis structure as advised in SOR model, the empirical results also discover the interrelationships among the "O" (Organism) variables. Shown in the "O" interactions are two, namely 1) customer value can significantly explain the variance in both brand image and customer satisfaction, 2) brand image formed has significant impact on the level of customer satisfaction. As the consumers who purchase frequently perceive better thanwithout on the SOR terms, the brand manufacturers and marketers thus should prioritize on their loyal base. In sum, the SOR should be the structured customer-oriented strategic framework suggested for the tea-markets in China; thus, this study addresses the research objective raised.

6. ACKNOWLEDGEMENT

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