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Study on the Dilemma and Development Strategy of Chinese Beauty brand: Based on the Analysis of Consumption Characteristics and Influencing Factors of Purchasing Willingness of College Student Groups

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Abstract: In order to fully explore the dilemmas behind the development of Chinese beauty brands, analyze the main factors affecting college students' purchasing of national beauty brands, and thus put forward a possible path for national beauty brands to retain traffic, this paper takes typical Chinese beauty brands and college students' groups as the objects of research, applies the factor analysis method to analyze the three factors that college students' groups are most concerned about Chinese beauty brands, and combines them with the existing data to find out the dilemmas and reasons that Chinese beauty , so as to put forward the paths and relevant countermeasures for Chinese beauty brands to retain traffic. The study shows that the brand awareness of Chinese beauty brands, the product R&D level of Chinese beauty brands, and the relative lack of product power of Chinese beauty brands are the three major dilemmas faced by Chinese beauty brands. Meanwhile, countermeasures such as optimizing brand layout by focusing on segmented categories, inviting celebrity endorsement and strengthening brand image are proposed.

Keywords: Chinese Beauty brand, Purchase intention, factor analysis, University student population

1.Introduction

With the continuous development of domestic science and technology level as well as economic level, Chinese national brand gradually enter our vision, and at the same time become the main products purchased by consumers, competing fiercely with foreign brand[1]. With the development of economy, people's living standard is improving, people's consumption demand has changed from the necessary consumption to meet the basic material needs to meet the higher level of spiritual needs of non-necessary consumption[2]. Coupled with the elevation of women's status, women's awareness of the awakening of the "her economy" has become a force to be reckoned with in the consumer market. Therefore, China's domestic cosmetics market has a broad blueprint. National identity, national self-confidence awakening makes consumers, especially young consumers are no longer superstitious about international brand, China's national cosmetics won a good opportunity to thrive[3]. The

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advantages of China's national beauty brand lie in a better understanding of local consumer needs, faster adaptation to change, more flexible operation mode, and extensive use of digital platforms to interact with consumers[4]. Utilizing the new advantages of the digital economy to empower the transformation and upgrading of China's national cosmetics industry has brought an opportunity for Chinese national beauty brand, which started late and have a relatively weak foundation, to bend the road and overtake[5].

2. Research methodology

2.1 Questionnaire

This part adopts consumer questionnaire analysis, uses factor analysis to find the main problems affecting consumption motivation, and combines the actual market data to find out the dilemmas facing the current development of Chinese national brand and the reasons for facing dilemmas.

2.1.1 Sample Selection

According to the current consumption characteristics of national goods consumers, the mainstream group of e-commerce shopping and offline shopping is the college student group, so the research sample is set as the college student group in Sichuan province and the college student group in the first-tier, new first-tier and second-tier cities outside Sichuan province. The questionnaire was distributed by questionnaire star, with a balanced ratio of men and women, 320 copies of this research were distributed, 310 copies of questionnaires were recovered, of which 300 were valid questionnaires, and it lasted for one week from the end of October 2023 to the first half of November(*Table 1*).

Table 1 Basic information on investigators

name	option	Frequency	percentage (%)	Cumulative percentage (%)
Gender	woman	150	50	50
Gender	man	150	50	100
	Under 18	3	1	1
Ago	18-22 years	141	47	48
Age	22-26 years	93	31	79
	46-55 years	63	21	100
Grade level	first-year university student	49	16.33	16.33
	second-year university student	92	30.67	47
host city	third-year university student	57	19	66

name option		percentage (%)	Cumulative percentage (%)
fourth-year university student	51	17	83
Chengdu	80	26.67	26.67
Other Cities in Sichuan Province	74	24.67	51.34
First-tier cities outside Sichuan	50	16.67	68.01
second-tier city	49	16.33	84.34
others	47	15.67	100
	300	100.000	100.000
	fourth-year university student Chengdu Other Cities in Sichuan Province First-tier cities outside Sichuan second-tier city	fourth-year university student Chengdu 80 Other Cities in Sichuan Province First-tier cities outside Sichuan second-tier city 49 others 47	fourth-year university student Chengdu 80 26.67 Other Cities in Sichuan Province First-tier cities outside Sichuan second-tier city 49 16.33 others 47 15.67

2.1.2 Reliability and Validity Tests

Table 2 Reliability test table

	Cronbach's Alpha	item count (of a		
		consignment etc)		
The questionnaire as a whole	0.932	9		
Product Value Factor	0.862	3		
Product Efficacy Factors	0.837	3		
Marketing Factor	0.816	3		

The data were imported into SPSS22.0 software to calculate the Cronbach's reliability coefficients of all levels were greater than 0.8, and the overall scale reliability was 0.932, which shows the scientific and reasonable design of the questionnaire structure and question items(*Table 2*).

Table 3Validity test table

The Kaiser-Meyer-		
sampling a	.944	
	approximate	
Bartlett's test of sphericity	chi-square	1823.336
	(math.)	
	df	36
	Sig.	.000

We analyzed the overall outcome validity of the questionnaire using factor analysis and calculated a KMO coefficient of 0.944 with a p-value of 0.000<0.05 using SPSS 22.0, which indicates that the questionnaire has good construct validity(*Table 3*).

2.1.3 Factor extraction

A total of nine consumer purchase motivation factors were designed in this questionnaire, and factor analysis was applied to extract the main factors. As shown in *Table 4*, the sum of the initial eigenvalues of the first three main factors in the total variance interpretation accounted for has reached 77.750%, close to 80%, so the first three factors can be extracted as the main factors.

Table 4Total Variance Interpretation Table

	Initial eigenvalue			Extract the sum of squares to			Rotate the sum of squares to		
comp				load			load		
onent	total	% of	Cumulativ	total	% of	Cumulati	total	% of	Cumulati
	total	variance	e %	totat	variance	ve %	เบเสเ	variance	ve %
1	5.854	65.049	65.049	5.854	65.049	65.049	2.635	29.283	29.283
2	.622	6.916	71.964	.622	6.916	71.964	2.597	28.854	58.137
3	.521	5.786	77.750	.521	5.786	77.750	1.765	19.613	77.750

Extraction method: Principal Component Analysis

2.1.4 Principal Component Analysis

(1) Using X1-X9 to denote 9 factors respectively, the rotated factor analysis model is established as shown in model (1), which is calculated that the first common factor is mainly determined by X1, X2 and X3, the second common factor is mainly determined by X4, X5 and X6, and the third common factor is mainly determined by X7, X8 and X9.

(1)
$$X_i = a_i F_1 + a_i F_2 + a_i F_3$$

(2) Identify the common factors. The first common factor has larger factor loading on the efficacy of Chinese national brand compared with foreign products, the effect that Chinese national brand can achieve, and the opinion of people around us on the effect of Chinese national brand, so the first common factor is categorized as the efficacy factor of Chinese national brand. The second common factor has larger factor loading on the degree of popularity of Chinese national brand, price range and product safety, so the second common factor is categorized as the value factor of Chinese national brand. The third factor has larger factor loading on celebrity artist publicity, e-commerce anchor recommendation, and friends and family recommendation, so the third factor is categorized as the Chinese national brand marketing factor.

Table 5 Component matrix after rotation

questionnaire topic	Compone nt 1	Compo nent 2	Componen t 3	Correspondence factor
How important is the degree of product explosion to your purchase of Chinese national brand	0.570	0.550	0.447	National Product Value Factor
How important is the price range of the product for you to buy Chinese national brand	0.245	0.829	0.249	National Product Value Factor
How important is the safety of the	0.377	0.742	0.239	National Product

product to your purchase of a Chinese				Value Factor
product to your purchase of a Chinese	value ractor			
national brand				
The efficacy of Chinese national brand is	0.804	0.246	0.256	National Product
more prominent than foreign products.	0.804 0.246 0.256		Efficacy Factor	
I am satisfied with the results I can	0 604	0.382	0.204	National Product
achieve with the Chinese national brand.				Efficacy Factor
People around me are very satisfied with	0.793	0.319	0.205	National Product
the efficacy of Chinese national brand		Efficacy Factor		
The importance of celebrity artists'				National Product
representation and publicity for	0.278	0.246	0.866	Promotion Factor
purchasing Chinese national brand				Promotion Factor
The importance of key e-commerce				National Product
representatives opinion leaders for your	0.321	0.486	0.630	
purchase of Chinese national brand				Promotion Factor
The importance of recommendations				National Duaduat
from friends and family for your	0.413	0.672	0.324	National Product
purchase ofChinese national brand				Promotion Factor

Extraction method: Principal components.

2.1.5 Computing the eigenvector matrix

As shown in *Table 5*, the main factors influencing consumers to buy Chinese national brand are Chinese national brand efficacy, Chinese national brand value and Chinese national brand promotion, and the factor eigenvector matrix is calculated to provide certain reference and reference for Chinese national brand.Y1, Y2 and Y3 represent the three main factors of Chinese national brand efficacy, Chinese national brand value and Chinese national brand promotion, respectively.

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Y1=0.106*X1-0.308*X2-0.116*X3+0.603*X4+0.394*X5+0.572*X6-0.209*X7-0.198*X-0.075*X9
Y2=0.070*X1+0.695*X2+0.524*X3-0.307*X4-0.108*X5-0.186*X6-0.368*X7+0.027*X8+0.372*X9
Y3=0.096*X1+-0.220*X2-0.240*X3-0.106*X4-0.083*X5-0.219*X6+1.010*X7+0.506*X8-0.089*X9
Y= (Y1*2.635+Y2*2.597+Y3*1.765) / (2.635+2.597+1.765)
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2.2 Problem analysis

Through the factor analysis of the questionnaire, it can be seen that the target consumer groups are more concerned about the three factors of marketing, product efficacy and product value, and their component coefficients are as high as 0.694-0.804, 0.550-0.829, 0.630-0.866 respectively. According to the factor analysis, the coefficient of the component scores ranges from 0.4 or above can be considered that the variables are related to the components, and the closer the coefficient is to 1, the more relevant the coefficient is. 1 the stronger the correlation. Based on the above three factors, we will trace the current dilemmas faced by national brand and the related reasons from the three aspects of consumers' awareness of the brand, the level of product R&D of Chinese national brand companies and the product power of Chinese national brand.

a.Rotation method:Orthogonal rotation with Kaiser normalization.

2.2.1 There is still some room for improvement in the brand recognition of Chinese national brand

In the Chinese national brand industry, there are many brand and products to choose from, and the product iteration and update fast, and consumers generally have the attribute of tasting the new, so the brand loyalty is relatively low. But even so, brand strength is still one of the primary factors affecting consumer decision-making. From the point of view of the promotion factor of Chinese national brand, the popularity of national brand determines the quality and effect of marketing. According to the questionnaire survey data for consumer groups in terms of brand awareness, international brand accounted for 58%, domestic brand accounted for only 42%[6]. At the same time, the number of fans of domestic and foreign product brand platforms also reflects their brand awareness, which supports the promotion of product brand power. As of August 9, 2022, according to the public data of Tmall flagship store, the total number of fans of the four brand under the famous Chinese national brand company is 37.363 million, while the total number of fans of the 11 skincare brand under the famous foreign brand company is 103.036 million, which is 2.76 times of the total number of fans of the famous Chinese national brand company [7]. It can be seen that the international big brand in the Chinese market has accumulated a large number of traffic resources, has a strong brand effect, and the domestic brand has also accumulated a certain degree of brand influence, but its marketing positioning precision brand power gradually grow, but brand awareness still has room for improvement.

2.2.2Chinese national brand R&D level still needs to be improved

From the point of view of the efficacy factor of Chinese national brand, the efficacy of the product mainly depends on the level of research and development. R&D is the core driving force of an enterprise, and to measure the level of R&D and innovation of an enterprise, the number of patents and the R&D expenditure rate are important reference indicators. As of 2021, the two leading domestic beauty companies have 374 and 201 patents respectively after years of brand accumulation, which is far ahead of the national brand. Throughout the international big brand, in 2021, the number of patent applications in the global skin care industry TOP10 applicant technology is mainly laid out in the A61K8 (cosmetic or similar grooming with configurations) segment, of which the global skin care patent applications of the first beauty care company in the field of patent applications amounted to 2,030[8], and none of the domestic beauty brand on the list. International cosmetic brand in product development started early, large volume, but still did not relax the continuous investment in research and development.

Compared to the high marketing expenses of domestic beauty brand, its R&D expenses are relatively small. Public data show that its R&D expenses between 2018 and 2020 were 2.641 million yuan, 0.23 billion yuan and 0.67 billion yuan, accounting for 0.4%, 0.8% and 1.28% of total revenue respectively. The foreign high-end brand are obviously higher in R&D costs. L'Oreal's R&D expense ratio in 2020 is about 3.48%, and the R&D expenses in the first half of 2020 alone amounted to 3.783 billion yuan, an increase of 7.1 percentage points over the same period last year[9].

2.2.3 Relative lack of product power of Chinese national brand

In terms of product value factors, product power is the decisive factor. Product power is the attractiveness of the product to the target consumers, mainly reflected in the product quality, price and innovation to reflect the level. From the questionnaire survey data can be seen, the product explosion,

acceptable price and product safety for the focus of consumer attention. In the "flower West" behind the incident revealed not only the problem of e-commerce anchors, but also more of the national brand continue to increase prices, according to public information: the current domestic skincare products prices generally increased between 3% -15%.

At the same time, public information shows that the domestic beauty company also exists in the brand construction is not perfect, the aging of the product shows; new product quality is not stable enough, the exclusive market is limited, raise the price of the growth rate is fast. And foreign beauty under the middle and high-end skincare brand although the function is complete, product stability, but pricing is higher, consumer circle obvious. Therefore, national beauty brand want to enter the high-end market, in the research and development of efficacy differentiated products, do across the life cycle of the product, improve product safety and other product power still need to work [10].

2.2.4 Summary

To summarize, the biggest problem of the current national brand is that some of the Chinese national brand are not clearly positioned, resulting in brand dilution. At the same time, Chinese national brand do not pay attention to product research and development, resulting in a lack of research and development capabilities, the lack of high-end product lines, can only improve the marketing costs to sell products, however, because of foreign brand continue to eat online marketing leads to its only to increase their own prices, resulting in the reduction of its product power.

3. Brand Strategy and Recommendations

According to the above existing gaps and deficiencies, this paper from the position of the actual starting point, put forward the following Chinese national beauty brand strategy recommendations.

(1) Focusing on niche categories and optimizing brand layout.

Behind the national tide culture lies the consumption preference of different groups of people, constituting a diversified and prosperous national tide era. Under the background of national trend, enterprises should position their target market in the groups that are favorable to their development and have outstanding advantages. For example, after market research, Brand A chooses cool girls of Generation Z as its target market, and produces differentiated beauty products according to the characteristics of target consumers who "love beauty, want to taste freshness, and are not financially well-off" as well as the differentiated preferences of target consumers for beauty products, which satisfy consumers' needs and give value to the brand. Skillfully avoid the advantages of international brands, choose the development of immature, yet to be tapped lip glaze as a product entry point, occupy the product segmentation category, create air lip glaze this empty space, and continue to deepen the plowing, launched a series of explosive lip glaze, lip glaze to create a unique label for the brand. From the experience of L'Oreal, Procter & Gamble and other international brands, in multiple market segments to create explosive products, the use of differentiated product characteristics to attract different needs of consumer groups, to occupy more segments of the market, even if the loss of a product market, will not affect the overall layout and development of the brand. A brand as a domestic emerging brand, on the basis of ensuring product quality, and not confined to the lip glaze lipstick category, successive launch of the A brand as a new brand in China, on the basis of ensuring product quality, is not limited to lip glaze lipstick category, successive launch of foundation, loose powder,

eyebrow pencil and other categories of products, and constantly broaden their product mix, and then optimize the brand layout for the brand's subsequent long-term development of laying a deep foundation[11].

(2) Invite celebrity endorsement to strengthen brand image

In the era of "traffic is king", brands are gradually realizing that they can use the star effect to prompt fans to consume, seize the fans' psychology of following and loving stars, and attract more young consumers. When choosing a star to endorse a product, there are two main bases: one is the star's topic degree, with the topic of the star can bring heat and flow for the brand, increase product exposure and attract more consumer groups; the second is the star's persona, the star's persona needs to match the brand's concept, the better the fit, the more unified the content and brand perception is, the more persuasive the endorsement is.B brand through the online and offline double dimension to put endorsement ads, reach more target groups, perfectly enhance the brand premium ability, from the explosive national products upgraded to the national brand representatives. B brand has also repeatedly used Liu Baxin, Bi Wenjun, Wang ZiYi from the popularity of popularity from the popularity of variety shows, netroots talent show from popularity of idols, through the official announcement of the brand and other hot events, the use of the fan economic dividend to create a hotspot attention through the fans pry the economy. B brand marketing gives full play to the value of its spokespersons, transforming star traffic into brand energy and sales, transferring fans' and consumers' personal impressions of the stars to the brand image, and obtaining a win-win situation in terms of emotion and effect by empowering artists and fan groups[12].

(3) The people planting grass + live broadcasting, help the brand to break the circle.

Grasping the changes in consumer habits, Brand C chose Xiaohongshu as its main camp, where young women are the user group, and where the content aggregation, user quality, and tone are all in line with the brand, and vigorously launched soft advertisements by cooperating with expert.Brand C chose expert in the head waist (with more than 500,000 followers) and tail (with less than 1,000 followers) on Jieyin, Shutterhands, and other platforms, where the content is mainly about beauty, personal care and fashion, to work with. Brand C cooperates with head (500,000+ followers) and tail (1,000 followers or less) expert, utilizing head expert to attract followers, increase brand influence and consolidate the brand's tone. Through the cost-effective tail expert, we can spread the brand widely, build up a good reputation and further occupy consumers' mind. As for the live broadcast, we mainly choose the head of the Darren, and adopt the decentralized strategy of binding different products with different KOL, so as to ensure that each of the main products can get the exposure and support.

(4) Creating co-branded IP and shaping brand connotations.

Consumers are gradually changing their mindset, focusing on the meaning behind the product instead of the single function. Taking advantage of the national trend, D brand added two colors of "Flower Yellow" and "Red Makeup" to its eyeshadow palettes, which corresponds to the poem of Mulan, "When the house is in the red make-up" and "When the mirror is pasted with flower yellow". "Putting on flowers in the mirror" in Mulan's poem. Different from traditional IP cooperation, D-brand's IP cooperation will deeply explore the spirit and connotation of both brands. Hua Mulan is a loyal and courageous soldier on behalf of her father, and Brand D utilizes "Hua Mulan", a classic IP of traditional Chinese culture, to

convey the brand connotation of "I hope that every maverick cool girl can burn the world with a loyal, courageous, and true fervor, and become cool and beautiful". D brand also cross-border co-branding with national intangible cultural heritage "Qiang embroidery", launching "Beyond Qiang limited edition gift box", interpreting Chinese culture from the perspective of the new generation, perfectly integrating the traditional culture with modern spirit, and publicizing the national trend of the new generation, explaining the brand's "cool and beautiful". It is a perfect fusion of traditional culture and modern spirit to publicize the national trend and interpret the brand's cultural connotation of "Dare to be different"[13].

(5) Establishing private domain traffic to empower brand development.

Private traffic marketing is not a cut-and-dried single-channel marketing, enterprises should focus on the linkage between public and private traffic while focusing on the digital private traffic track. brand E adopts a comprehensive development strategy of online + offline in the private traffic field. As of June 2021, the number of E brand offline stores has exceeded 30, and it has strongly entered 1,528 Watsons stores. E brand stores are sweet, cool, simple and personalized, which is in line with the brand's tone, and the staffs in the stores provide attentive services according to the needs of the consumers to give them a better product experience. The staff will also guide and invite consumers to add the official public number and join the brand community to attract traffic to the online private area. Online private marketing is the key to brand marketing, the public domain traffic acquisition cost is getting higher and higher, the private domain traffic acquisition and maintenance is particularly important. In addition to offline traffic, the E brand will also through the "new tasting" "pull new gift" "into the group red packets" and other ways, so that more consumers and potential consumers to add the enterprise WeChat, and actively invite people around them to enter the group. The brand's exclusive WeChat customer service is real customer service, which can provide consumers with more timely and more humanized service, and improve consumer satisfaction. The brand community group members are highly active, the group chat content is not monotonous and boring advertising output, most of the product experience sharing and beauty teaching, not only can mobilize the group members to share the enthusiasm of the spontaneous, but also can stimulate the purchase desire of potential consumers to increase the user viscosity.

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