

The Effect of Brand Attachment on Consumer Willingness to Pay Price Premiums Based on Cosmetic Products Insight

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Abstract. With the continuous upgrading of consumption level and the continuous growth of demand, people's attention to brands is gradually increasing, especially in China. To investigate the impact of cosmetic's brand attachment on consumer willingness to pay price premiums, this article uses consumer willingness to pay price premiums as the dependent variable, and cosmetic brand attachment as the independent variable for regression analysis. It has been determined through empirical analysis that consumer willingness to pay price premiums is positively impacted by cosmetic brand attachment and its four dimensions including appearance, utility, brand-self connection, and memory. The research finds that the memory has the biggest impact on consumer willingness to pay price premiums. Also, the brand-self connection, and utility would increase consumer willingness to pay price premiums. Appearance has the least influence on consumer willingness to pay price premiums. The research findings of this paper offer advice to the cheap cosmetics firms and once well-known cosmetics firms on how to improve future marketing strategies and competitive advantages respectively. This paper's key contribution is the advancement of the research object. At the moment, brand attachment research is primarily a macro market analysis conducted by both domestic and international academics. They fail to make a distinction between different brand types, such as the market for cosmetic brand names.

Keywords: Willing to pay the premium; brands; marketing; cosmetic products.

1. Introduction

The Chinese consumption has reached previously unheard-of heights due to the country's economic development. In 2022, China's total retail sales of consumer goods reached 44 trillion yuan. As a result of rising demand and rising supply for goods being purchased, brand recognition is also rising. China's huge consumer market has also spawned many cosmetic brands.

The popularity of cosmetic products is rising in tandem with the public's loveliness and desire for beauty [1]. Particularly recently, there have been an increasing number of topics involving makeup. For instance, creative makeup styles including "Boiled Water Makeup", "Parallelogram Eye Makeup", and "Lower Eyelids" have been shared and well-liked by fans on numerous platforms like Xiaohongshu, Weibo, Tiktok, and Bilibili. Many high-quality and affordable cosmetics firms have formed in response to consumer demand, lowering the entry barriers for people who want to wear makeup. There used to be pricey cosmetics that only celebrities could afford, but today there are "replacement" products or affordable alternatives [2]. Brand attachment related theme research is very diverse. Consumers that are emotionally connected to a brand will unconsciously choose to buy it again and again in the future and will continue to spread the word about it to those in their social circles, bringing in a lot of new users and drawing in consumers [3]. Strengthening tolerance to price changes for the brand's items over time [4]. Also, environment and psychology also affect consumer willingness to pay price premiums [5]. Trang et al. [6] consider brand attachment's impact on mobile branded apps, finding a positive effect among them.

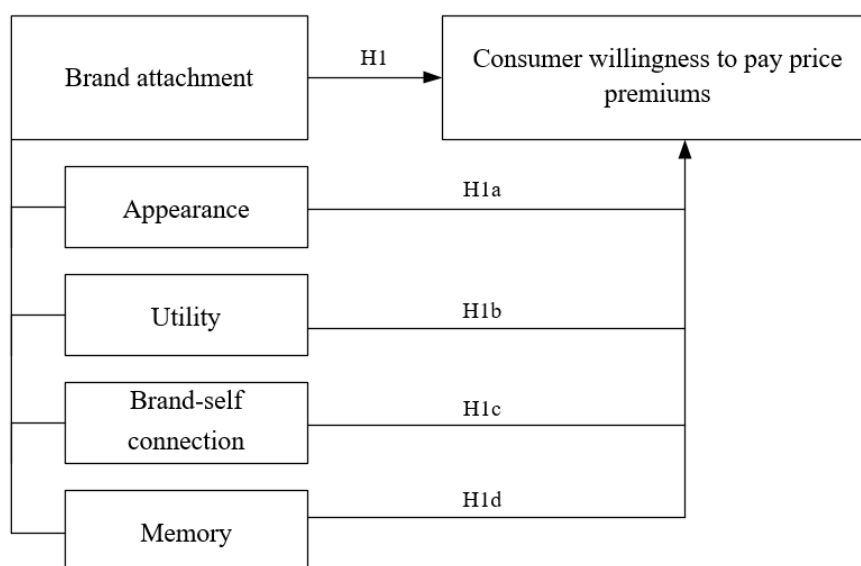


Fig 1. Structure of hypothesis.

This paper explores the impact of brand attachment on consumer willingness to pay price premiums and set a series of hypothesis (Fig 1). The following hypothesis are put out in this research regarding the connection between consumers' brand attachment and consumer willingness to pay price premiums.

Main hypothesis:

H1: Brand attachment would facilitate consumer willingness to pay price premiums;

Sub- hypothesis:

H1a: Appearance positively influences consumer willingness to pay price premiums;

H1b: Utility increases consumer willingness to pay price premiums;

H1c: Brand-self connection positively affects consumer willingness to pay price premiums;

H1d: Memory positively influences consumer willingness to pay price premiums.

Through empirical investigation, it has been found that cosmetic brand attachment and its four dimensions—appearance, utility, brand-self connection, and memory—all have a positive impact on consumer willingness to pay price premiums.

The structure of the article is organized as follows. Section 2 is the data collection. Section 3 presents the analysis of the results. Section 4 summarized the conclusion and marketing suggestions.

2. Data Collection

The questionnaire method is widely used in consumer psychology and behavior research, such as brand attachment [7], and marketing-establishing [8]. Ball and Tasaki [9] examine the role of attachment in the relationship between people and possessions. Relationships between attachment and other important consumer behavior constructs are explored by questionnaire [10].

This paper also utilizes questionnaire to collect data. Firstly, the questionnaire is carefully selected to ensure that respondents are familiar with the brand that is frequently used. Secondly, the main section uses a five-level scale to assess consumer willingness to pay price premiums and their attachment to a specific cosmetic brand. The scale assigns one point for "very unsatisfied," two points for "dissatisfied," three points for "fair," four points for "satisfied," and five points for "extremely satisfied." Finally, the third component captures the participants' basic demographic information and individual data, including gender, age, and monthly consumption level.

There are 373 questionnaires retrieved in all, and those that have identical responses on the five-level scale and are completed in under one minute are deemed invalid. 364 valid surveys are remained after elimination, and the effective recovery rate was 97.59%.

The following table shows the descriptive statistics of different variables (Table 1).

Table 1. Descriptive statistical for demographics.

Demographics	Options	Amounts	Percentage
Gender	male	99	27.20%
	female	265	72.80%
Age	Lower tahn 18	29	7.97%
	18~25	131	35.99%
	26~30	110	30.22%
	31~40	45	12.36%
	41~50	28	7.69%
	Higher than 50	21	5.77%
	Lower than 2000	79	21.70%
Consumption level	2001-5000	151	41.48%
	5001-8000	79	21.70%
	8001-17000	32	8.79%
	17001-40000	13	3.57%
	40001-85000	8	2.20%
	Higher than 85000	2	0.55%

The Table that follows shows that there is a huge disparity between the proportions of males and women, with the proportion of women being significantly higher. Each age group is approximately typical in terms of age, but the majority are still young people, which is consistent with the fact that young people use more cosmetics in everyday life. The proportion of consumption level in 2001 yuan to 5000 yuan amounts to 41.48%, which is the highest.

The author also summarizes the data of appearance, utility, brand-self connection, memory, brand attachment, and willingness to pay a premium in Table 2.

Table 2. Different Features of Brand.

	Appearance	Utility	Brand-self connection	Memory	Brand attachment	Willingness to pay a premium
Mean	3.8242	3.7473	3.5412	3.3661	3.569	3.4524
Median	4	4	4	3.75	3.9	3.6667
Std. Dev	1.07019	1.03884	1.11016	1.17294	0.96566	1.10949

3. Results Analysis

3.1. Reliability analysis

Reliability analysis refers to the consistency of the results obtained when the same object is repeatedly measured by the same method. The size of the variable reliability value in the scale is determined by Cronbach's alpha in this study (Table 3).

Table 3. Reliability analysis.

Variables	Composition	α
Appearance	2	0.801
Utility	2	0.764
Brand-self connection	2	0.810
Memory	4	0.909
Willingness to pay a premium	3	0.864

According to the above table, the alpha coefficients of all variables are greater than 0.7, indicating that the internal consistency of the measurement scale selected in this paper is relatively good, and the reliability of the questionnaire is good.

3.2. Validity analysis

After reliability analysis, validity analysis is also needed [9]. This paper uses Exploratory Factor Analysis (EFA) to test whether each scale can clearly express the meaning of the dimensions by SPSS.

This work considers principal component analysis to construct brand attachment and consumer willingness to pay price premiums. In this article, the KMO and Bartlett sphericity tests are carried out. The study found that the KMO value is greater than 0.7, and the p-value is less than 0.001. The value of the Bartlett sphericity test is also very large, indicating that the scale is suitable for factor analysis (Table 4).

Table 4. KMO value and Bartlett spherical test.

KMO measure of sampling adequacy	0.935
Bartlett sphericity test	Chi-square 2404.183 df 45 significance 0

Table 5. Component matrix after brand attachment rotation.

Option	Component			
	1	2	3	4
M3	0.848	0.279	0.117	0.141
M1	0.8	0.213	0.284	0.136
M2	0.772	0.155	0.374	0.219
M4	0.726	0.166	0.359	0.303
A1	0.192	0.834	0.242	0.255
A2	0.293	0.698	0.315	0.31
B2	0.399	0.263	0.763	0.22
B1	0.447	0.397	0.636	0.112
U1	0.173	0.258	0.24	0.872
U2	0.368	0.495	0.013	0.624

Extraction Method: Principal component analysis
Rotating method: Caesar's biggest difference method.
a. Rotating has converged after 7 iterations.

The value in component 1 for the four items of “M1, M2, M3, and M4” is quite large and is greater than 0.5, thus it is referred to as memory. Similar to this, the values of “A1 and A2” in component 2 are higher and exceed 0.5. The author named it as appearance. Brand-self connection is shown by “B1 and B2” in component 3. The component 4 is called as utility. The values of “U1 and U2” are greater than 0.5 (Table 5).

In the consumer premium willingness to pay component matrix, the values of “W1 W2, and W3” are all higher than 0.5. The author extracted it as a component and named consumer willingness to pay price premiums (Table 6).

Table 6. Component matrix after rotation.

Option	Component
W2	0.894
W1	0.888
W3	0.878

Method: Principal component analysis

3.3. Regression analysis

The impact of cosmetic brand attachment on consumer willingness to pay price premiums is shown in Table 7.

Table 7. Regression results for brand attachment's effect on consumer willingness to pay price premiums.

Willingness to pay a premium					
Variables		Model 1		Model 2	
		β	p	β	p
Control	Gender	-0.009	0.87	-0.047	0.128
	Age	0.031	0.575	0.02	0.537
	Monthly consumption level	0.091	0.097	0.023	0.475
Independent Variables	brand attachment			0.811	0.000
	F	1.320(p=0.268)		175.599(p=0.000)	
	R ²	0.011		0.662	

From the above table, it can be observed that after adding the three control variables of gender, age, and monthly consumption level, the model's R square increases from 0.011 to 0.662. This means that adding these three factors improves the model's robustness. Model 2 is significant at 0.001, as can be seen from the F test results, suggesting that the model is statistically significant (Table 6).

The result shows that significance is less than 0.001 and the standard coefficient value is 0.811 more than 0. T-test of the independent variable brand attachment shows that cosmetic brand attachment has a positive impact on consumer willingness to pay price premiums. Then, the paper examines the relationship between consumer willingness to pay price premiums with each dimension of brand attachment, including appearance, utility, brand-self connection, and memory.

Table 8. Regression results for appearance, utility, brand-self connection, and memory.

Willingness to pay price premiums					
Variables		Model 1		Model 2	
		β	p	β	p
Control	Gender	-0.009	0.87	-0.05	0.109
	Age	0.031	0.575	0.019	0.555
	Monthly consumption level	0.091	0.097	0.025	0.438
Independent	Appearance			0.117	0.016
	Utility			0.25	0.000
	Brand-self connection			0.229	0.000
	Memory			0.344	0.000
F		0.268		0.000	
R2		0.11		0.665	

The generated regression equation is valid because the significance level is less than 0.001 after that the control variables of gender, age, and monthly consumption level have been added. The four dimensions all affect willingness to pay price premium, but to different degrees, as shown by the table with a significantly impact. From Table 8, p-value of utility, brand-self connection, appearance and memory are lower than 0.05. Also, memory has the biggest impact ($\beta=0.344$), followed by utility, brand-self connection, and appearance. The appearance's impact on consumer willingness to pay price premiums is 0.117.

Therefore, the sub-hypothesis H1a, H1b, H1c, and H1d of cosmetics brand attachment to consumer willingness to pay price premiums are all proved.

4. Conclusion and Marketing Suggestion

4.1. Conclusion

Consumer willingness to pay price premiums is significantly influenced by brand attachment (memory, utility, brand-self connection, appearance). This article collected 364 valid surveys and utilizes PCA (Principal component analysis) method to construct brand attachment and consumer willingness to pay price premiums. Then, the paper conducts a regression model to evaluate the impact of brand attachment on consumer willingness to pay price premiums. The results show that brand attachment positively affects consumer willingness to pay price premiums. When we consider these four dimensions of brand attachment, we find that memory has the biggest influence, followed by utility, brand-self connection, and appearance.

Contrary to original belief, buyers do not place a great deal of importance on a product's appearance. Comparatively, a story or a memory might be the crucial element that ties consumers' feelings to stickiness and cosmetic products.

The most fundamental purpose of cosmetics is utility. In contrast to apparel and other categories where there is little variation efficacy, if one cosmetic firm can produce a result that other cosmetics firms are unable to, including in terms of efficacy and, degree, etc., Its distinctive edge in terms of technology is what draws users to it. Due to the high level of irreplaceability brought by such technologies, people get emotionally tied to the brand. Because of this irreplaceability, a price increase will be accepted.

4.2. Marketing Suggestion

According to the results. This paper proposes some suggestions for brand development and marketing.

Before offering products, the cosmetic firm should spend time and money making narratives with consumers so that the brand may become a part of their daily life. For instance, several companies now release limited Christmas gift boxes to entice people to buy them as presents for their girlfriend.

Investments in the research and development of new aesthetic technologies should also be made, depending on the utility's level of impact. Take the topic of anti-aging, which has recently attracted interest. Cosmetic companies can innovate in a variety of ways, such as by creating new anti-aging chemicals, increasing the possibility that existing anti-aging products will maintain their benefits over time, hastening the time it takes for them to start working, and more.

It must have its distinctive style and qualities and perform well in terms of market positioning when it comes to cosmetic brand image promotion. Consumers will be more likely to know your brand if you choose one from the start and stick with it rather than constantly changing it to reflect the most recent trends.

Although investing is possible in terms of appearance, it is not a good idea to invest excessive amounts, and the proportion of investment can be decreased.

For the emerging cheap cosmetics, although it is now favored by some consumers through the advantages of low price, this is not a means to get the attachment to the consumer brand, and it is not helpful for future consumers' viscosity. For big-name cosmetics, although emerging cheap cosmetics compete with them, the target market of the two is not completely overlapped. The above strategies can help large brands of cosmetics gain a larger market in terms of brand attachment.

References

- [1] Bowlby, J (1969). Attachment and loss, Vol.1: Attachment. New York: Basic Books, 24-37
- [2] Oliver, Richard L (1999). Satisfaction: A Behavioral Perspective on the Consumer. New York: The McGraw Hill Companies, Inc. 5, 77-84

- [3] Park, C.W., MacInnis, D.J., Priester, J., Eisingerich, A. B., Iacobucci, D (2010). Brand Attachment and Brand Attitude Strength: Conceptual and Empirical Differentiation of Two Critical Brand Equity Drivers. *Journal of Marketing*, 74(November): 1-17.
- [4] Brown Jorge H (1952). Brand Loyalty-Fact or Fiction? *Advertising Age*.1952,9(23):53-55
- [5] Mehrabian, A., & Russell, J. (1974). *An Approach to Environmental Psychology*. Cambridge: MIT Press
- [6] Trang P. Tran and Christopher P. Furner and Pia A (2020). Albinsson. Understanding drivers and outcomes of brand attachment in mobile branded apps. *Journal of Consumer Marketing*, 38(1):113-124.
- [7] Chaudhuri, A., Ligas M (2009). Consequences of value in retail. *Journal of markets*, 85(3): 406-419
- [8] Morgan RM, Hunt SD (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*,58(2):20—3
- [9] Ball, AD, and Tasaki L H (1992). The role and measurement of attachment in consumer behavior. *Journal of Consumer Psychology*, 1, P155-172. 4
- [10] Kleine,S S, and Baker S M (2004). An integrative review of material possession attachment. *Academy of Marketing Science Review*, vol: 7, P11-35.