Effects of consumer's brand familiarity on apparel brand extension evaluation: an experimental study

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Abstract

Using experimental methods, this paper studies the effects of consumers' brand familiarity on the evaluation of apparel brand extension, and then further validates experimental conclusions through consumers' investigation. The experimental study indicates that the difference of brand familiarity has no effect on the evaluation of brand extension of women's apparel. Surprisingly, the consumer survey further validated the experimental result and led to the same conclusion. The study also indicated that difference of brand familiarity is a primary factor which affects the evaluation of brand extension of menswear. The higher the brand familiarity, the higher the evaluation of the brand's clothing-related extension, near-extension and up-extension. Brand familiarity has no significant impact on the brand's down-extension.

Introduction

Brand extension has drawn increasing attention among apparel industry professionals in China in the recent years (Wei Wenguo, 2001). In China, research on branding is at its developmental stage, and experimental study of brand extension in apparel industry is very limited. Although research on brand extension has achieved significant progress, whether these research findings apply to the apparel industry is still questionable.

The purpose of apparel brand extension is to put new products into the market rapidly and effectively through the original brand's radiating strength and influence. Brand familiarity refers to a consumer's recognition of and familiarity to a brand. Because brand familiarity reflects a consumer's existing experience and knowledge about a brand

in a certain extent, so from the viewpoint of consumer's psychology it has great influence on a consumer's purchase decision.

Previous studies indicated that a consumer's level of familiarity with a brand affects the brand's ability to extend (Wayne and Steven, 1990; Vicki and Robert, 1995). This research represents a first attempt to study important effects of apparel brand familiarity on apparel brand extension evaluation. Based on existing theories of brand extension, this study developed and tested research hypotheses through experimental design, and also employed an intercept survey with real consumers to further validate the findings obtained through experimental design.

Research method

A preliminary experiment was to filter pairs of apparel brands according to experimental conditions, and a formal experiment was to explore consumers' evaluations of these brands' extension products. Thirty-six questionnaires were independently completed by 36 female juniors in a classroom setting. Then, an intercept survey was conducted by researchers in a shopping center and a total of 806 questionnaires were completed. Least-Significant Difference and Independent Samples T test were performed with SPSS (Lu Wendai, 2002), and Contingency table tests in social statistics were used (Lu Shuhua, 2001).

Experiments

Experiment variables included independent variables, dependent variables and control variables. Independent variables referred to brand familiarity, dependent variables stood for near-extension evaluation, far-extension evaluation and down-extension, and control variables contained brand category stickiness, brand abstract characteristics and brand perception.

Preliminary experiment

The choice of women's apparel extension category

We used 9-point rating scales ranging from 1 (had no differences between different products) to 9 (had great differences between different products) to measure the extension distance of some hypothetic brand extensions. We considered 5 as a diversion standard in terms of Sujan's previous study (Lei Li, Wang Yong and Ding Xiaqi, 2005, Sujan and Bettman, 1989). The result indicated that the

classification distance between women's apparel and cigarette was 6.51, which meant a far-extension, however, the classification distance between women's apparel and women's underwear was 2.63, the distance between women's apparel and shoes and caps was 2.20, and that between women's apparel and cosmetics was 2.89, which showed them near-extensions.

The analyses of women's apparel brand familiarity and their differences

We considered the first mentioned brand's rate as the measurement of brand familiarity (Zheng Zongcheng & Chen Jin, 2002). At the beginning of the research, participants were asked to write some brands without any hints. According to questionnaires, the rank of brand familiarity was as follows: ELLE, ONLY, Etam, Vero Moda, ESPRIT, E-land and CHANEL. Then, we measured these seven brands' familiarity, which used a five-point rating scale (0-I don't know this brand; 1-I know this brand, but I am not familiar with it; 2- I am familiar with it, friends have told me about it or wear it ; 3-I am familiar with this brand, I have bought it; 4-I am very familiar with this brand) (Lei Li, Wang Yong and Ding Xiaqi, 2005): we found that undergraduates were familiar with the brand of ELLE, ONLY, Etam, Vero Moda, ESPRIT, and E-land, and all of their mean values were above 2.00, so we chose these six brands as main experimental objects.

Using a contingency table test, we figured out the scores (χ^2) of five pairs of brand combinations (which were "ONLY-ELLE", "ONLY-Vero Moda", "ONLY-ESPIRIT", "ONLY-Etam" and "ONLY-ELAND"), and their scores respectively were 10.118, 10.118, 10.118, 5.756 and 10.118. If we chose $\chi_{0.05}^2(1) \approx 3.841$, then all five figures exceeded it. Therefore, we drew a conclusion that there were differences among the five pairs of brand familiarity. We further investigated whether these were consistent among the five pairs of brand category stickiness, brand abstract characteristics and brand perception.

The analyses of women's brand category stickiness, brand abstract characteristics and brand perception

We used a nine-points rating scale to measure brand category stickiness: the larger the figure was, the more factors showed that this brand had a close relationship with women's apparel. The measurement of brand perception also used the same rating scale: the large the figure

was, the more factors showed that participants preferred this brand. We measured brand abstract characteristics through referring to Park's scale table, which was composed by two questions: one of them was "I feel self-confident or a sense of pride when I wear this brand's apparel"; the other was "this brand is a symbol of high quality" (Lei Li , Wang Yong and Ding Xiaqi, 2005; Smith and Park, 1992). Participants were told to answer these two questions and the relative value achieved 0.01, so both of the mean values are used.

Based on Least-Significant Difference analysis, as shown in Table 1, there were no remarkable differences in brand category stickiness, brand abstract characteristics or brand perception in each pair of brands among the total five pairs. Hence, we chose them as investigative objectives of concrete brand extension in the formal experiment.

Brand(I)	Brand(J)	Brand category stickiness		Brand perception		Brand abstract characteristics	
		The Difference of Mean Value (I-J)	Sig.	The Difference of Mean Value (I-J)	Sig.	The Difference of Mean Value (I-J)	Sig.
ONLY	ELLE	0.19	0.772	-0.82	0.124	-0.37	0.171
ONLY	Vero Moda	-1.00	0.287	-0.52	0.485	-0.15	0.691
ONLY	ESPRIT	-1.83	0.089	-1.46	0.087	-0.47	0.275
ONLY	Etam	-0.47	0.573	-0.68	0.309	-0.04	0.899
ONLY	E-land	1.03	0.337	-0.32	0.707	0.17	0.691
*Note * the mean value of brand group equal 0.05 stands for significant difference (sig means significant probability)*							

Table 1. The Least-Significant Difference Analysis of Consistency about Woman's apparel brand category stickiness, brand abstract characteristics and brand perception

Formal experiment

Dependent variable—measurement of extension evaluation

We applied Bronjarczyk's extension evaluation table to do the measurement, which was formed by two questions: "I have a good opinion of the brand"; "I think this brand will succeed in the market" respectively. Figures of one to nine were used to show whether participants agreed with the two statements. The larger the figure was, the more factors that participants agreed with them (Lei Li, Wang Yong and Ding Xiaqi, 2005; Susan Bronjarczyk and Alba, 1994). The result

indicated that the correlative coefficient of participants' answers about these questions achieved 0.01, so the mean value of these two questions was adopted to evaluate brand extension.

Participants used the table mentioned above to evaluate far-extension (from women's apparel to cigarette), near-extension (from women's apparel to women's underwear and cosmetics) and down-extension of 'ONLY', 'ELLE', 'Vero Moda', 'ESPRIT', 'Etam', 'E-land'.

Result and discussion

We surveyed five brand combinations' far-extension, which extended to cigarettes, near-extension, which extended to women's underwear and cosmetics separately, and down-extension, which extended to low-end women's apparel. From Table 2, brand familiarity had little influence on women's apparel brand extension evaluation. That is to say brand familiarity had little influence on women's apparel brand near-extension evaluation and down-extension evaluation in the context that there were differences between familiarities of these brands. After comparing these five brand combinations' far-extension, as shown in Table 3, we concluded in general the explanation that brand familiarity affected women's brand extension evaluation lacked for factors.

In order to further validate and explain these experimental results, we surveyed some consumers to further study the effects of consumer's brand familiarity on apparel brand extension evaluation.

Consumer investigations

Investigation sample

We used 'Consumer Investigation on Women's apparel Brand' and 'Consumer Investigation on Menswear Brand', which were surveyed on December, 2005: the effective sample quantities were 446 and 360.

Investigation results of women's apparel brand extension evaluation

With the method of using a nine-point rating scale, consumers thought that women's apparel had a greater relationship with women's underwear, shoes, caps, and cosmetics than other products, which showed near-extensions, and on the contrary, women's apparel had little relationship with menswear, watches and mobile telephones,

which implied far-extensions. Through the investigation of women's apparel brand familiarity and testing the differences of their brand familiarity, we found that there were remarkable differences in five pairs of brand familiarities, which were 'ONLY-White Collar', 'ONLY-ESPRIT', 'ONLY-DIOR', 'ONLY-CHANNEL' and 'ONLY-PORTS'. During the investigation, we surveyed these five pairs near-extension to underwear and cosmetics, their cross-classification extension to

Extension Classification	Brand(I)	Brand(J)	The Difference of Mean Value (I-J)	t	f	p
Near-extension to underwear	ONLY	ELLE	-0.125	-0.296	69.607	0.768
Near-extension to cosmetic	ONLY	ELLE	-0.361	-0.827	70	0.411
Down-extension to low-end woman's apparel	ONLY	ELLE	0.455	1.221	69.929	0.226
Near-extension to underwear	ONLY	Vero Moda	0.815	0.235	69.898	0.815
Near-extension to cosmetic	ONLY	Vero Moda	-0.208	-0.465	69.826	0.643
Down-extension to low-end woman's apparel	ONLY	Vero Moda	0.208	0.457	69.936	0.649
Near-extension to underwear	ONLY	ESPRIT	-0.403	-0.977	68.806	0.332
Near-extension to cosmetic	ONLY	ESPRIT	-0.333	-0.772	69.907	0.443
Down-extension to low-end woman's apparel	ONLY	ESPRIT	0.111	0.241	69.997	0.810
Near-extension to underwear	ONLY	ETAM	0.333	0.770	69.947	0.444
Near-extension to cosmetic	ONLY	ETAM	0.306	0.675	69.642	0.502
Down-extension to low-end woman's apparel	ONLY	ETAM	0.514	1.002	67.605	0.320
Near-extension to underwear	ONLY	E-land	0.069	0.165	69.536	0.870
Near-extension to cosmetic	ONLY	E-land	-0.264	-0.613	69.950	0.542
Down-extension to low-end woman's apparel	ONLY	E-land	-0.028	-0.066	67.303	0.948
Note ** $p<0.05$(two-tailed T test's significant probability)						

Table 2 The Contrast Result of Near-extension and Down-extension in 'ONLY-ELLE', 'ONLY-Vero Moda', 'ONLY-ESPRIT', 'ONLY-Etam' and 'ONLY-Eland' Near-extension to underwear

cigarettes, their down-extension to low-end women's apparel, and their up-extension to top-grade women's apparel. The result in table 4 showed that brand familiarity had little effect on women's brand extension evaluation, regardless of the point of near-extension, down-extension, up-extension or cross-classification extension to cigarettes, which validated the experimental conclusion obtained previously. The reason maybe related to women's pattern of consumption, because women consumers usually thought more about their apparel's design, color and so on, and they thought little about brands.

Extension Classification	Brand(I)	Brand(J)	The Difference of Mean Value (I-J)	t	f	p
Far-extension to cigarette	ONLY	ELLE	0.455	1.221	69.929	0.226
Far-extension to cigarette	ONLY	Vero Moda	0.815	0.235	69.898	0.815
Far-extension to cigarette	ONLY	ESPRIT	-0.403	-0.977	68.806	0.332
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Far-extension to cigarette	ONLY	E-land	-0.028	-0.066	67.303	0.948
Note ** $p < 0.05$(two-tailed T test's significant probability)						

Table 3. The Contrast Result of Far-extension in 'ONLY-ELLE', 'ONLY-Vero Moda', 'ONLY-ESPRIT", 'ONLY-Etam' and "ONLY-Eland"

Investigation result of menswear brand extension evaluation

Still using a nine-point rating scale to investigate male consumers, we showed that menswear had related strongly to shoes, neckties, watches and cigarettes, which had near-extensions. Conversely, menswear had little relationship with women's apparel, mobile telephones and cosmetics, which had far-extensions. After testing menswear brand familiarity and the corresponding differences, we found there were remarkable disparities in five pairs of brand combinations' familiarity, which were 'Pierre Cardin-QI PAI', 'Pierre Cardin-SHAN SHAN', 'Pierre Cardin-Youngor', 'Pierre Cardin-Septwolves', and 'Pierre Cardin-Playboy'. Then we further surveyed these brands' clothing-related extension to women's apparel, near-extension to shoes and watches, down-extension to low-end menswear and up-extension to top

grade menswear. The result in Table 5 showed that brand familiarity affected men's brand extension evaluation, viz., the higher the brand familiarity the higher the evaluation of clothing-related extension, near-extension and up-extension. At the same time, brand familiarity

Extension Classification	Brand(I)	Brand(J)	The Difference of Mean Value (I-J)	t	f	p
Extension to cigarette	ONLY	Etam	0.1925	0.958	345.547	0.339
Near-extension to underwear	ONLY	Etam	0.1868	1.401	345.999	0.162
Near-extension to cosmetic	ONLY	Etam	0.1379	0.797	338.445	0.426
Down-extension to low-end woman's apparel	ONLY	Etam	0.0891	0.501	343.174	0.617
Up-extension to top-grade woman's apparel	ONLY	Etam	0.3319	2.859	345.441	0.005**
Extension to cigarette	ONLY	ESPRIT	0.1360	0.588	269.881	0.557
Near-extension to underwear	ONLY	ESPRIT	0.0809	0.547	269.999	0.585
Near-extension to cosmetic	ONLY	ESPRIT	0.0000	0.000	260.218	1.000
Down-extension to low-end woman's apparel	ONLY	ESPRIT	1.7978	10.301	225.875	0.000**
Up-extension to top-grade woman's apparel	ONLY	ESPRIT	0.1728	1.360	269.232	0.175
Extension to cigarette	ONLY	White Collar	-0.0565	-0.227	245.958	0.821
Near-extension to underwear	ONLY	White Collar	0.3750	2.325	230.098	0.021**
Near-extension to cosmetic	ONLY	White Collar	0.1048	0.600	245.434	0.549
Down-extension to low-end woman's apparel	ONLY	White Collar	-0.1210	-0.538	244.404	0.591
Up-extension to top-grade woman's apparel	ONLY	White Collar	0.1129	0.816	246.000	0.415
Note ** $p<0.05$(two-tailed T test's significant probability) Due to page restrictions, this paper presents only a part of the results of data analysis						

Table 4. The Contrast Result of Extension Evaluation in 'ONLY-Etam','ONLY-ESPRIT' and 'ONLY-White Collar'

had no distinctive impact on the down-extension evaluation of menswear. The reason could be explained by men's pattern of consumption, namely that when male consumers bought apparel, they often thought more about the brand, which stood for their status, and thought less about specific factors, such as style and colour, which was different from women consumers' opinions.

Extension Classification	Brand(I)	Brand(J)	The Difference of Mean Value (I-J)	t	f	p
Extension to woman's apparel	Pierre Cardin	QI PAI	1.4081	8.542	366.013	0.000**
Near-extension to shoes	Pierre Cardin	QI PAI	1.3541	10.450	354.097	0.000**
Near-extension to watch	Pierre Cardin	QI PAI	1.1838	6.560	367.945	0.000**
Down-extension to low-end menswear	Pierre Cardin	QI PAI	0.2054	1.179	354.040	0.239
Up-extension to top grade menswear	Pierre Cardin	QI PAI	1.1514	10.643	310.035	0.000**
Extension to woman's apparel	Pierre Cardin	SHAN SHAN	0.7335	4.846	418.784	0.000**
Near-extension to shoes	Pierre Cardin	SHAN SHAN	1.6910	14.347	346.997	0.000**
Near-extension to watch	Pierre Cardin	SHAN SHAN	1.5731	9.684	414.272	0.000**
Down-extension to low-end menswear	Pierre Cardin	SHAN SHAN	0.0236	0.148	391.042	0.882
Up-extension to top grade menswear	Pierre Cardin	SHAN SHAN	1.2052	13.320	390.055	0.000**
Extension to woman's apparel	Pierre Cardin	Septwolves	1.0979	8.123	644.923	0.000**
Near-extension to shoes	Pierre Cardin	Septwolves	0.8930	9.028	642.618	0.000**
Near-extension to watch	Pierre Cardin	Septwolves	0.9067	6.348	643.539	0.000**
Down-extension to low-end menswear	Pierre Cardin	Septwolves	0.0856	0.646	630.546	0.518
Up-extension to top grade menswear	Pierre Cardin	Septwolves	0.7202	10.161	585.020	0.000**
Note ** p<0.05(two-tailed T test's significant probability)` Due to page restrictions, this paper presents only a part of the results of data analysis.						

Table 5. The Contrast Result of Extension Evaluation in 'Pierre Cardin-QI PAI', 'Pierre Cardin-SHAN SHAN', and 'Pierre Cardin-Septwolves'

Conclusions

According to this study, when apparel enterprises establish a brand and carry out a strategy of brand extension, they should pay attention to the following principles:

There is a remarkable difference in the behavior of evaluation between female consumers doing brand extension evaluation on women's apparel and male consumers doing brand extension evaluation on menswear, which is related to consumer behavior of female and male consumers. For female consumers, many details including imagination, style and colour of apparel are main factors that influence them regarding extension evaluation, and brand familiarity had no significant impact. For male consumers, however, the recognition of brand familiarity is the most important and significant element in their purchasing behaviour and brand extension evaluation, and brand familarity is the main factor that affects them regarding extension evaluation.

Before enterprises which manage menswear extend their original brand to other fields, they should investigate brand familiarity. Brands with high familiarity are suitable for clothing-related extension, near-extension and up-extension to top grade products. If the original brand familiarity is lower among consumers' evaluation, or consumers have a negative attitude towards the brand, then enterprises should be cautious about carrying out an extension strategy.

There are still some shortages and problems that we have not conquered in this study. On the one hand, we did not survey mutual effects between variables: from current research, we know how one variable's change will affect extension evaluation only under the ideal conditions whereby other variables' characteristics keep in line. In fact, variables often react together in the market: for example, the interaction of brand familiarity and brand perception also affects extension evaluation. This paper did not do further research on this question. On the other hand, when consumers were investigated, it was difficult to control consumer behaviour effectively, so although we strictly controlled the brand familarity, we did not control other variables' characteristics effectively, which possibly led to shortcomings in our conclusions.

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Appendix: The Evaluation Rating Scale of Women's apparel Extension (Consumer Investigation)

Please use number 1-9 to evaluate these brands and their brand extension, the higher the number is, the more you approve.							
Whether you know these brands	**White Collar**	**ONLY**	**ESPRIT**	**Etam**	**DIOR**	**CHANNEL**	**PORTS**
Underwear							
I have good sense of this product							
I think this product will succeed in market							
Cosmetic							
I have good sense of this product							
I think this product will succeed in market							
Cigarette							
I have good sense of this product							
I think this product will succeed in market							
Low-end woman's apparel							
I have good sense of this product							
I think this product will succeed in market							
Top-grade women's apparel							
I have good sense of this product							
I think this product will succeed in market							