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**THE EFFECT OF PRODUCT SAMPLING ON BRAND
IMAGE**

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ABSTRACT

To analyze the effect of product sampling on brand image, a field experiment and a survey were conducted, in a North African city, Tunis. Perfume, skin care and make up samples were giving away to 500 women. Brand image was measured before and after sampling.

INTRODUCTION

In these last decades sales promotion had became of great interest for researchers. However, in spite of this interest, some fields were widely investigated like price reductions and couponing while others are still under studied. This is typically the case of free samples (Bawa, Shoemaker, 2004; Heiman, McWilliam, Shen & Ziberman, 2001). Meanwhile, the importance of product sampling as a promotion tool seems to have increased in recent years (Marketing week, 1997).

McGuinness, Brennan & Gendall (1995) consider product sampling as a sales promotion technique used by marketers to encourage “consumer trial”, while for Ailloni-Charas (1984), this technique involves giving away trial-sized quantity of a product with little risk and no obligation.

In this study, brand image is defined as the sum of all tangible & intangible traits - the ideas, beliefs, values, prejudices, interests and features that make it unique. A brand image visually & collectively represents all internal & external characteristics — the name, symbol, packaging, literature, signs, vehicles & culture. It's anything & everything that influences how a brand or a company is perceived by target constituencies or even a single customer (brandwerk group, 2006).

RESEARCH OBJECTIVES

The objective of this paper is to analyze the effect of product sampling on brand image.

CONCEPTUAL FRAME WORK

Heiman, McWilliam, Shen & Ziberman (2001) characterize product sampling as having two effects on purchase behaviour. One is immediate, it is the short term effect and the other is a long term effect called goodwill. They suggested that the effect of sampling depends on the

sample usage. If the usage is immediate samples will have a short term effect, however if it is delayed they will only have a long run effect.

Hamm, Perry and Wynn (1969) concluded that if a product has a feminine image in the eyes of men, exposure to free sample is very likely to change this image.

Also, Bettinger, Dawson and Wales (1979) found that offering free samples of peanut butter produced not only a shift from a childish image towards an adult image but an increased improvement in the qualitative judgments of the adult group that had received free samples.

Attitude formation theory (Anderson, 1974) suggests that the acquisition of positive information about a brand would lead to have a positive brand attitude.

However, attribution theories like self-perception theory consider that consumer may have negative attribution about the sampled brand or product.

Considering the attitude formation theory, Heiman and al. (2001) conclusion and trying to transfer the results of Hamm, Perry and Wynn (1969) and Bettinger, Dawson and Wales (1979) dealing with product image, to family brand image, **it is possible to try to verify the following hypothesis: Product sampling may have a positive effect on family brand image.**

METHOD

The study focuses on luxury cosmetic sector. Three reasons explain this choice: at first, free samples are very common in this sector, second, luxury cosmetic companies used to spend big amounts of money on product sampling and finally this sector gives the opportunity to deal with three kinds of products- perfume, skin care and make up- which can make the study more interesting.

Data collection method

To analyze the effect of product sampling on brand image, we conducted an experiment and a survey in a North African city, Tunis (Capital of Tunisia) between March and June 2005.

Data collection was made in a perfumery chain with a surface between 300m² and 400 m².

The experiment treatment is a bag containing four samples with different product types: two perfume, one skin care and one make up samples. Two questionnaires were inserted into the

bag in order to measure brand image before and after sampling. When giving the treatment and after explaining the survey objectives, subjects were asked to fulfill the first questionnaire, the same day of receiving the samples (at the perfumery). They were asked to fulfill the second questionnaire a month after samples delivery and to give it back to the perfumery. In order to maximize the feed back, respondents were informed that a make up bag will be offered when giving the second questionnaire back. Also, messages were sent on each respondent mobile phone (subjects have given their mobile phone number and their loyalty card number when they received the treatment) to remember them to fulfill the questionnaires and to give them back in order to get the gift.

The survey statistic sample is made of 500 women between 20 and 60 years old, customers of the considered outlet. To recruit subjects, the outlet manager was asked to give the treatment to women who present their “loyalty card” (a card which registers customers’ purchases and personal information like the name, age...) when paying cosmetic products.

287 subjects have given back the two questionnaires, allowing to reach a response rate of 59%. However, only 238 subjects have given valid responses to the two questionnaires.

Variable measurements

Fauchois and Krieg (1991) analyzed communication contents of luxury firms. They identified eight luxury fields. In order to measure brand image, in depth interviews with seven managers of luxury cosmetic brands help us to choose four among these fields: tradition, distinction, esthetic and quality. For each field, two criterions were selected which are:

- Classicism and tradition for tradition field.
- Prestige and distinction for the distinction field.
- Elegance and sophistication for the esthetic field.
- Quality and excellence for the quality field.

A qualitative survey was conducted on 20 women. They were giving the above list and asked to select one criterion among two for each field, when thinking about luxury cosmetic brands. Here are the selected criterions: classicism, prestige, elegance and quality.

Based on the suggestions of the brand managers, three other criterions were added to the four ones chosen above, which are: expertise in perfume, expertise in make up and expertise in

skin care. In fact, referring to these brand managers, luxury cosmetic brands are often perceived according to their expertise in one field (perfume, make up or skin care). So, seven criteria were considered to measure brand image changes. Three criteria are related to intangible traits: classicism, prestige, elegance and four criteria are related to traits relative to the product: quality, expertise in perfume, expertise in make up and expertise in skin care, they are tangible traits.

In this study, brand image criteria are measured at the beginning of the study (when receiving the treatment), and measured again one month after receiving the treatment. Many studies dealing with product or brand image employ the semantic differential as the measurement instrument (Dobni and Zinkhan, 1990, Low and Lichtenstein, 1993). We use this scale at 7 points in this study, to quantify brand image based on seven criteria. It is coded from 1 to 7 for statistical treatments. The semantic differential requires polar adjectives, so the following adjectives were opposed:

- classic/ fashionable,
- not prestigious/prestigious,
- not elegant/elegant,
- bad/good quality,
- not expert/ expert in perfume,
- not expert/ expert in make up,
- not expert/ expert in skin care.

Only one family brand was analysed. For confidential reasons, its name will not be named. However, the choice of this brand can be explained by three factors:

- It is a very well-known family brand within the Tunisian market, actually, it is important to choose a well-known brand as subjects have to judge the brand before and after using samples.
- The firm representing this brand was the only firm agreeing to give us four samples to each subject which is equal to 2000 samples.
- It was not possible to ask respondents to evaluate three or four brands according to seven criteria. It is an annoying work for them.

Data analysis method

For data analysis, paired-samples t test was applied. The paired-samples t test procedure compares the means of two variables for a single group. It computes the differences between values of the two variables for each case and tests whether the average differs from 0.

For each variable we have: mean, sample size, standard deviation, and standard error of the mean. For each pair of variables we have: correlation, average difference in means, t test, standard deviation and standard error of the mean difference.

RESULTS AND DISCUSSION

Results

This study shows that the considered brand has a very good image on the majority of the criterions.

Criterion of classicism: On this criterion, the brand registered the lowest mean in comparison to the other criterions. The mean is 4.495 before sample usage and it grows to 4.805 after a month (see table 1, p7). At first, it is important to notice that the brand is not perceived as classic, but it is neither judged as fashionable (4.495 is hardly equal to the mean between 1 and 7 which is 4).

Then, the correlation between measurements before and after sampling is high and equal to 0.552. It is statistically significant (see table 2, p 8). So, the comparison is possible.

Finally, offering free samples has contributed to change the brand image, so that it is perceived more fashionable. The mean has progressed by 0.309 after sampling. The difference between the mean before and after is significant for a confidence level of 95% ($t=-2.614$, $df=235$, $sig=0.01$, see table 3, p 9).

So, free samples have a positive impact on the brand image on the criterion of “classicism”.

Criterion of prestige: Based on table 1 (p 7), it seems that the brand has a prestigious image, given that the mean is equal to 6.375 before sampling and is 6.611 after (the maximum score is 7). The correlation between the observations is significant and equal to 0.215. The scores mean has increased of 0.236 after a month of giving away free samples. The difference between the 2 means is significant ($t=-3.711$, $df=236$, $sig=0.00$).

Product sampling has also a positive effect on the brand image on the criterion of “prestige”.

Criterion of “elegance”: The brand is perceived to be elegant. The measurements mean before sampling is 6,312 and it is 6,582 after. The difference between the 2 means is 0.27, it is statistically significant (Student $t = -3.975$, $df = 236$, $sig = 0.00$). Also, the correlation between judgments before and after is equal to 0.244. It is significant for a confidence level of 95% (see table 2, p 8).

Thus, free samples have a positive impact on brand image, measured by the “elegance” criterion.

Criterion of “quality”: The mean of the measurements before using samples is 6.315, it is 6.491 after. The mean increased of 0.176 after sampling. However, the correlation between the judgments before and after is low and not significant. So, even if the difference between the two means is significant ($t = -2.201$, $df = 237$, $sig = 0.029$), it is not possible to conclude that the brand image has changed positively and is perceived as offering better quality.

Criterion of “expertise in perfume”: Table 1 indicates that the brand is judged as “expert in perfume”. Actually, the mean of judgments is 6,333 before, it has increased of 0.24 after the treatment, to reach 6.573. This increase is significant ($t = -3,428$, $df = 236$, $sig = 0.00$). The correlation is significant between the two means and equal to 0.202.

Giving away free samples seems to have a favorable effect on brand image regarding a tangible trait which is “expert in perfume”.

Criterion of “expertise in make up”: The brand is considered as an “expert in make up”. The scores mean before sampling is 6.485, but this mean still hardly the same after. In fact, it has decreased of 0.016, but this decrease is not statistically significant ($t = 0.225$, $df = 236$, $sig = 0.823$). Brand image still unchanged after sampling on the criterion “expert in make up”.

Criterion of “expertise in skin care”: The brand seems to be perceived as less “expert in skin care” than in make up. However, these perceptions have not changed after sampling. The difference between the two means before and after is not significant ($t = 0.225$, $df = 236$, $sig = 0.746$). So, Sampling has no effect on brand image perceived on the criterion of “expert in skin care”.

To summarize, the results have shown that product sampling has a positive effect on intangible traits of brand image which are “classicism”, “prestige” and “elegance”. However, only one criterion (“expert in perfume”) has shown a positive impact when dealing with

tangible traits. It appears that free samples are more willing to have a positive effect on intangible traits than on tangible traits of brand image.

So it is possible to accept the hypothesis of this study: “Product sampling has a positive effect on family brand image”.

Discussion

It is probable that the reception of four samples of a same family brand at the same time has developed a positive feeling (sympathy) towards the promoted brand. This sympathy may lead to have a favorable attitude toward brand, which will encourage subjects to give more positive judgments about it. Then, they may find that the brand is more fashionable, more prestigious or more elegant after using samples. It seems that sampling helps constructing a brand franchise. This supports Prentice Franchise Model (1975). As these traits of brand image are related to a person imagination, so, it is probably easier to change perceptions when the brand is judged on intangible criterions than when it is judged on tangible criterions. This conclusion may explain why only one tangible trait (“expert in perfume”) has produced a positive change in brand image. Actually, perceptions related to the product are not willing to change after a reception of a few quantity of this product. Image related to a tangible trait is more fixed on the mind and that’s why harder to influence than the one related to an intangible trait.

Also, these findings don’t sustain attribution theories which suggest that consumer may have a negative attribution about the sampled brand or product. At the contrary, results found that he may have a positive attribution about promoted brand.

CONCLUSION AND IMPLICATIONS

This study can draw some useful insights. At first, overall, it seems that product sampling with a delayed usage has a positive effect on family brand image. Second, this technique affects probably brand image more on its intangible traits than on its tangible traits.

Our review of sampling literature suggests that more researches should be conducted in order to investigate the effect of sampling on brand image. In fact, very few studies have dealt with this subject. It is interesting to choose other kinds of products to see if this conclusion still valid when changing product category. The effect of new criterions can also be analyzed.

Also, another scale can be developed for brand image measurements. Finally, it is of interest to consider a brand not very well-known in order to compare the results with those of this research.

REFERENCES

Bawa, K. and R.W Shoemaker. 2004. "The Effects Of Free-Sample Promotions On Incremental Brand Sales". *Marketing Science* 23 (summer): 345-363.

Bettinger C.O, L. E Dawson Jr. and Wales H. G. 1979."The Impact Of Free-Sample Advertising". *Journal of Advertising Research* 19 (June):35-40.

Chingching C. and R. Mark. .2004. "The Interplay Of Product Class Knowledge And Trial Experience In Attitude Formation". *Journal of Advertising* 33 (spring):83-93.

Heiman A.;B. McWilliams , Z. Shen and D..Zilberman.2001. " Learning and Forgetting: Modeling Optimal Product Sampling OverTime". *Management Science*; 47 (April): p532-547..

Kempf D. S.and R. N. Laczniak. 2001. "Advertising's Influence On Subsequent Product Trial Processing". *Journal of Advertising* 30 (fall):27-39.

Lammers H. B. 1991.."The effect of free samples on immediate consumer purchase". *Journal of Consumer Marketing* (8),:31-38..

Jain D., V. Mahajan., and E. Muller. 1995. "An Approach For Determining Optimal Sampling For The Diffusion Of A New Product". *Journal of Innovation Management* 12:125-137.

Marks L J. and M. A. Kamins. 1988. "The Use of Product Sampling and Advertising: Effects of Sequence of Exposure and Degree of Advertising Claim Exaggeration on Consumers'Belief Strength, Belief Confidence, and Attitude". *Journal of Marketing Research* 25 (August) : 266-282.

McGuinness D., M. Brennan Mike and P. Gendall. 1995. " The Effect Of Product Sampling And Couponing On Purchase Behaviour: Some Empirical Evidence". *International Journal of Advertising* : 219-230.

Sood S. 1996. " Effect Of Product Sampling By Established Brands", University of Iowa.

Table 1. Brand Image -Statistics for paired samples

		Mean	N	Standard Deviation	Standard Error of the Mean
Pair 1	classic/ fashionable (before)	4.4958	236	1.9667	.1280
	classic/ fashionable (after)	4.8051	236	1.8714	.1218
Pair 2	bad/good quality (before)	6.3151	238	.9079	5.885E-01
	bad/good quality (after)	6.4916	238	.9035	5.857E-01
Pair 3	not prestigious/prestigious (before)	6.3755	237	.8427	5.474E-01
	not prestigious/prestigious (after)	6.6118	237	.7139	4.637E-01
Pair 4	not elegant/elegant (before)	6.3122	237	.9363	6.082E-01
	not elegant/elegant (after)	6.5823	237	.7581	4.925E-01
Pair 5	not expert/ expert in perfume (before)	6.3333	237	.8941	5.808E-01
	not expert/ expert in perfume (after)	6.5738	237	.8129	5.280E-01
Pair 6	not expert/ expert in make up (before)	6.4852	237	.8213	5.335E-01
	not expert/ expert in make up (after)	6.4684	237	1.0637	6.909E-01
Pair 7	not expert/ expert in skin care (before)	5.9789	237	1.1697	7.598E-01
	not expert/ expert in skin care (after)	6.0042	237	1.2091	7.854E-01

Table 2. Brand image - Correlations for Paired-Samples

		N	Correlation	Sig.
Pair 1	classical/ fashionable(before)& (after)	236	.552	.000
Pair 2	bad/good quality (before) & (after)	238	.068	.299
Pair 3	notprestigious/prestigious(before)& (after)	237	.215	.001
Pair 4	not elegant/elegant (before) & (after)	237	.244	.000
Pair 5	not expert/ expert in perfume (before)& (after)	237	.202	.002
Pair 6	not expert/expert in make up (before)& (after)	237	.267	.000
Pair 7	not expert/ expert in skin care(before) &(after)	237	.491	.000

Table 3. Brand image - Paired-Samples T Test

	Average difference means	Standard Deviation	Standard Error	t	df	Sig.
Pair 1	-.3093	1.8177	.1183	-2.614	235	.010
Pair 2	-.1765	1.2369	8.018E-01	-2.201	237	.029
Pair 3	-.2363	.9802	6.367E-01	-3.711	236	.000
Pair 4	-.2700	1.0511	6.827E-01	-3.955	236	.000

Pair 5	-0.2405	1.0800	7.016E-0	-3.428	236	.001
Pair 6	1.688E-02	1,1570	7.516E-0	.225	236	.823
Pair 7	-2.5316E-0	1.2000	7.795E-0	-.325	236	.746