# The Effect Of Promotion Type And Benefit Congruency On Brand Image 

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#### Abstract

Sales promotion is a communication device increasingly used by companies due to its capacity to produce an immediate sales increase. However, although these activities generate good shortterm results, they may also have side effects on the customers' assessment of the promoted brands. The purpose of this paper is to delve into the effects of promotions on the expected product price and brand image. The results of the study reveal that the frequent use of promotions affect consumers' evaluations of brand image, but the effect depends on the type of promotional tool and the product category. The frequent use of price promotions will lower brand image assessments whereas non-monetary promotions lead to higher brand evaluations. These results are moderated by the product category. Moreover, the expected price of a product is lower after frequent monetary promotions.


## 1. INTRODUCTION

$>$ompanies recognize the importance of sales promotion as a tool to achieve short-term aims (Huff, Alden and Tietje, 1999). Consequently, sales promotion is increasingly gaining relevance within company communication programs. Nevertheless, although promotions may prove to be useful for a rapid sales increase, these marketing tools have long-term effects. Several researchers have revealed that the frequent use of promotions may have a negative effect on the expected product price and the promoted brand image (Kalwani and Yim, 1992; Raghubir and Corfman, 1999; Low and Mohr, 2000). However, other authors have verified that these effects may differ according to the promotion tool used. Thus, price promotions -such as discounts or coupons- may have a detrimental effect on brand image, whereas non-monetary promotions -i.e. gifts or contests- do not damage brand image and may even help to create it (Boulding, Lee and Staelin, 1994; Papatla and Krishnamurthi, 1996; Mela, Gupta and Lehmann, 1997).

Given that brand image is a strategic asset for organizations today, companies should consider the scope of promotions and to what extent their short-term results modify the brand image they intend to establish in the consumer's mind. In this present paper, within an experimental context promotional influences on consumer assessment of brands are studied, and more specifically the extent promotion type and product category influences expected prices and brand image are investigated.

First, the relevance of brand image in corporate marketing strategies is considered. Further, the effects of promotions on brand image are reviewed. The potential moderating variables are studied and hypotheses formulated. Next, the methodology to verify hypotheses and the results are presented. Finally, the paper concludes with limitations and recommendations for future research.

## 2. THE EFFECTS OF PROMOTIONS ON BRAND IMAGE

Brands today have gained importance in society and have become a strategic business asset for some companies because a high-value brand provides companies with competitive advantages (Aaker, 1996). Marketing researchers have suggested that brand image is a vital element for brand equity (Phau and Lau, 2001), because, as marketing processes have become more complex, consumers base their purchase decisions on global impressions of
the company, the store or the brand. Consequently, companies are increasingly investing more in creating a brand image and they need a theoretical base that systematises and defines the dimensions that significantly influence brand image and value (Aaker, 1996).

Promotional marketing is extremely attractive for manufacturers because it facilitates the introduction of new products, hastens effects on consumer behaviour, increases the brand's sales, etc. Nevertheless, both in the managerial and academic field, there are numerous recommendations about its use. Very often there have been warnings that positive short-term results might not compensate for the negative long-term effects associated with promotions. The alteration of the expected product price (Diamond and Campbell, 1989; Kalwani and Yim, 1992) and the interference with brand image (Dodson, Tybout and Sternthal, 1978; Mela, Gupta and Jedidi, 1998; Raghubir and Corfman, 1999) are some of the risks posed by the frequent use of sales promotions

Following Aaker's recommendation (1996), this research intends to emphasize the effects of promotional actions on expected prices and on a component of brand equity, brand image. When reviewing the literature on sales promotion, numerous studies encourage researchers to delve into the relationship of these variables (i.e. Ailawadi, 2001). For this reason, in the past few years several researchers have attempted to better understand promotional actions. It is important to recognize that not many authors directly analyze brand image (Davis, Inman and McAlister, 1992; Raghubir and Corfman, 1999). Most researchers focus on some components related to this construct such as brand differentiation, price premium, brand loyalty, etc.

The following reasons could explain why promotional actions damage the brand: promotions increase consumer sensitivity to price (Johnson, 1984; Mela et al., 1997; Ailawadi, 2001); they reduce reference price (Kalwani and Yim, 1992; Hunt and Keaveney, 1994; Blattberg, Briesch and Fox, 1995); they reduce the perceived quality of the promoted good (Lichtenstein, Bloch and Black, 1988; Raghubir and Corfman, 1999; Jørgensen, Taboubi and Zaccour, 2003); consumers learn the brands' promotional patterns, favouring opportunist behaviours (Mela, Gupta and Jedidi, 1998); and brand loyalty decreases (Johnson, 1984; Neslin and Shoemaker, 1989). However, some studies have demonstrated that promotional actions have no negative effect on brand image (Neslin and Shoemaker, 1989; Davis et al., 1992) and sometimes promotional marketing might even be beneficial for the brand (Boulding et al., 1994).

Some researchers argue that the effects of promotions may depend on the promotion type or the product category. Regarding the promotion type, some authors have verified that there are substantial differences between monetary and non-monetary promotions (Campbell and Diamond, 1990; Mela et al., 1997; Srinivasan and Anderson, 1998; Gedenk and Neslin, 1999). Likewise, the product type might also have a moderating role in the effects of promotional actions on brand image. The promotions of some product categories can be more effective than the same promotions with other categories (Bolton, 1989; Wakefield and Inman, 2003).

## 3. HYPOTHESES

## Moderating Role Of Promotion Type

Different types of promotional tools may have different effects on sales, profitability or brand equity (Srinivasan and Anderson, 1998). In the analyses of these differences numerous studies distinguish between monetary and non-monetary promotions because each of these categories has clearly differentiated costs and benefits (Lichtenstein, Netemeyer and Burton, 1995; Chandon, Wansink and Laurent, 2000).

## Monetary Promotions

Monetary promotions, or price promotions, are those actions which allow the consumer to purchase a product at a lower price than usual. Several studies stress the long-term risks and negative effects of these promotions (Diamond and Campbell, 1989; Kalwani and Yim, 1992; Gedenk and Neslin, 1999). The first argument that would explain why monetary promotions have a negative effect on brand image is that these actions diminish
the internal reference price (Diamond and Campbell, 1989; Kalwani and Yim, 1992). This lower reference price will reduce the perceived brand price, resulting in lower brand equity (Blattberg et al., 1995).

On the other hand, according to attribution theories, consumers try to attribute or find causes that may explain the surrounding events (Mizerski, Golden, and Kernan (1979). Some consumers make quality-price inferences (Zeithaml, 1988 and Lichtenstein et al., 1988), and when the only information about the product is the price, they are likely to associate the promoted brand with low quality (Hunt and Keaveney, 1994). In other instances, consumers make no attributions about the product but about their own behaviour. In this respect, when purchasing a product the consumer will question their behaviour, and this assessment will condition their future behaviour (Dodson et al., 1978). If the promotion itself justifies the purchase, the consumer will not buy that brand again, unless it is promoted (Gedenk and Neslin, 1999). As time goes by, these inferences reduce brand differentiation since the purchase motivation is the promotion itself rather than the product (Mela, Gupta and Jedidi, 1998).

All these arguments help us to understand the results obtained in some studies which infer that frequent price promotions reduce brand loyalty (Dodson et al., 1978; Gedenk and Neslin, 1999). Furthermore, some researchers have concluded that consumers learn the promotional patterns of brands and they adapt their inventory levels and purchase frequency to those patterns (Kalwani and Yim, 1992; Mela, Jedidi and Bowman, 1998). Thus, the hypotheses can be stated:

H1: Frequent monetary promotions reduce consumer's expectations regarding the regular price of the product.
H2: Frequent monetary promotions reduce brand image assessments of the promoted product.

## Non-Monetary Promotions

Non-monetary promotions embrace a vast variety of actions where the incentive is not directly evidenced in a lower purchase price. Unlike price promotions, both in professional and academic contexts, these types of promotions have been recommended because not only do they have a harmless effect on brand image Mela et al., 1997; Papatla and Krishnamurthi, 1996), but they may help to reinforce it.

The first reason why non-monetary promotions would not have negative effects on brand images is that its frequent use does not affect consumer internal reference prices. Unlike monetary promotions, the promotional incentive is not integrated in the product price so this type of action is unlikely to entail a reduction of the consumer reference price (Campbell and Diamond, 1990). Furthermore, Mela et al. (1997) verified that these promotions made brand-loyal customers less sensitive to price.

On the other hand, non-monetary promotions may improve image in the long term, generating differentiation (Papatla and Krishnamurthi, 1996) and helping brands maintain their competitive position. These actions often contain messages about the brand which enable an increase of knowledge without information about the price. Mela, Gupta and Jedidi (1998) observed a positive, though not significant, relationship between the use of non-monetary promotions and brand differentiation. Besides, this type of action does not modify brand loyalty (Gedenk and Neslin, 1999).

Since non-monetary promotions appear to not reduce reference prices, do not damage brand loyalty and improves product differentiation, the following hypotheses are proffered:

H3: Frequent non-monetary promotions do not modify the expected regular price of the product.
H4: Frequent non-monetary promotions increase brand image assessments of the promoted brand.

## Moderating Role Of Product Type And Benefit Congruency

Some authors have concluded that the effectiveness of promotional actions may vary according to the product category they are used with (Bolton, 1989; Wakefield and Inman, 2003). Chandon et al. (2000) propose an explanation for these differences on the basis of a benefit congruency framework. According to these authors, sales promotions will be more effective - they will generate more sales - if a congruency between the benefits perceived in the product and the benefits perceived in the promotional action occurs. If we consider, as presented above, that sales promotions affect brand image, it seems relevant to analyze whether benefit congruency may have a moderating role in that effect.

In order to apply the benefit congruency framework proposed by Chandon et al. (2000), it is first necessary to understand the benefits that products and promotions are likely to provide. Therefore, focusing on the benefits produced by the product, two dimensions or components can be identified in any product: utilitarian and hedonic. From the utilitarian dimension, the product is assessed according to its capacity to meet the consumer's instrumental expectations. On the other hand, in the hedonic dimension the product is assessed by means of its intrinsic properties to generate pleasure (Mano and Oliver, 1993). Despite their differences, both utilitarian and hedonic dimensions are complementary (Babin, Darden and Griffin, 1994). Consequently, any product will present both components, although one will prevail over the other in different instances.

Regarding the benefits produced by sales promotions, it has been traditionally considered that these actions only provide functional benefits for consumers. However, recent research (Chandon et al., 2000; Ailawadi, Neslin and Gedenk, 2001) has observed that economic savings are not enough to explain why and how consumers respond to promotional actions. Chandon et al. (2000) developed a multi-benefit framework of sales promotion that identifies six different benefit types: economic savings, quality, convenience, value-expression, exploration and entertainment. These six benefits can be more parsimoniously classified into utilitarian and hedonic benefit. According to these authors, utilitarian benefits will be generated when the promotion helps consumers maximize the utility, efficiency and economy of their purchase. On the other hand, promotions will bring hedonic benefits when they provide intrinsic stimuli, entertainment and self-esteem. As occurred with the product components, any promotional action is able to provide both utilitarian and hedonic benefits. However, one benefit type usually prevails over the other. In their study, Chandon et al. (2000) verified that monetary promotions fundamentally provided utilitarian benefits, whereas in non-monetary promotions the benefits perceived were mainly hedonic.

Considering the various effects of promotions, benefit congruency is expected to somehow moderate the effect of promotions on brand image. Therefore, the following hypotheses can be posited:

H5: The effect of promotions on brand image is moderated by the congruency between promotion and product benefits, such that the effect is stronger for the benefit congruency and weaker for non-benefit congruency.

H5a: The effect of monetary promotions on brand image will be stronger in utilitarian products than in hedonic ones.

H5b: The effect of non-monetary promotions on brand image will be stronger in hedonic products than in utilitarian ones.

## 4. METHODOLOGY

In order to contrast the hypotheses in the research, a factor-designed experiment between subjects has been conducted: 2 (promotion types: monetary and non-monetary) x 2 (product types: utilitarian and hedonic) x 2 (brand levels: high awareness and medium awareness). In the experimental design two brand levels were included in order to verify whether the results obtained were stable in different contexts.

### 4.1. Pretest 1

Two products, one essentially utilitarian and another essentially hedonic, were necessary to achieve the aims of our research. In a first pretest, a 68 -student sample was requested to indicate whether the 20 frequently used products of a list had a utilitarian or a hedonic character. The respondents had to assess each product on a 7-point scale ( $1=$ totally utilitarian, $7=$ totally hedonic). Some examples of the products considered were bottle of whisky, chocolates, deodorant, ice cream, olive oil, toothpaste or toilet paper. The pretest's results led to selecting a tube of toothpaste as the utilitarian product ( $97 \%$ of the respondents considered it as a fundamentally utilitarian product, mean $=1.32$ ) and a box of chocolates as the hedonic one ( $80 \%$ of the respondents considered it as a fundamentally hedonic product, mean $=6.16$ ).

### 4.2 Pretest 2

Once the products had been selected, a second pretest was carried out with a 69 -student sample and two objectives. First, in order to check that there were significant differences between both products selected in the first pretest, a utilitarianism index similar to the one used by Chandon et al. (2000) was calculated. The utilitarianism index was obtained through a 7-point semantic differential scale where the respondents had to assess the purchase and use of each product according to five bipolar adjectives extracted from the scale proposed by Spangenberg, Voss and Crowley (1997). The adjectives were: useless/useful; unnecessary/necessary; not functional/ functional; unpleasant/pleasant; not enjoyable/enjoyable. With the information obtained, a confirmatory factor analysis was conducted to check the validity and dimensionality of the measures. The results identified two dimensions, utilitarian (Cronbach alpha $=0.93$ ) and hedonic (Cronbach alpha $=0.77$ ), as well as a good fit index $(\mathrm{GFI}=0.956$; $\mathrm{IFI}=0.981 ; \mathrm{NFI}=0.967$ ). Then the means of the indicators included in each dimension were calculated for each product. Next, we obtained a utilitarianism index by subtracting the hedonic component mean from the utilitarian dimension mean. The results of the pretest showed that the utilitarian component prevails in the toothpaste $\left(\mathrm{UI}_{\text {toothpaste }}=1.94\right)^{1}$ and the hedonic one prevails in the chocolates $\left(\mathrm{UI}_{\text {chocolates }}=-2.71\right)$. Significant differences in the utilitarianism degree of both products $(t=22.18 ; p=0.000)$ were also found.

The second purpose of the pretest was to choose two well-known brands for each product, one with high awareness and another with medium awareness. As we explained, we wanted to analyze the hypotheses in different brand contexts. The respondents were then asked to indicate on a 7 -point scale the degree of perceived quality $(1=$ poor quality; $7=\operatorname{good}$ quality $)$ and the familiarity level $(1=$ not at all familiar; $7=$ very familiar $)$ for a series of toothpaste and chocolate brands ${ }^{2}$. Considering the results obtained, two toothpaste brands were selected: Colgate, with higher quality level $\left(\mathrm{QUAL}_{\text {Colgate }}=6.51\right)$ and higher familiarity $\left(\mathrm{FAM}_{\text {Colgate }}=6\right)$; and Binaca, also with a high quality level (QUAL ${ }_{\text {Binaca }}=5.41, \mathrm{t}=-5.89, \mathrm{p}=0.000$ ) and high familiarity ( FAM Binaca $=5.38, \mathrm{t}=-3.69$, $\mathrm{p}=0.000$ ), but both lower than Colgate's. For the chocolate brands, Nestlé and Zahor were chosen. Nestlé presents higher perceived quality ( $\mathrm{QUAL}{ }_{\text {Nestle }}=6.79$; QUAL Zahor $=4.80 ; \mathrm{t}=9.46 ; \mathrm{p}=0.000$ ) and higher familiarity than Zahor (FAM Nestle $=6.25 ; \mathrm{FAM}_{\text {Zahor }}=4.46 ; \mathrm{t}=8.19 ; \mathrm{p}=0.000$ ).

### 4.3 Subjects And Procedure

Data were collected from a 323 -student sample at the Faculty of Economy and Business Studies of the University of Zaragoza (Spain). The students were distributed in eight similar size groups which were actually practice groups of a subject. The information to contrast hypotheses was obtained by means of a survey adapted to the experimental conditions of each group. At the beginning of the session each participant was given a questionnaire with two differentiated parts and they were asked to complete the first part. After this, a PowerPoint presentation which simulated the purchase conditions of the product and brand corresponding to each group was performed in the classroom. At the end of the practical session, the participants had to answer the second part of the survey. The experimental groups and the treatments are summarized in table I. In the monetary scenario, the

[^0]promotions consisted of direct discounts and in the non-monetary scenario, they were direct gifts such us toothbrushes or coffee-cups.

Table I: Experiment Design

| Group | Product | Brand | Promotion | Participants |
| :---: | :---: | :---: | :---: | :---: |
| G1 | Utilitarian | High awareness | Monetary | 40 |
| G2 | Utilitarian | High awareness | Non Monetary | 41 |
| G3 | Utilitarian | Medium awareness | Monetary | 41 |
| G4 | Utilitarian | Medium awareness | Non Monetary | 41 |
| G5 | Hedonic | High awareness | Monetary | 40 |
| G6 | Hedonic | High awareness | Non Monetary | 40 |
| G7 | Hedonic | Medium awareness | Monetary | 40 |
| G8 | Hedonic | Medium awareness | Non Monetary | 40 |

### 4.4 Variable Measures

Variables used in the research were derived from the literature and selected for appropriateness for each case.

Benefits of promotions: The Chandon et al. (2000) scale was included in the questionnaire to assess the benefits associated to the type of promotional stimulus received in each treatment. In this 7-point Likert scale the participants had to indicate their level of agreement with 18 indicators.

Utilitarian and hedonic components of a product: A 7-point semantic differential scale, formed by six bipolar adjectives extracted form the scale proposed by Spangenberg et al. (1997) was included in the questionnaire. The pairs of adjectives used were: useless/useful; unnecessary/necessary; not functional/functional; not enjoyable/enjoyable; not happy/happy; and unpleasant/pleasant.

Brand awareness: To identify the familiarity of the brands used in the experiment, the respondents were asked to assess the perceived quality and familiarity of the brand in each treatment. Perceived quality was measured through two questions proposed by Park and Kim (2001). The first question is related to the opinions of the brand products (bad products/good products) and the second one refers to the assessment of brand quality (poor quality/good quality). For the familiarity with the brand we used Dawar's proposal (1996) which recommended three indicators: familiarity with the brand products (not at all familiar/very familiar), purchase frequency (not often/very often) and the knowledge of the products (not very knowledgeable/very knowledgeable). Seven-point scales were used in all the cases.

Product expected price: The participants were asked a question similar to the one used by Kalwani and Yim (1992) which required them to indicate the price they expected the product would have during the following week.

Brand image: To assess the variation in the consumer perception of the brand, two measurements of the construct are necessary: one before it is subjected to promotional stimuli and one subsequent to the stimuli. A 7-point Likert scale validated by Martínez, Montaner and Pina (2004) where respondents had to express their level of agreement with eight indicators that gathered aspects related to functional image, affective image and brand reputation was used.

## 5. RESULTS

Prior to testing the hypotheses it was necessary to guarantee that the different scales included in the survey presented adequate psychometric properties, as well as verifying the experimental manipulations. Consequently, a series of factor analyses, both exploratory and confirmatory, were conducted to analyse the adequacy of the different scales: promotion benefit, product type, brand familiarity and brand image. In order to analyze benefit congruency
and in a similar way to Chandon et al．（2000），promotion benefits were grouped into utilitarian and hedonic benefits by means of two second－order factor analyses．The utilitarian benefits＇factor included savings and quality benefits， and the hedonic benefits＇factor included convenience，self－expression，exploration and entertainment benefits． Table II depicts the depurated scales as well as the main indicators that enable us to assess the adequacy of the measure instruments used．Those items that did not meet the requirements of weak convergence，strong convergence and individual reliability（Jöreskog and Söbom，1993）were eliminated．

Table II：Goodness Fit Of Refined Scales

| Scale | Dimensions | Items | \} | $\mathbf{R}^{2}$ | Fit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Utilitarian Benefits $\alpha=0.828$ | I really save money | 0.86 | 0.75 | $\begin{gathered} \text { GFI }=0.911 \\ \text { RMSEA }=0.076 \\ \text { NFI }=0.907 \\ \mathrm{IFI}=0.938 \\ \mathrm{CFI}=0.937 \\ \chi^{2} / \mathrm{gl}=2.867 \end{gathered}$ |
|  |  | I feel that I am getting a good deal | 0.60 | 0.35 |  |
|  |  | I really spend less | 0.72 | 0.51 |  |
|  |  | I can have a higher quality product at the same price | 0.83 | 0.68 |  |
|  |  | I can afford a better than－usual product | 0.85 | 0.92 |  |
|  |  | I can upgrade to a better brand | 0.91 | 0.82 |  |
|  | Hedonic Benefits $\alpha=0.842$ | These promotions remind me that I need the product | 0.81 | 0.65 |  |
|  |  | I can remember what I need | 0.79 | 0.83 |  |
|  |  | I feel good about myself | 0.85 | 0.71 |  |
|  |  | I can be proud of my purchase | 0.93 | 0.87 |  |
|  |  | I feel like I am a smart shopper | 0.78 | 0.61 |  |
|  |  | I feel like trying new brands | 0.73 | 0.54 |  |
|  |  | I can get new ideas of things to buy | 0.78 | 0.61 |  |
|  |  | These promotions are entertaining | 0.89 | 0.8 |  |
|  |  | These promotions are enjoyable | 0.93 | 0.86 |  |
|  | $\begin{gathered} \hline \text { Utilitarian } \\ \alpha=0.828 \end{gathered}$ | Useless／useful | 0.93 | 0.86 | GFI $=0.952$RMSEA $=0.072$NFI $=0.89$$\mathrm{IFI}=0.993$$\mathrm{CFI}=0.993$$\chi^{2} / \mathrm{gl}=2.672$ |
|  |  | Unnecessary／necessary | 0.96 | 0.91 |  |
|  |  | Unfunctional／functional | 0.89 | 0.78 |  |
|  | Hedonic$\alpha=0.944$ | Unenjoyable／enjoyable | 0.87 | 0.75 |  |
|  |  | Unhappy／happy | 0.82 | 0.68 |  |
| 菏淢 | Quality | Bad／good product | 0.99 | 0.98 | $\begin{gathered} \mathrm{GFI}=0.990 \\ \mathrm{RMSEA}=0.058 \\ \mathrm{NFI}=0.996 \\ \mathrm{IFI}=0.996 \\ \mathrm{CFI}=0.996 \\ \chi^{2} / \mathrm{gl}=2.207 \\ \hline \end{gathered}$ |
|  |  | Poor／good quality | 0.74 | 0.55 |  |
|  | Familiarity$\alpha=0.887^{\circ}$ | Not at all／very familiar | 0.92 | 0.84 |  |
|  |  | Not／very often | 0.88 | 0.78 |  |
|  |  | Not very／very knowledgeable | 0.75 | 0.56 |  |
|  | $\alpha=0.870$ | The products have a high quality | 0.71 | 0.51 | $\begin{gathered} \mathrm{GFI}=0.967 \\ \mathrm{RMSEA}=0.076 \\ \mathrm{NFI}=0.958 \\ \mathrm{IFI}=0.972 \\ \mathrm{CFI}=0.972 \\ \chi^{2} / \mathrm{gl}=2.834 \end{gathered}$ |
|  |  | The products have characteristics that other brands don＇t | 0.60 | 0.36 |  |
|  |  | The brand is nice | 0.67 | 0.45 |  |
|  |  | The brand has a personality that distinguish itself from competitor s＇brands | 0.66 | 0.44 |  |
|  |  | It＇s a brand that doesn＇t disappoint its customers | 0.73 | 0.54 |  |
|  |  | It＇s one of the best brands in the sector | 0.81 | 0.65 |  |
|  |  | The brand is very consolidated in the market | 0.77 | 0.52 |  |
| 菏 | $\alpha=0.887$ | The products have a high quality | 0.75 | 0.57 | $\begin{gathered} \text { GFI }=0.912 \\ \text { RMSEA }=0.13 \\ \text { NFI }=0.911 \\ \mathrm{IFI}=0.922 \\ \mathrm{CFI}=0.922 \\ \chi^{2} / \mathrm{gl}=7.225 \end{gathered}$ |
|  |  | The products have characteristics that other brands don＇t | 0.69 | 0.48 |  |
|  |  | The brand is nice | 0.70 | 0.49 |  |
|  |  | The brand has a personality that distinguish itself from competitor s＇brands | 0.70 | 0.49 |  |
|  |  | It＇s a brand that doesn＇t disappoint its customers | 0.74 | 0.54 |  |
|  |  | It＇s one of the best brands in the sector | 0.80 | 0.65 |  |
|  |  | The brand is very consolidated in the market | 0.65 | 0.42 |  |

### 5.1 Manipulation Check

Manipulation check shows the adequacy of the treatments.
Promotion type: In monetary promotions utilitarian benefits are higher than hedonic benefits (UTIL $_{\text {monetary }}=3.92$; $\mathrm{HED}_{\text {monetary }}=3.10 ; \mathrm{t}=8.895 ; \mathrm{p}=0.000$ ) and in non-monetary promotions hedonic benefits are higher than utilitarian benefits $\left(\mathrm{HED}_{\text {non-monetary }}=3.57 ; \mathrm{UTIL}_{\text {non-monetary }}=2.95 ; \mathrm{t}=-6.543 ; \mathrm{p}=0.000\right)$.

Product type: Significant differences have been found between both products, the toothpaste is considered fundamentally utilitarian and the chocolates fundamentally hedonic $\left(\mathrm{UI}_{\text {toothpaste }}=2.92 ; \mathrm{UI}_{\text {chocolates }}=-1.91 ; \mathrm{Z}=-8.320\right.$; $\mathrm{p}=0.000$ ).

Brand type: To assess awareness, a series of indicators related to perceived quality and familiarity with the brand were used. As for toothpaste, in this study, Colgate's perceived quality is significantly higher than Binaca's (QUAL Colgate $=4.43$; QUAL ${ }_{\text {Binaca }}=3.03 ; \mathrm{Z}=-3.72 ; \mathrm{p}=0.000$ ) and the same occurs for familiarity ( $\mathrm{FAM}{ }_{\text {Colgate }}=5.33$; FAM Binaca $=4.74 ; \mathrm{Z}=-4.191$; $\mathrm{p}=0.000$ ). Regarding chocolates, Nestlé also obtained better assessments than Zahor both in perceived quality (CAL Nesté $=5.00$; $\mathrm{CAL}_{\text {Zahor }}=2.90 ; \mathrm{Z}=-8.096 ; \mathrm{p}=0.000$ ) and familiarity ( $\mathrm{FAM}{ }_{\text {Nestée }}=5.64$; FAM Zahor $=4.47 ; \mathrm{Z}=-6.697 ; \mathrm{p}=0.000$ ).

### 5.2 Hypotheses Test

Regarding the effects of promotions on the products' expected prices, the first hypothesis established that frequent monetary promotions have a negative effect on future expected regular prices. Table III shows the mean of the regular prices used in the experiment and the means of the expected prices for the products in the different groups subjected to a monetary promotion treatment. In these groups the price that participants expected for the product after treatment is significantly lower than the products' mean regular price. Therefore, as H1 hypothesized, there is evidence that monetary promotions reduce the product expected price.

Table III: Effect Of Monetary Promotions On Expected Prices

| Brand | Group | Regular price | Expected price | t (p) |
| :---: | :---: | :---: | :---: | :---: |
| Colgate | G1 | 1.44 | 1.27 | $7.570(0.000)$ |
| Binaca | G3 | 1.34 | 1.21 | $3.243(0.000)$ |
| Nestlé | G5 | 4.73 | 4.39 | $8.373(0.000)$ |
| Zahor | G7 | 3.03 | 2.79 | $9.674(0.000)$ |

In respect of non-monetary promotions, table IV compares the expected prices of the different groups with their regular price. Except for group number 6, there are no significant differences between both prices. In this group, the mean expected price is 4.72 and the regular one is 4.73 ; though slight, the difference is significant and H3 is rejected. A likely explanation for this result is that the price in each treatment was not fixed but it varied from one week to the other. This may make the one-cent difference between regular and expected price significant.

Table IV: Effect Of Non-Monetary Promotions On Expected Prices

| Brand | Group | Normal price | Expected price | t (p)* |
| :---: | :---: | :---: | :---: | :---: |
| Colgate | G2 | 1.44 | 1.44 | $1.358(0.103)$ |
| Binaca | G4 | 1.34 | 1.34 | $1.275(0.210)$ |
| Nestlé | G6 | 4.73 | 4.72 | $2.648(0.012)$ |
| Zahor | G8 | 3.03 | 3.04 | $0.450(0.655)$ |

To discuss the effects of promotions on brand image variance analyses have been conducted. Brand image variation was considered a dependent variable in these analyses. The variation in brand image was determined as the difference between the final brand image assessments and the initial one. To obtain this variable it was necessary to
calculate the initial and final scores through the arithmetic mean of the indicators included in the validated scale of initial and final brand image. The brands' initial and final assessments, as well as their difference, are depicted in table V.

Table V: Initial And Final Brand Images

| Montetary Promotions |  |  |  |  | Non-Monetary Promotions |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Group | Initial Image | Final Image | Variation | Group | Initial Image | Final Image | Variation |  |
| G1 | 4.661 | 4.414 | -0.246 | G5 | 5.196 | 5.129 | -0.068 |  |
| G2 | 4.404 | 4.561 | 0.157 | G6 | 5.229 | 5.536 | 0.307 |  |
| G3 | 3.983 | 3.617 | -0.366 | G7 | 3.779 | 3.589 | -0.189 |  |
| G4 | 4.080 | 4.153 | 0.073 | G8 | 3.789 | 4.021 | 0.232 |  |

An ANOVA considering three independent variables: promotion type, benefit congruency -associating product type and promotion type- and brand type, was applied. With this variance analysis both the main and the interaction effects of the three independent variables on the dependent one -brand image variation- were studied. Table VI shows the results of this analysis. The ANOVA results reveal significant differences in the effects of promotional actions according to the promotional tool used ( $\mathrm{F}=43.836 ; \mathrm{p}=0.000$ ) and also in the interaction between product type and benefit congruency ( $\mathrm{F}=7.207$; $\mathrm{p}=0.008$ ). Nevertheless, the main effects of benefit congruency and brand type are not significant, and neither are the rest of the interactions between the independent variables.

Table VI: Three-Way ANOVA

|  | Type III sum of squares | Df | Mean square | F | Sig. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Corrected model | 16.638 | 7 | 2.377 | 7.689 | 0.00 |
| Intercept | $5.064 \mathrm{E}-02$ | 1 | $5.064 \mathrm{E}-02$ | 0.164 | 0.69 |
| Promotion | 13.550 | 1 | 13.550 | 43.836 | 0.00 |
| Benefit congruency | $1.059 \mathrm{E}-02$ | 1 | $1.059 \mathrm{E}-02$ | 0.034 | 0.85 |
| Brand | 0.805 | 1 | 0.805 | 2.605 | 0.11 |
| Promotion x Benefit congruency | 2.228 | 1 | 2.228 | 7.207 | 0.01 |
| Promotion x Brand | $3.412 \mathrm{E}-02$ | 1 | $3.412 \mathrm{E}-02$ | 0.110 | 0.74 |
| Benefit congruency x Brand | $5.699 \mathrm{E}-04$ | 1 | $5.699 \mathrm{E}-04$ | 0.002 | 0.97 |
| Promotion x Benefit Congruency x Brand | $2.212 \mathrm{E}-04$ | 1 | $2.212 \mathrm{E}-04$ | 0.001 | 0.98 |
| Error | 97.370 | 315 | 0.309 |  |  |
| Total | 114.061 | 323 |  |  |  |
| Corrected total | 114.008 | 322 |  |  |  |

Regarding promotion type, H 2 and H 4 analysed its direct effect on brand image. The variance analysis detected a significant main effect of type promotion. Within the groups subjected to monetary promotion treatment, the post-treatment assessment of the brand is lower than the initial one ( $\left.\mathrm{DIF}_{\text {monetary }}=-0.22\right)^{3}$. However, non-monetary promotions have an opposite effect and brand assessments are higher after the treatment ( $\mathrm{DIF}_{\text {non-monetary }}=0.20$ ). Although the model's dependent variable is the variation in image perception, the effects are clearer by presenting both the initial and the final image. Graphic 1 shows the measurements of the initial and final assessments of all the brands differentiating between the two different treatment types: monetary and non-monetary promotions.

Therefore, H2, which established that frequent monetary promotions reduce brand image, is confirmed. In all the experimental groups subjected to monetary promotions treatment the final brand image assessment was lower than the initial one. Overall, the final image $\left(\mathrm{FI}_{\text {monetary }}=4.18\right)$ is significantly lower than the initial one ( $\mathrm{II}_{\text {monetary }}=4.40 ; \mathrm{Z}=-3.365 ; \mathrm{p}=0.000$ ) and we can conclude that frequent monetary promotions negatively affect the image of the promoted brands.

[^1]According to H 4 , it was expected to prove that non-monetary promotions have a positive effect on brand image of the promoted product. Overall, the final brand image assessment after monetary promotions ( $\mathrm{FI}_{\text {non- }}$ monetary $=4.57$ ) is significantly higher than the initial image ( $\mathrm{II}_{\text {non-monetary }}=4.37 ; \mathrm{Z}=-5.718 ; \mathrm{p}=0.000$ ) and thus H 4 can be supported.

## Graphic 1: Effect Of Monetary And Non-Monetary Promotions On Brand Image



In the initial variance analysis, table VI, a significant interaction effect between promotion type and benefit congruency had been detected $(\mathrm{F}=7.207 ; \mathrm{p}=0.008)$ and, the effect of promotions on brand image is moderated by the congruence between promotion and product benefits, as H5 hypothesized. After verifying the interaction effect of both variables, the different promotion types were analyzed separately.

Regarding monetary promotions, these types of actions are observed to reduce brand image assessments both in utilitarian and hedonic products (graphic 2). In order to evaluate the repercussion of these actions a new variance analysis was conducted only with the groups subjected to monetary promotions. The results show that the differences between the effects of monetary promotions according to the product type are significant, being lower for the utilitarian products than for the hedonic ones ( $\mathrm{DIF}_{\mathrm{util} .}=-0.31$; $\mathrm{DIF}_{\text {hed.c }}=-0.13 ; \mathrm{F}=2.760 ; \mathrm{p}=0.099$ ). Accordingly, as H5a hypothesized, the effects of monetary promotions on brand image evaluations will be stronger in utilitarian products than in hedonic ones.

With regard to non-monetary promotions, graphic 3 indicates that in both utilitarian and hedonic products, the assessment of brand image was higher after treatment. In order to contrast these differences statistically a variance analysis was conducted with the groups subjected to non-monetary promotions. The results of this analysis confirm the effects of non-monetary promotions are significantly higher in hedonic products than in utilitarian ones $\left(\mathrm{DIF}_{\text {hed. }}=0.33 ; \mathrm{DIF}_{\text {util. }}=0.12 ; \mathrm{F}=6.075 ; \mathrm{p}=0.015\right)$. Therefore, as H5b hypothesised, from the benefit congruency perspective the effect non-monetary promotions has on brand image assessments will be more beneficial on hedonic products than on utilitarian ones.

Graphic 2: Effect Of Monetary Promotions On Brand Image. Influence Of Product Type


Graphic 3: Effect Of Non-Monetary Promotions On Brand Image. Influence Of Product Type


In the experiment two brands for each product category were included to study results consistency. In all ANOVA, brand awareness principal effects were not significant, neither were the interactions with other factors. Consequently, the results obtained are stable for brand types.

## 6. DISCUSSION AND IMPLICATIONS

From the results of the experiment conducted one may conclude that the frequent use of promotions may modify consumers' perceptions of the promoted brands, but it also appears that the changes in that perception may differ according to how and where the promotional actions are performed.

As suggested in the literature reviewed, the effect of sales promotions on brand image differs according to the type of promotional tool used. Therefore, in the experimental context, significant differences in the effects of monetary and non-monetary promotions have been observed. Monetary promotions reduce the expected price and reduce the image of the promoted brands. For all the groups where this type of promotion has been applied, the assessment of the brands after the treatment has been lower than the initial one. On the contrary, non-monetary promotions have a positive effect on brand assessment. In all the experimental groups it has been verified that nonmonetary promotions would improve the post-treatment brand image. Therefore, these promotional devices would be compatible with the brand image creation strategies fostered by many companies.

We have also detected that benefit congruency boosts the effects of different promotional actions on brand image. When designing a promotional campaign, it is important to consider that consumers perceive different benefits according to the different promotional tools. From the consumer perspective, promotions based on discounts mainly produce utilitarian benefits, whereas in gift promotions hedonic benefits prevail. Accordingly, it has been concluded that the effects of both monetary and non-monetary promotions increase when consumers perceive in the promotion the same benefits they look for in the product. Consequently, although monetary promotions reduce the brand image of both utilitarian and hedonic products, their use diminishes perceptions of utilitarian products more. Regarding non-monetary promotions, which are beneficial for both utilitarian and hedonic products, they have a more positive effect on hedonic products.

Since a brand is a strategic organizational asset, marketing managers should be aware of the effects that promotional actions have on consumers in relation to their brands. The results here hold significant implications for manufacturers and retailers and those responsible for brand management.

Although price offerings are common the results of this study indicate that frequent use of monetary promotions diminishes perceptions of expected price and damages the image of the promoted brand. Consequently, brand managers should be leery of using this type of promotion as it may prevent brand positioning aims. Their use may be viable in specific situations but such use has a potential downside.

Retailers develop numerous price offerings in order to attract and retain customers. This reality should be considered within the distribution channel relationship since retailers's use of price strategy may interfere or hinder manufacturers' brand strategies.

Studies indicate that non-monetary promotions may also be attractive to customers and may modify their purchase decisions. The results here indicate that these promotions are not only harmless for brand image but also beneficial when frequently used. For this reason, manufacturers should consider other types of promotional incentives as an alternative. Besides, manufacturers should also negotiate and agree with distributors in order to boost the use of these promotional actions for their brands, designing joint campaigns and sharing the costs of such efforts.

To summarize, manufacturers should be aware that promotional marketing is not only a tactical variable within the company's marketing mix but it also presents numerous qualities that make it a strategic variable in the organization's communication program.

However, the current study has limitations that should be taken into consideration in future research. The first one refers to the sample used. Although samples of students are common in these experiments on the consumer response to promotions, for further research it would be of some interest to analyze these relationships with a different type of sample. On the other hand, the treatments have been applied on brands with a certain awareness degree in the market, and it is recommended to use low awareness brands as well.

Moreover the results of this study had to be addressed in the experimental context. We have distinguished between monetary and non-monetary promotions but the treatments just considered one type of promotion in each case, direct discounts and direct gifts. In future research, it could be interesting to check the studied effects with other promotional incentives, for example with coupons or refunds -within monetary promotions- and contests or self-liquidating premiums -within non-monetary promotions. Another issue which may be subject to study in further research is to analyze the number and frequency of promotional impacts from which brand image may be negatively affected.

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## REFERENCES

1. Aaker, D.A. (1996) Construir Marcas Poderosas, Ediciones Gestión 2000, Barcelona.
2. Ailawadi, K.L. (2001) The Retail Power-Performance Conundrum: What have we Learned? Journal of Retailing, Vol 77, pp. 299-318.
3. Ailawadi, K.L.; Neslin, S.A. and Gedenk, K. (2001) Pursuing the Value-Conscious Consumer: Store Brands Versus National Brand Promotions, Journal of Marketing, Vol 65 (January), pp. 71-89.
4. Babin, B.J.; Darden, W.R. and Griffin, M. (1994) Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value, Journal of Consumer Research, Vol 20 (March), pp. 644-656.
5. Blattberg, R.C.; Briesch, R. and Fox, E.J. (1995) How Promotions Work, Marketing Science, Vol 14 No 3, part 2 of 2, pp. 122-132.
6. Bolton, R.N. (1989) The Relationship between Market Characteristics and Promotional Prices Elasticities, Marketing Science, Vol8 No 2, pp. 153-170.
7. Boulding, W.; Lee, E. and Staelin, R. (1994) Mastering the Mix: Do Advertising, Promotion, and Sales Force Activities Lead to Differentiation?, Journal of Marketing Research, Vol 31 (May), pp. 159-172.
8. Campbell, L. and Diamond, W. (1990) Framing and Sales Promotions: the Characteristics of a "Good Deal, Journal of Consumer Marketing, Vol7 No 4, pp. 25-31.
9. Chandon, P.; Wansink, B. and Laurent, G. (2000) A Benefit Congruency Framework of Sales Promotion Effectiveness, Journal of Marketing, Vol 64 (October), pp. 65-81.
10. Davis, S.; Inman, J.J. and McAlister, L. (1992) Promotion Has a Negative Effect on Brand Evaluations-Or Does It? Additional Disconfirming Evidence, Journal of Marketing Research, Vol 29 (February), pp. 143148.
11. Dawar, N. (1996) Extensions of Broad Brands: The Role of Retrieval in Evaluations of Fit, Journal of Consumer Psychology, Vol 5 No 2, pp. 189-207.
12. Diamond, W.D. and Campbell, L. (1989) The Framing of Sales Promotions: Effects on Reference Price Change, Advances in Consumer Research, Vol 16, pp. 241-247.
13. Dodson, J.A.; Tybout, A.M. and Sternthal, B. (1978) Impact of Deals and Deal Retraction on Brand Switching, Journal of Marketing Research, Vol 15 (February), pp. 72-81.
14. Gedenk, K. and Neslin, S.A. (1999) The Role of Retail Promotion in Determining Future Brand Loyalty: Its Effect on Purchase Event Feedback, Journal of Retailing, Vol 75 No 4, pp. 433-459.
15. Huff, L.C.; Alden, D.L. and Tietje, B.C. (1999) Managing the Sales Promotion Mix: Brand Managers' Response to Sales Promotions, Journal of Promotion Management, Vol 5 No 1, pp. 77-89.
16. Hunt, K.A. and Keaveney, S.M. (1994) A Process Model of the Effects of Price Promotions on Brand Image, Psychology \& Marketing, Vol 11 No 6, pp. 511-532.
17. Johnson, T. (1984) The Myth of Declining Brand Loyalty, Journal of Advertising Research, Vol 24 No 1, pp. 9-17.
18. Jöreskog, K. G. and Sörbom, D. (1993) LISREL 8: Structural Equation Modelling with the SIMPLES Command Language, Scientific Software International (SSI), Chicago-Illinois.
19. Jørgensen, S.; Taboubi, S. and Zaccour, G. (2003) Retail Promotions with Negative Brand Effects: Is Cooperation Possible?, European Journal of Operational Research, Vol 150, pp. 395-405.
20. Kalwani, M.U. and Yim, C.K. (1992) Consumer Price and Promotion Expectations: An Experimental Study, Journal of Marketing Research, Vol 29 (February), pp. 90-100.
21. Lichtenstein, D.R.; Bloch, P.H. and Black, W.C. (1988) Correlates of Price Acceptability, Journal of Consumer Research, Vol 15 (September), pp. 243-252.
22. Lichtenstein, D.R.; Netemeyer, R.G. and Burton, S. (1995) Assessing the Domain Specificity of Deal Proneness: A field Study, Journal of Consumer Research, Vol 22 (December), pp. 314-326.
23. Low, G.S. and Mohr, J.J. (2000) Advertising Vs Sales Promotion: a Brand Manager Perspective, Journal of Product and Brand Management, Vol 9 No 6, pp. 389-414.
24. Mano, H. and Oliver, R.L (1993) Assessing the Dimensionality and Structure of the Consumption Experience: Evaluation, Feeling, and Satisfaction, Journal of Consumer Research, Vol 20 (December), pp. 451-466.
25. Martínez, E.; Montaner, T. and Pina, J.M. (2004) Leveraging Brand Image in New Product Introduction. An Operational Measurement, Proceedings of the 11th International Product Development Management Conference. Dublin.
26. Mela, C.F.; Gupta, S. and Jedidi, K. (1998) Assessing Long-Term Promotional Influences on Market Structure, International Journal of Research in Marketing, Vol 15, pp. 89-107.
27. Mela, C.F.; Gupta, S. and Lehmann, D.R. (1997) The Long-Term Impact of Promotion and Advertising on Consumer Brand Choice, Journal of Marketing Research, Vol 34 (May), pp. 248-261.
28. Mela, C.F.; Jedidi, K. and Bowman, D. (1998) The long-term Impact of Promotions on Consumer Stockpiling Behavior, Journal of Marketing Research, Vol 35 (May), pp. 250-262.
29. Mizerski, R.W; Golden, L.L. and Kernan, J.B. (1979) The Attribution Process in Consumer Decision Making, Journal of Consumer Research, 6 No 2, 123-40.
30. Neslin, S.A. and Shoemaker, R.W. (1989) An Alternative Explanation for Lower Repeat Rates After Promotion Purchases, Journal of Marketing Research, Vol 26 (May), pp. 205-213.
31. Papatla, P, and Krishnamurthi, L. (1996) Measuring the Dynamic Effects of Promotions on Brand Choice, Journal of Marketing Research, Vol 33 (February), pp. 20-35.
32. Park, J.W. and Kim K. (2001) Role of Consumer Relationships with a Brand in Brand Extensions: Some Exploratory Findings, Advances in Consumer Research, Vol 28, pp. 179-185.
33. Phau, I. and Lau, K.C. (2001) Brand Personality and Consumer Self-Expression: Single or Dual Carriageway? Brand Management, Vol 8 No 6, pp. 428-444.
34. Raghubir, P. and Corfman, K. (1999) When do Price Promotions Affect Pretrial Brand Evaluations?, Journal of Marketing Research, Vol 36 (May), pp. 211-222.
35. Spangenberg, E.R.; Voss, K.E. and Crowley, A.E. (1997) Measuring the Hedonic and Utilitarian Dimensions of Attitude: A Generally Applicable Scale, Advances in Consumer Research, Vol 24, pp. 235241.
36. Srinivasan, S.S. and Anderson, R.E. (1998) Concepts and Strategy Guidelines for Designing Value Enhancing Sales Promotions, Journal of Product and Brand Management, Vol 7 No 5, pp. 410-420.
37. Wakefield, K.L. and Inman, J.J. (2003) Situational Price Sensitivity: The Role of Consumption Occasion," Social Context and Income, Journal of Retailing, Vol 79 (4), pp. 199-212.
38. Zeithaml, V.A. (1988) Consumer Perceptions of Price, Quality and Value: A Means-end Model and Synthesis of Evidence, Journal of Marketing, Vol 52 (July), pp. 2-22.

Appendix 1: Treatments Of Experimental Groups

| Week | Colgate |  |  |  | Binaca |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Group 1 |  | Group 2 |  | Group 3 |  | Group 4 |  |
|  | $€$ | PROMO | $€$ | PROMO | $€$ | PROMO | $€$ | PROMO |
| 1 | 1.45 | - | 1.45 | - | 1.35 | - | 1.35 | - |
| 2 | 1.25 | $0.19 €$ off | 1.45 | Toothbrush | 1.15 | $0.19 €$ off | 1.35 | Toothbrush |
| 3 | 1.45 | - | 1.44 | free | 1.35 | - | 1.34 | free |
| 4 | 1.29 | 10\% off | 1.45 | - | 1.22 | 10\% off | 1.35 | - |
| 5 | 1.42 | - | 1.42 | - | 1.32 | - | 1.32 | - |
| 6 | 1.25 | $0.20 €$ off | 1.45 | Sponge bag | 1.18 | $0.20 €$ off | 1.35 | Sponge |
| 7 | 1.22 | 15\% off | 1.45 | free | 1.14 | 15\% off | 1.35 | bag free |
| 8 | 1.44 | - | 1.44 | - | 1.34 | - | 1.34 | - |
| Week | Nestlé |  |  |  | Zahor |  |  |  |
|  | Group 5 |  | Group 6 |  | Group 7 |  | Group 8 |  |
|  | $€$ | Promo | $€$ | Promo | $€$ | Promo | $€$ | Promo |
| 1 | 4.75 | - | 4.75 | - | 3.05 | - | 3.05 | - |
| 2 | 4.27 | $0.19 €$ off | 4.75 | Mug free | 2.60 | $0.19 €$ off | 3.05 | Mug free |
| 3 | 4.70 | - | 4.70 |  | 3.00 | - | 3.00 |  |
| 4 | 4.03 | 10\% off | 4.75 | - | 2.74 | 10\% off | 3.04 | - |
| 5 | 4.68 | - | 4.68 | - | 2.99 | - | 2.99 | - |
| 6 | 3.99 | $0.20 €$ off | 4.75 | Dish free | 2.75 | $0.20 €$ off | 3.05 | Dish free |
| 7 | 4.28 | 15\% off | 4.75 |  | 2.58 | 15\% off | 3.04 |  |
| 8 | 4.70 | - | 4.70 | - | 3.00 | - | 3.00 | - |


[^0]:    ${ }^{1}$ UI $=$ Utilitarianism Index
    ${ }^{2}$ They are well-established brands in supermarkets for each product category.

[^1]:    ${ }^{3}$ DIF: difference between final and initial image

