# Sales Promotion and Brand Loyalty: Some New Insights 

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#### Abstract

Sales promotions have become one of the preferred methods of marketing communication. The purpose of this study is to establish the impact of different types of monetary and nonmonetary promotions on brand loyalty and its relationship to product involvement. A comprehensive literature review of sales promotion was undertaken to inform this study. A study of consumers in Puerto Rico was undertaken that includes both nonmonetary and monetary promotions and reports the impact on long-term effects, such as brand loyalty and the type of risk associated with a product or service. We report our findings for both high and low involvement products. Our results show that both monetary and nonmonetary promotions can enhance brand loyalty, contrary to findings of previous studies. Finally we make some recommendations.


Keywords: sales promotion, monetary promotion, high involvement, low involvement

## 1. Introduction

Up until several years ago promotions were considered less effective when given the choice of traditional advertising or sales promotions.

Today that playing field has changed with sales promotions leading the way in both local and national marketing budgets. Local businesses are spending 81 percent more on promotions than they did in 2007 with dollars spent forecast to reach $\$ 176$ billion in 2013 . National advertising spending was $\$ 244$ billion in 2012 compared to $\$ 584$ billion spent on promotions. (Garabian, 2013). Despite the fact that sales promotion has become the most predominant strategy in the marketing of consumer packed goods, accounting for almost a quarter of the marketing budget of consumer product companies (Raghubir et al., 2004), relatively less research attention has been given to the investigation of the consequences of sales promotions for brand preference after promotions have ended (DelVecchio, Henard, \& Freling, 2006).

In addition, most sales promotion research studies put emphasis on monetary promotions (Bawa \& Shoemaker, 1987; Blattberg, Eppen, \& Lieberman, 1981; Blattberg \& Neslin, 1990; Diamond, 1990; Diamond \& Campbell, 1989; Dickson \& Sawyer, 1990; Hunt \& Keaveney, 1994; Irons, Little, \& Klein, 1983). It was not until the late 1990s that studies on promotion started to pay attention to nonmonetary sales promotions (Hardesty \& Bearden, 2003; Liao, 2006; Lowe \& Barnes, 2012; Palazón-Vidal \& Delgado-Ballester, 2005; Teunter, 2002).

Most early research studies on sales promotions concentrated on the effects of sales promotions on sales and profits, the effects of promotions on purchase behavior during the promotional period, and the effects of a promotional purchase on subsequent choice behavior. The studies on behavioral shaping, or operant conditioning, by Rothschild and Gaidis (1981), Peter and Nord (1982), and Rothschild (1987), represent an important research stream in promotion studies. Research thereafter made reference to these but began a different stream. The new research had more emphasis on the role of reference price, which is the internal price a consumer sets for a product based on the worth of the product to the consumer (Yi and Yoo, 2011) and the long-term effects of monetary promotions. Research was devoted almost in its entirety to the utilization of coupons and price reductions (monetary promotions) exclusively. Diamond and Campbell (1989) suggested that not all sale promotions will behave in the same way with regards to their long-term influence to reference price. The price observed at the moment of purchase is a fundamental variable. Consumers perceive a gain when the reference price is higher than the observed price, and perceive a loss when the reference price is lower than the observed price (Alvárez-Alvárez \& Vázquez-Casielles, 2005).
There is empirical research that shows promotion activities have indirect effects on brand loyalty through customer satisfaction, which in turn has direct effects on brand loyalty (Li-xin \& Shou-Lian, 2010). Nevertheless, most researchers claim that sales promotions yield negative effects, including price sensitivity (Chandon, Wansink, \& Laurent, 2000; Neslin, 2002), brand switching, and lower repeat purchase rates (Gupta, 1998).

In addition, societal concerns may add to the preference for instant gratification versus long term gains. In a study that looked at promotions for cosmetics and toiletry retailers in Hong Kong, monetary rewards such as pricepaks and premiums considered "instant-reward" techniques, were preferable to the "delayed rewards" techniques. In this instance, societal norms were sited as a possible influence (Yang, Cheung, Henry, Guthrie \& Fam, 2010). This is congruent to the study of Taiwanese (Liao, 2006) consumers. In a study of Indian consumers, several types of sales promotions were studied in relationship to their potential to influence behavior. It was found that premiums were the most effective tool as well as bonus packs and price discounts, while the more traditional promotional tools, coupons and scratch offs, were not as effective. The authors posit that the consumers are less educated and therefore, more concerned about immediate value for their money and not with promotions that involve active search (Mittal \& Sethi, 2011). As far as United States consumers are concerned, a study by Fogel \& Thornton (2008) indicated that consumers are "hassle free" disposed when it comes to participating in a sales promotion. Promotions such as rebates, were considered too difficult to redeem due to the higher effort involved.

According to Te'eni-Harari (2008), young people were investigated as to their preferences for premiums. Since they grow up in such a fast-paced environment, and tend to be highly selective, their attention to a premium offer will probably be stronger for a high involvement product than a low involvement product. This may result in a more positive attitude toward the brand.
Our study adds to the current literature as there is a need for research that includes both nonmonetary and monetary promotions and reports the impact on long-term effects, such as brand loyalty and the type of risk associated with a product or service. Consumer involvement depends on the degree of personal relevance that the product holds for the consumer. It is usually classified as high and low. High involvement purchases are those that are very important to the consumer and are usually associated with high levels of perceived risk.

Low involvement purchase are not very important to the consumer, hold little relevance, and have little perceived risk (Schiffman and Kanuk, 2009). The purpose of this study is to establish the impact of different types of monetary and nonmonetary promotions on brand loyalty and its relationship to product involvement.

## 2. Literature Review

### 2.1 Perceived Value of Nonmonetary and Monetary Promotions

Diamond and Johnson (1990) and Campbell and Diamond (1990) related reference price to sales promotions through the terms gains and reduced loss. According to these researchers, some promotions add value to the product (such as premiums, bonus packs, samples, and sweepstakes), while others (such as discounts) merely reduce the cost. Therefore, attitudes such as perceived gain or reduced loss experienced by the consumer as result of engaging in sales promotion activities might also have an effect on reference price.
According to Liao (2006), monetary promotions rewards can be perceived as savings or loss reduction. On the other hand, for promotions in units other than money (e.g., samples, premiums), the benefits are more difficult to be integrated into the price reference. These promotions are then framed as gains. Promotions framed as gains have the benefit of being segregated from the reference price, whereas promotions framed as reduced loss are seen as merely reducing the purchase price. In addition, if non-monetary promotions do not affect reference prices, they may not be seen as lowering the perception of quality or image for the brand (Sinha \& Smith, 2000).
Simonson, Carmon, and O'Curry (1994) suggested that a new product feature or promotion could decrease a brand's overall choice probability, if the segment of consumers perceived it as providing little value or no value when compared to other options. Several possible explanations were provided: The most common was based on inferences about value and quality. "Consumers might mistakenly believe that they are paying for the unneeded feature, and therefore conclude that the product offers no value" (Simonson, Carmon, \& O'Curry, 1994, p. 24). Another popular explanation was based on the attitude of others. Some consumers find it particularly difficult to justify choices with unneeded features. Nonmonetary promotions not only have a larger, noticeable difference, they also have a wider range of acceptability than monetary promotions (Campbell \& Diamond, 1990). Lowe and Barnes (2012) found that when examining the role of sales promotions for new products, non-monetary were more favorably received due to the view that they give more gains and reduce the loss for a new product buy. The level of innovativeness, however, moderated the effect of non-monetary promotions with the preference for monetary promotions for more innovative types of new products, thus reducing the risk. Yi and Yoo (2011) found that non-monetary promotions did not significantly affect brand attitude.

## 2,2 The Benefit Congruency of Sales Promotions

Consumer sales promotions also have been classified by their effect at a cognitive and emotional level; that is, utilitarian or hedonic. Monetary promotions (e.g., coupons, rebates) primarily are related to utilitarian benefits, which have a functional and cognitive nature. Utilitarian benefits are primarily instrumental, functional, and cognitive; they provide customer value by being a means to an end. Hedonic benefits are non-instrumental, experiential, and affective; they are appreciated for their own sake, without further regard to their practical purposes. (Chandon, Wansink, \& Laurent, 2000, p. 66)

Most researchers have suggested that monetary savings is the only consumer benefit of sales promotions. Chandon et al.'s (2000) study is the first known to examine the importance of benefit congruency between type of product and type of sales promotion. "The existence of multiple types of consumer benefits provides a stepping stone for a benefit congruency framework, which argues that sales promotion's effectiveness is determined by the congruency between its benefits and those of the promoted product" (Chandon et al., 2000, p. 65). The idea is that promotions that are compatible with the promoted product, based on the benefits they provide, have a greater impact on the demand of the product.

### 2.3 Effects of Sales Promotions on Buying Behavior

Alvárez-Alvárez and Vázquez-Casielles's (2005) analyzed a series of fundamental variables on the brand choice process: price, reference price, losses and gains, loyalty, and promotions. Special attention was given to the influence sales promotions had on this process. Results suggested consumers will take into account whether or not a promotion exists, as well as price information, prior to making a purchase decision. Gedenk and Neslin (1999) found that the promotional status of the previous purchase can differentially influence brand choice, through purchase event feedback. They also provided a very useful example to help identify this issue.

If after buying a brand on promotion the consumers is asked: Did you buy this brand because you like the brand, or because of the promotion? and the answer is because of the promotion, then the promotion has provided a negative purchase feedback. (Gedenk \& Neslin, 1999, p. 435)

Bridges, Briesch, and Yin (2006) examined how various promotions affect consumer response to subsequent marketing mix activities. They make reference to previous streams in theoretical and empirical research studies that support moderating effects of prior brand purchases on consumer response to promotions. They identified two streams: usage dominance and promotion enhancement.

The usage dominance concept suggests that, after purchase and use of a brand, consumers become less responsive to promotional activities for that brand because their direct experience dominates external information. What this implies is that consumers who are more focused on their personal experience are less responsive to marketing mix activities for the most recently purchased brand and, consequently, are more likely to repurchase the brand after a promotion has ended (Bridges, Briesch, \& Yin, 2006).

On the other hand, promotion enhancement indicates that promotions reduce subsequent brand loyalty due to the increased sensitivity to marketing mix activities for all brands in the category. In other words, promotion enhancement implies a reduced likelihood to buy previously purchased brands, simultaneously with an increase in the impact of promotional activities for all brands in the category (Bridges, Briesch, \& Yin, 2006).

### 2.4 Potential Negative Effects of Sales Promotions on Brand Loyalty

Some of the potential negative effects of sales promotions that have been mentioned are an increase in price sensitivity, a decrease in brand loyalty, and brand equity erosion. Hunt and Keaveney (1994) suggested that not all price promotion activities are viewed positively: "price promotion satisfaction or dissatisfaction will become associated with brand image, if the consumer attributes the cause of the satisfaction or dissatisfaction to the brand" (p.16). Yoo, Donthu, and Lee (2000) argued that frequent use of price promotions causes consumers to infer lower product quality. Hence, frequent use of price promotions, such as price deals, is related to low brand equity. The reason for low brand equity is that price promotions lead consumers to think primarily about the deals and not about the utility provided by the brand.
Popular belief was that promotions were mostly reinforcing purchasing on a deal rather than purchasing the brand. "Heavy coupon user's loyalty is to the next coupon, not the product or the brand" (Diamond, 1992, p. 467). Blattberg and Neslin (1989) postulated that the large increase in promotional elasticity (consumers prone to deals) is due to: brand switching by consumers; inventory behavior (stockpiling); and transaction utility effects (sense of gain). It was estimated that approximately $80 \%$ of this increase was due to brand switchers. "Nearly half of coupon redemptions are by new customers . . . However, this increase may be temporary as brand switchers may be deal loyal and will follow the next deal that comes along" (Raghubir et al., 2004, p. 25).

Bridges et al. (2006) stated that prior usage of a brand and prior promotional activities can both play roles in driving consumer promotional sensitivities. However, "results indicate that prior promotional purchases influence choice more than prior brand usage does" (Bridges et al, 2006, p. 295). According to Luk and Yip (2008), the buying behavior of less-committed consumers is mainly promotion-driven. This group is comprised of the socalled brand switchers: consumers who process the brand's promotions as information to discriminate among acceptable brands and ultimately develop the habit of purchasing on promotion (Luk \& Yip, 2008, p. 456).

### 2.5 Potential Positive Effects of Sales Promotions on Brand Loyalty

Oliver (1977) defined brand loyalty as a "deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior" (p. 392). According to Dick and Basu (1994), brand loyalty consists of a consumer's commitment to repurchase or otherwise continue using the brand and can be demonstrated by repeated buying of a product or service or other positive behaviors, such as word of mouth advocacy. Oliver (1999) posits that three conditions must exist for true loyalty: The brand information held by the consumer (i.e. the consumer's beliefs) must point to the focal brand as being superior to what is known of competitive offerings; the consumer's degree of liking must be higher than that for other offerings, so that a clear affective preference exists for the focal brand; and the consumer must intend to buy the focal brand, as opposed to the alternative brands, when a purchase decision arises. (p. 30)

Delgado-Ballester and Munuera-Alemán (2005) support Oliver's (1999) brand loyalty definition by recognizing that brand loyalty does not exclusively focus on repeated purchases but on the internal dispositions or attitudes towards the brand. Palazón-Vidal and Delgado-Ballester (2005) confirmed a positive relationship between sales promotions and brand loyalty. The results showed that nonmonetary promotions are more customer franchise building (brand loyalty) as far as they enhance a greater number and more favorable associations than monetary promotions. "Based on the results obtained, sales promotions can be used to build brand knowledge because the individuals exposed to promotion stimuli evoked a greater number and more favorable associations" (PalazónVidal \& Delgado-Ballester, 2005, p. 198)
Closely related to brand loyalty is brand equity. "Brand loyalty makes consumers purchase a brand routinely and resist switching to another brand. Hence, to the extent that consumers are loyal to the brand, brand equity will increase" (Yoo et al., 2000, p. 197). These associations represent the personal meaning about a brand. Krishnan (1996) showed brands with high equity are characterized by having a great number of associations and more positive and unique associations. According to Palazón-Vidal and Delgado Ballester (2005), nonmonetary promotions, such as premiums, take the focus away from the price. "When promotion experience is linked to enjoyment kind of feelings, thoughts, and benefits, more favorable and positive brand associations are linked to the brand" (Palazón-Vidal \& Delgado Ballester, 2005, p. 184). This idea is consistent with Yoo et al.'s (2000) findings about brand associations being positively related to brand loyalty.

### 2.6 Controversy over Long-term Effects

There has been debate on whether sales promotions can enhance or undermine brand preference beyond the time they are offered (Luk \& Yip, 2008). For many years, marketers believed advertising was the primary tool, if not the only one, for brand building. Promotions were thought primarily to immediate sales bumps or short-term goals. "It is generally assumed that enhancing a product with features that do not negatively affect other attributes, such as offering a free premium or sweepstakes, can only help short term sales" (Simonson et al., 1994, p. 23).
According to Gedenk and Neslin (1999), experimental evidence gathered supports that promotions can be reinforcing if consumers have well-developed attitudes toward the brand, and this will be especially true when nonmonetary promotions are used. "Non-price promotions are even more effective because they enhance rather than hurt repeat purchasing. So even though they are not quite as effective in the short term, their stronger longterm effects enable them to generate more sales" (Gedenk \& Neslin, 1999, p. 449).
In the same direction, the PMA/Northwestern University 2002 study, Promotion, Brand Building and Corporate Performance Research, showed promotions could enhance a consumer's brand experience and lead to a stronger consumer relationship. Van Heerde and Neslin (2008) also found similar results on positive long-term effects of sales promotions. "Promotions may also affect long-term consumer behavior" (van Heerde \& Neslin, 2008, p. 132).

Palazón-Vidal and Delgado-Ballester (2005) agreed with previous studies in that monetary promotions are less effective in building brand knowledge because of their emphasis on only one brand association (price). In other words, they lead consumers to think primarily about deals and not about the brand. "Since price discounts have traditionally been the dominant form of consumer promotion, consumers are aware of and often expect price deals and therefore simply lowering prices is often problematic" (Hardesty \& Bearden, 2003, p. 17).

Darke and Chung (2005) performed a study to examine the advantages and disadvantages of discounts compared to other promotional strategies such as every-day-low-prices (EDLP) and free gift promotions. The study showed that free gift offers maintained quality perceptions of the brand. EDLP were less effective in this respect. In addition, free gifts provided a useful alternative for conveying value to consumers.
Bawa and Shoemaker (2004) presented a model of how a free sample promotion is expected to affect various components of incremental sales and possibly brand loyalty. Their findings support previous research (e.g., Seetharaman, 2004; Villas-Boas, 2004) that free samples can play an important role in creating brand loyalty. They found that free samples could be highly effective in increasing sales over a long period due to greater retention of customers after trial, a larger potential for acceleration of purchases, and higher purchase probability among those who would not have tried the brand without a free sample.

DelVecchio, Henard, and Freling (2006) conducted a meta-analysis to evaluate the results of previously published research that links the use of sales promotion to indicators of post-promotion brand preference.

A total of 51 studies were integrated. Their findings suggest that on average, sales promotions do not statistically affect post promotion brand preference. "However, depending upon characteristic of the sales promotion and the promoted product, promotions can either increase or decrease preference for a brand" (DelVecchio, Henard, \& Freling, 2006, p. 203).
We posit our hypothesis:
$\mathrm{H}_{\mathrm{a}}$ : Preference for nonmonetary promotions will have a greater effect than preference for monetary promotions on brand loyalty for high involvement products.
$\mathrm{H} 1_{\mathrm{b}}$ : Preference for nonmonetary promotions will have a smaller effect than preference for monetary promotions on brand loyalty for low involvement products.

## 3. Methodology

### 3.1 Survey Instruments

The questionnaire was originally prepared in English and then translated into Spanish by a certified interpreter from Puerto Rico. A pilot study with five respondents was administered to check the clarity of the translation, survey layout, and question order. Additionally, a pre-test to select two products for high- and low-involvement product categories was conducted. A total of 13 subjects participated in the pre-test survey and identified deodorant and laundry detergent as the products for high- and low-involvement product categories respectively.
The level of involvement was measured using a three-item Purchase Decision Involvement Scale (PDI) by Mittal (1989). Respondents were asked to rate on a seven-point verbal scale the degree of brand importance when purchasing deodorant or laundry detergent. Brand loyalty was measured using three items taken from the consumer-based brand equity scale developed and validated by Yoo et al. (2000) that measured the extent to which the respondent's favorite product brand is his/her preferred choice. The brand loyalty utilized a five-point Likert-type scale with anchors ranging from $1=$ "strongly disagree" to $5=$ "strongly agree". Next, participants rated the degree to which the purchase of their favorite product brand is influenced by nonmonetary and monetary promotions on a scale from $1=$ "very unlikely" to 5 ="very likely". Six different forms of promotions were offered including coupons, discounts, store special monetary savings among monetary promotions and free prize, free sample and a chance to win a free vacation among nonmonetary promotions. Prior to answering brand loyalty and promotion questions, the respondents were asked to recall the last purchase of laundry detergent or deodorant. Demographic questions about age, gender and household size were asked as well.

### 3.2 Data Collection

This study utilized a quasi-experimental approach to collect data. A team of three interviewers went door to door in the five most populated cities of Puerto Rico looking for subjects who must have purchased both product categories within the past 3 months of the interview and were the persons in charge of the grocery shopping for the household. A quota restricting gender proportion, household size, and geographical residency was applied: at least $70 \%$ of the sample was to be comprised of women, at least $25 \%$ was to be single households, and close to $70 \%$ was to be from the San Juan metro area. Only respondents who met the inclusion criteria and quota requirements were interviewed.

### 3.3 Method of Analysis

The hypothesized relations between brand loyalty and its determinants were tested using the following regression model:

$$
\begin{array}{r}
\text { Brand Loyalty }=\beta_{0}+\beta_{1} \text { Product Involvement }+\beta_{2} \text { Promotions }+ \\
\beta_{3} \text { Age }+\beta_{4} \text { Gender }+\beta_{5} \text { Household Size }+e
\end{array}
$$

A multiple regression model was run first to test the effects of product involvement and promotions on brand loyalty after controlling for the demographic characteristics of respondents (Model 1). Next, the clustering regression analysis was performed to identify customer groups for which product involvement/promotions have a different impact onto the product brand loyalty (Models 2 and 3). The data analysis was performed using NCSS 8.0.11 statistical software by NCSS, LLC.

## 4. Results

One hundred and fourteen subjects from five of the most populated metropolitan areas of Puerto Rico were interviewed.

Table 1: Descriptive statistics of variables in the study $(n=114)$

| Variable | Mean | SD | Min | Max |
| :---: | :---: | :---: | :---: | :---: |
| Brand loyalty (BL) laundry detergent | 10.69 | 4.12 | 3 | 15 |
| deodorant | 12.94 | 2.75 | 3 | 15 |
| difference in means | $2.25 * * *$ |  |  |  |
| Involvement (I) laundry detergent | 16.50 | 5.20 | 3 | 21 |
| deodorant | 18.79 | 3.36 | 3 | 21 |
| difference in means | $2.29 * * *$ |  |  |  |
| Preference for monetary promotions (PM) |  |  |  |  |
| laundry detergent | 11.60 | 3.14 | 3 | 15 |
| deodorant | 12.72 | 2.63 | 3 | 15 |
| difference in means | 1.12*** |  |  |  |
| Preference for nonmonetary promotions (PNM) |  |  |  |  |
| laundry detergent | 11.37 | 3.47 | 3 | 15 |
| deodorant | 12.04 | 3.28 | 3 | 15 |
| difference in means | . 67 |  |  |  |
| Age of respondents (years) | 41 | 13.08 | 21 | 83 |
| Gender (proportion of males) | . 27 | . 45 | 0 | 1 |
| Household size (proportion of households of two or more persons) | . 73 | . 45 | 0 | 1 |
| Geography (proportion of respondents from San-Juan Metro area) | . 68 | . 44 | 0 | 1 |

Notes: Means of the variables were compared using $T$-test. Mann-Whitney $U$ test for differences in medians was used when the normality assumption was not met.

* $p$-value $<.10 ; \quad * * p$-value $<.05 ; \quad * * * p$-value $<.01$ for a two-tailed test.

From Table I, the final sample included 72.80 percent of women, 68.42 percent were San-Juan residents and 27.19 percent were single-person households meeting the sampling quota requirements. All age groups were well represented. Respondents had significantly higher levels of brand loyalty and involvement for the highinvolvement product than for the low-involvement product. The average brand loyalty levels were 12.94 and. 10.69 for deodorant and laundry detergent with a $p$-value $<0.01$ for the two-sided test of differences in means. As expected, the level of involvement for the two products was significantly different as well (18.79 vs. 16.50, pvalue $<0.01$ ). Furthermore, the preference for monetary promotions for the high-involvement product (deodorant) was higher than that for laundry detergent ( 12.72 vs. $11.60, p$-value $<0.01$ ). At the same time, the respondents' preference for nonmonetary promotions were similar for both product categories ( $12.04 \mathrm{vs} .11 .37, p$-value $>0.10$ ). In both product categories, "coupon" was the most preferred and "chance to win a prize" was the least preferred type of sales promotion. There seems to be a higher preference for monetary promotions over nonmonetary promotions.

The correlation coefficients for the variables in the study are presented in Table 2.

Table 2: Correlations of variables in the study

|  | Brand <br> loyalty | Involve <br> ment | PM | PNM | Age | Gender |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Laundry detergent: |  |  |  |  |  |  |
| Brand loyalty (BLL) | 1 |  |  |  |  |  |
| Involvement (IL) | $.67^{* *}$ | 1 |  |  |  |  |
| Preference for monetary promotions (PML) | .02 | -.01 | 1 |  |  |  |
| Preference for nonmonetary promotions (PNML) | .15 | .10 | $.53^{* *}$ | 1 |  |  |
| Age | .04 | .05 | .05 | -.16 | 1 |  |
| Gender | -.07 | -.16 | -.16 | -.15 | -.09 | 1 |
| Household size | .07 | .09 | .10 | .06 | .07 | $-.42^{* *}$ |
| Deodorant: |  |  |  |  |  |  |
| Brand loyalty (BLD) | 1 |  |  |  |  |  |
| Involvement (ID) | $.37^{* *}$ | 1 |  |  |  |  |
| Preference for monetary promotions (PMD) | .18 | .07 | 1 |  |  |  |
| Preference for nonmonetary promotions (PNMD) | .07 | .04 | $.59^{* *}$ | 1 |  |  |
| Age | .04 | .08 | .03 | -.13 | 1 |  |
| Gender | .05 | -.19 | .04 | .00 | -.09 | 1 |
| Household size | -.03 | .15 | .03 | -.07 | .07 | $-.42^{* *}$ |

Notes: **p-value $<.05$ for a two-tailed test. Significance of sample correlations was tested using a doublesided $t$-test.

There was a significant positive correlation between brand loyalty (BL) and involvement for both products. This finding is consistent with findings from previous studies. For example, Douglas (2011) suggested that involvement is a critical antecedent to brand loyalty, while Joseph and Sivakumaran (2009) found that high levels of involvement could lead to brand equity. According to Aaker (1991), brand equity is a multidimensional concept, and brand loyalty is one of the main components.
A multiple regression model was estimated next to assess the effect of promotions and involvement onto brand loyalty. From Table 2, the two types of promotions are highly related for both product categories, which might introduce multicollinearity problem resulting in inflated standard errors of the least squares estimates. Greene (2011), Aiken and West (1991) suggest several remedies to rectify the situation including changing the model, removing outliers, or centering the data. Since residual analysis did not reveal data misspecification problems and dropping one of the promotion variables was not theoretically justified, mean-centering of the collinear variables was applied (including gender and household type). In the estimated model, the variance inflation factors (VIFs) for all independent variable were smaller than 5 and eigenvalues of correlations (both centered and un-centered) were below 100 suggesting no multicollinearity. Tables 3 and 4 summarize the estimation results for laundry detergent and deodorant respectively.

Table 3: Regression models of brand loyalty for low-involvement product: laundry detergent (BLL)

| Variables | Model 1 |  | Model 2 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\beta$ | SE | $\beta$ | SE |
| Intercept | . 65 | 1.37 | 4.47*** | . 53 |
| Preference for monetary promotions (PMD) | -. 05 | . 11 |  |  |
| Preference for nonmonetary promotions for deodorant (PNMD) | . 15 | . 10 |  |  |
| Age | . 03 | . 02 |  |  |
| Gender | 1.10 | . 74 |  |  |
| Household of two or more | . 85 | . 71 |  |  |
| Involvement for deodorant (ID) | . $54 * * *$ | . 06 | . $34 * * *$ | . 03 |
| Cluster 1 for deodorant (CD1) omitted |  |  |  |  |
| Cluster 2 for deodorant (CD2) |  |  | -2.52* | . 69 |
| Cluster 3 for deodorant (CD3) |  |  | 7.12*** | 1.27 |
| ID * CD1 omitted |  |  |  |  |
| ID * CD2 |  |  | -. 08 | . 04 |
| ID * CD3 |  |  | $-.18^{* * *}$ | . 07 |
| Regression diagnostics: |  |  |  |  |
| $\mathrm{R}^{2}$ | 47.89\% |  | 94.10\% |  |
| Adjusted R ${ }^{2}$ | 44.97\% |  | 93.83\% |  |
| $F$-regression | 21.68*** |  | 344.58*** |  |
| D'Agostino omnibus test | 7.31*** |  | 3.01*** |  |

Note: $n=114$; SE standard error; ${ }^{*} p$-value $<.10,{ }^{* *} p$-value $<.05$, ${ }^{* * *} p$-value<.01. Collinear variables including preference for promotions (PML and PNML), gender and household variables, were centered to reduce multicollinearity: for Model 1, variance inflation factors (VIFs) for all independent variable were smaller than 5 and eigenvalues of correlations (both centered and un-centered) were smaller than 100 suggesting no multicollinearity. Normality of the residuals was investigated using Q-Q normality plots and D-Agostino omnibus normality test.

Table 4: Regression models of brand loyalty for high-involvement product: deodorant (BLD)

| Variables | Model 1 |  | Model 2 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\beta$ | SE | $\beta$ | SE |
| Intercept | 6.78*** | 1.57 | 7.92*** | . 62 |
| Preference for monetary promotions (PMD) | . 17 | . 12 |  |  |
| Preference for nonmonetary promotions for deodorant (PNMD) | . 03 | . 09 |  |  |
| Age | . 01 | . 02 |  |  |
| Gender | . 75 | . 61 |  |  |
| Household of two or more | . 10 | . 61 |  |  |
| Involvement for deodorant (ID) | . 31 *** | . 07 | . 20 *** | . 03 |
| Cluster 1 for deodorant (CD1) |  |  | -2.19* | 1.21 |
| Cluster 2 for deodorant (CD2) omitted |  |  |  |  |
| Cluster 3 for deodorant (CD3) |  |  | 6.79*** | 1.04 |
| ID * CD1 |  |  | -. 08 | . 07 |
| ID * CD2 omitted |  |  |  |  |
| ID * CD3 |  |  | $-.19 * * *$ | . 05 |
| Regression diagnostics: |  |  |  |  |
| $\mathrm{R}^{2}$ | 17.05\% |  | 91.43\% |  |
| Adjusted $\mathrm{R}^{2}$ | 12.40\% |  | 91.03\% |  |
| $F$-regression | 3.67*** |  | 230.42*** |  |
| D'Agostino omnibus test | 21.02*** |  | 68.93*** |  |

Note: $n=114 ;$ SE standard error; * $p$-value $<.10$, ** $p$-value<.05, *** $p$-value<.01. Collinear variables including preference for promotions (PMD and PNMD), gender and household variables, were centered to reduce multicollinearity: for Model 1, variance inflation factors (VIFs) for all independent variable were smaller than 5 and eigenvalues of correlations (both centered and un-centered) were smaller than 100 suggesting no multicollinearity. Normality of the residuals was investigated using Q-Q normality plots and D-Agostino omnibus normality test.

Both models had sizeable explanatory power accounting for about $48 \%$ of the variance in brand loyalty for laundry detergent and $17 \%$ for deodorant.
For both product categories no significant relationships between the preference for promotions variables or the control variables (age, gender, and household type) and brand loyalty were found. The level of involvement, however, was a significant predictor of the brand loyalty for both laundry detergent and deodorant suggesting that a higher level of involvement leads to a higher level of brand loyalty.
To investigate whether the customers were homogeneous in their preferences, involvement, and loyalty to a particular brand, clustering regressions were performed and the results are presented in Tables 3 and 4. Three customer cluster groups for each product categories were identified. As presented in Table 5, the three clusters had significantly different levels of both brand loyalty and involvement as suggested by Kruskal-Wallis tests for differences in medians followed by the multiple comparisons Dunn's procedure.

Table 5: Descriptions of clusters for low and high involvement products


Note: $*^{* *} p$-value < .01. Differences in clusters' means were compared using non-parametric Kruskal-Wallis ANOVA test followed by Dunn's multiple comparisons procedure with a Bonferroni corrected level of significance.

Low-involvement product: laundry detergent


1

Figure 1: Cluster composition of brand loyalty - involvement relationships for low and high involvement products

Next, the differences between the slopes between brand loyalty and involvement for individual clusters were analyzed. From Figure 1, the laundry detergent slopes for the three clusters were about the same suggesting that despite different levels of brand loyalty and involvement among the customer groups, the relationships between the brand loyalty and involvement are similar - higher levels of involvement lead to a higher level of brand loyalty. For deodorant, the relationships between the level of involvement and brand loyalty were similar for customers from cluster 1 and 2. For customers with the largest levels of both brand loyalty and involvement (cluster 3), there were no relationships between the two variables: customers highly loyal to a deodorant brand exhibit the same levels of brand loyalty for all levels of involvement.

## 5. Discussion

Related to Hypothesis $\mathrm{H} 1_{\mathrm{a}}$ and $\mathrm{H} 1_{\mathrm{b}}$, preference for type of promotion and brand loyalty results showed that "Buy 2 and get $20 \%$ off" for deodorant, a high involvement product, increases brand loyalty. Respondents were more brand loyal to high involvement products than low involvement products. This is one of the most significant findings to emerge from this study, as the assumption was that preference for nonmonetary promotions would have a stronger effect on brand loyalty for high involvement products.
Besides "Buy 2 and get $20 \%$ off," involvement was the other independent variable to positively impact brand loyalty on both models: deodorant and laundry detergent. The wider body of literature suggests that product involvement is a critical antecedent to brand loyalty, especially for high involvement products (Douglas, 2011). The present study confirms previous findings and contributes additional evidence suggesting that involvement can be a critical antecedent of brand loyalty even for low involvement products. This suggests that a higher level of involvement leads to higher brand loyalty. Another finding is that the three clusters identified had different levels of involvement. It identified that customers in clusters 1 and 2 were similar in that the level of loyalty increased with the level of involvement. However, with the higher level product in cluster 3, consumers stayed loyal for all levels of involvement.

The findings of this study illustrate the disagreement about the potential impact of sales promotions on brand loyalty in the literature. Papatla's and Krishnamurthi's (1996) analysis proposed that promotions could have both a negative and positive dynamic effect. On the other hand, there are several studies that have shown a negative or neutral impact on brand loyalty (Blattberg \& Neslin, 1989; Bridges, Briesch, \& Yin, 2006; Diamond, 1992; Gedenk \& Neslin, 1999; Simonson, Carmon, \& O’Curry, 1994; Yoo, Donthu, \& Lee, 2000). Bridges, Briesch, and Yin (2006) argued that promotion enhancement reduces brand loyalty due to the increased sensitivity to marketing mix activities for all brands in the category; therefore, it implies a reduced likelihood of consumers to buy previously purchased brands on promotions. Similarly, Gedenk and Neslin (1999) stated that the promotional status of previous purchases could differentially influence brand choice. They provided a very useful tool to measure promotional status by asking consumers after buying a brand on promotion, Did you buy this brand because you like the brand, or because of the promotion? If the answer is because of the promotion, then the promotion has provided negative purchase feedback.

## 6. Limitations

The current investigation was limited to two products: laundry detergent and deodorant. Both product categories can easily be found at any grocery store, pharmacy, or discount store. The two product categories chosen were considered to be very basic products that should be available in almost any household. This could be a limitation to the study because it excludes other types of products that could better represent different levels of involvement.

## 7. Implications and Recommendations

The findings of this study have a number of important implications for future research. The first involves the relationship between involvement and brand loyalty. In all regressions, involvement showed a very strong relationship with brand loyalty, the dependent variable, with $p$ values $<.01$ for both laundry products and deodorant.

Belch and Belch (2008) classified sales promotions into consumer franchise building (CFB) and nonfranchise building (non-CFB). CFB contributes to the development and reinforcement of brand identity by communicating distinctive brand attributes, while non-CFB promotions try to generate immediate sales or shorten the buying decision. Joseph and Sivakumaran (2009) found that high levels of involvement combined with high levels of deal proneness and non-CFB promotion could lead to brand equity.

The concept of involvement has been extensively used as a moderating or explanatory variable in consumer behavior (Dholakia, 1997, 1998). According to Solomon (2004), many sales promotions are designed to increase product involvement.

The findings of Chandon et al. (2000), Liao (2006), and Palazón-Vidal and Delgado-Balleter (2005) confirm that not all sales promotional tools are equally effective for all product categories. Similarly, DelVecchio et al.'s (2006) findings concluded that depending upon characteristics of the sales promotions and the promoted product, promotions could either increase or decrease preference for a brand. If the debate whether sales promotions can positively influence brand loyalty or not is to be moved forward, a better understanding of the impact of monetary and nonmonetary promotions on brand loyalty needs to be developed. Also, future research should expand the number of product categories to be included in the study, to ideally three for each level of involvement, to have a wider spectrum for comparison.

## 8. Conclusion

This study suggests that sales promotions can either reinforce or reduce the behavior of brand loyalty. The findings for deodorant suggest that "Buy two get $20 \%$ off" (a monetary promotion) served as reinforcement to build brand loyalty. It makes sense that buying an additional product of the same brand in order to receive a 20 percent discount shows some sort of commitment to the brand. Still, the most important fact about this finding is that both monetary and nonmonetary promotions can enhance brand loyalty, contrary to findings of previous studies (Diamond, 1992; Yoo, Donthu, \& Lee, 2000). There may be other external factors that are influencing this shift in behaviors. The economy must be a major influence. Puerto Rico's economy mirrors the United States of America economy, which currently is in a recession that has been going on for a few years. Consumer habits and behaviors have been influenced by a need to stretch the dollar. A new study in Puerto Rico, "Eating In," directed by the research council of the Chamber of Food Marketing, Industry \& Distribution (MIDA by its Spanish acronym) (as cited in Santiago, 2012) has concluded that the recession has changed consumers' foodpurchasing habits.

Sales promotions serve as a last minute influencer up until the point of purchase, and results show some promotions can positively influence brand loyalty, while others do not. Joseph and Sivakumaran (2009) stated, "it is the characteristics of the market and the marketing actions taken by the company that decide whether promotions will contribute to building brand equity, and not just the promotion, as believed earlier" (p. 823). From a marketer perspective, the good news is that this study shows there is still loyalty to certain brands and that sales promotions can contribute to the on-going success of marketing efforts if there is an appropriate understanding of the consumer and the market.

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