

The Effect of Store Name, Brand Name and Price Discounts on Consumers' Evaluations and Purchase Intentions

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This paper develops and tests a conceptual model of the effects of store name, brand names and price discounts on consumers' evaluations (store image, brand quality perceptions, internal reference prices, and value perceptions) and purchase intentions. The moderating effects of consumer knowledge and prior ownership on the proposed relationships in the model are also explored. A store's perceived image is influenced by the store name and the quality of merchandise it carries. Results also indicate that internal reference price is influenced by price discounts, brand name, and a brand's perceived quality. The influence of price discounts on a brand's perceived quality was minimal. Price discounts, internal reference price, and brand's perceived quality exerted significant influence on perceived value. Perceived value and store image, in turn, positively influenced purchased intentions. High knowledge respondents are more influenced by brand name, while low knowledge

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respondents are more influenced by price discounts. Low knowledge consumers are also swayed by store name and brand name.

INTRODUCTION

A positive store image and good value merchandise are key for retailers to achieve and sustain success in an increasingly competitive marketplace. Three important components that appear to be key to store patronage decisions are the retailer's store image, quality of the merchandise/brands sold and price/promotions. Consumers use certain cues as signals for these components; store name, brand name and price discounts (e.g., Dawar and Parker, 1994; Dodds, Monroe, and Grewal, 1991). Retailers who understand how these components and the role of external cues that represent them can influence store patronage decisions and improve their competitive situation.

In contrast, many retailers who have not understood these components (i.e., store image, reputation of brands carried and role of price-promotions) have had to file for bankruptcy and/or closed their stores. Montgomery Ward & Co., Woolworth Corp., and Levitz Furniture are some examples of recent failures. Their efforts to upgrade the store image from a vendor of inexpensive offerings to one of style and quality has been slow to take. Cuneco (1997) faults their inability to project their store name and image as the main reason for the failure. Industry publications have been calling for radical restructuring of stores' offerings and their formats to reconnect with the American Consumer (Progressive Grocer, April 1, 1997, Supplement, Page 8).

Clearly, store image is an important input in the consumer decision-making process (e.g., Nevin and Houston, 1980). Store image encompasses characteristics such as the physical environment of the store, service levels, and merchandise quality (Baker, Grewal, and Parasuraman, 1994; Zimmer and Golden, 1988). Store name, as a cue to store image, provides a tremendous amount of information to consumers. As an example, the name "Nordstrom" evokes an image of a luxurious store environment, high levels of customer service and high quality merchandise.

Finally, retailers are starting to pay more attention to their store name and are spending more to promote their name and develop an appropriate image. Sears increased their budget in 1996 (from \$556.3 million in 1995 to \$588.1 million in 1996) to support their "softer side" campaign. Gap increased its budget by 72.6% to promote its name "Gap". K-Mart is vigorously tackling store image and growth issues through a store renewal program. As part of the store renewal program, K-Mart is trying to make shopping easy, stimulating and even fun (Chain Store Age Executive, July 1, 1993, Vol. 69, page 22).

The retail competitive landscape has become more crowded with the advent of the internet (Murphy, 1997). The days of localized competition are a thing of the past, and retailers now have to compete with stores globally on the information superhighway. Forrester Research claims that on-line ticketing will grow to \$10 billion by 2001 from a mere \$475 million in 1996. Many feel that on-line purchases will enjoy a similar growth. Retailers, who enjoy high store name awareness, are likely to do well in the information superhighway as store name familiarity and image will reduce purchase anxiety for the store loyalists.

Today, consumers can find a lot of information about products, prices and stores through the internet. As a result of their increased awareness, they are likely to become more price sensitive. Thus, the role of store reputation, brand names and price discounts are likely to become more pronounced in the next decade. Embracing these retailing opportunities via the proliferation of internet technology, Barnes & Nobles, the nation's largest bookseller, entered on-line book retailing. Barnes & Noble's name (and associated positive image) will help them to gain a significant share of the internet book market.

Store brand sales will continue to gain share as retailers fine tune their approaches to meeting consumer needs (Walker, 1991). This implies that merchandise selection is very important as it will affect store image. The quality of products offered by a retailer influences customer patronage behaviors (Dodds, Monroe, and Grewal, 1991). Brand name has been shown to be a critical cue for customer perceptions of product quality in a number of studies (e.g., Dawar and Parker, 1994; Dodds, Monroe, and Grewal, 1991). The role of merchandise and brand names that retailers carry are important for a better understanding of store patronage decisions.

Price and special promotions have been used to attract consumers to a retail store (i.e., providing greater value via the discount) and generate an increased level of store traffic (Grewal, Monroe, and Krishnan, 1998; Lichtenstein and Bearden, 1989). However, Doug Raymond, President and CEO of Retail Advertising & Marketing argues that retailers cannot depend on these price promotions to attract customers on a regular basis. According to the trade publications, retailers use of price promotions to attract customers and the desire to maintain margins have always been at odds with each other. The conflict has become more acute as price promotions have failed to build sales (Progressive Grocer, 1992). Additionally, while price discounting may generate traffic in a retail store, such discounting may have negative effects on the brand's quality and internal reference prices. Price discounting may even hurt a store's overall image. These issues warrant further investigation.

The basic relationships between store name, brand name, price, quality, and value have been explored in the literature in isolation (e.g., Dodds et al., 1991). However, the simultaneous effects of these retail cues (store name, brand name, and price discounts) are less clear. The need to simultaneously examine the effects of store name, brand name, and discount is supported by congruity theory. Congruity theory states that consumers try to bring disparate information together and make sense of it. For example, if one states that K-Mart sells Tiffany Jewels there will be an incongruity that the consumer will have to reconcile. In this specific case, the brand's image will decrease while the store's image will increase. Even if both objects are perceived negatively or positively, if the perceptions are not equivalent there will exist potential benefits or detriments. The recent shift in consumer purchasing from national labels to private brands and the longer-term shift toward discount stores are important examples of how purchase intentions are being shaped by a plethora of product and store related information. Possibly the most important implication of this model is the simultaneous consideration of the whole gamut of variables affecting value perceptions and willingness to buy. A simultaneous examination of these three cues will also enable one to identify the magnitudes of their effects.

Finally, past pricing research has suggested that prior knowledge and experience with the brand or product category moderates the effect of price on consumer evaluations (e.g.,

Rao and Monroe, 1988). Consequently, an exploratory issue that will be addressed in this research is examining the robustness and generalizability of the proposed model across two related boundary conditions (i.e., knowledge and ownership).

MODEL DEVELOPMENT AND HYPOTHESES

Consumers use price as an indicator of product quality because they believe that market prices are determined by the forces of competitive supply and demand. These forces would result in an ordering of competing products on a price scale such that there becomes a positive relationship between price and quality. Therefore, if consumers believe price and quality are positively related, it follows that they would use price as an indicator, or signal, of quality. Past research on the price-quality relationship has focused on actual selling price (Dodds et al., 1991; Rao and Monroe, 1989), rather than the advertised reference price provided in a price discount situation (e.g., was \$50, now \$30). The price signaling perspective has been expanded by researchers to include other signals of product quality, such as brand name and store name.

Price and brand name have been shown to have a moderately significant effect on buyers' perceptions of quality while store name had minimal effect (Rao and Monroe, 1989). While a number of studies have examined the effects of price and other cues on quality, few have addressed the degree to which brand and store name combine with price in influencing not only buyers' perceptions of quality, but also their perception of value and their willingness to buy. Our model (Figure 1) proposes that the store name, the price promo-

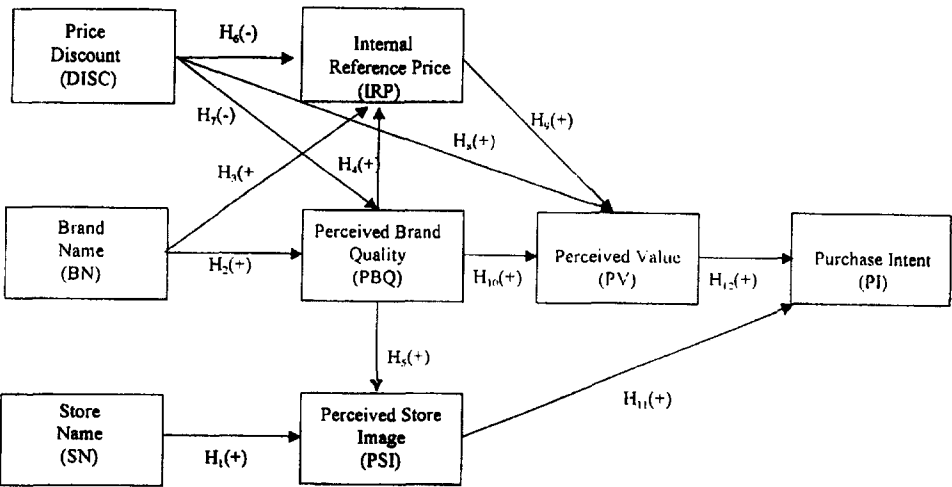


FIGURE 1
Integrative Model

tions or discounts offered, and the name of the brand are antecedent variables that influence perceived store image, perceived brand quality, and internal reference price, which in turn affect perceived value and willingness to buy. Theoretical perspectives supporting the hypothesized linkages in the model are discussed below.

Store Name and Perceived Store Image

As markets become more fragmented, stores continually adjust their positioning strategies, altering their image, in order to remain competitive. For instance, millions of dollars are spent each year by retailers designing, building and refurbishing stores. This is, at least in part, because they want to portray an image that is appealing to their current and potential customers. Darden, Erden and Darden (1983) found that consumers' beliefs about the physical attractiveness of a store had a high correlation with patronage intentions. For example, to improve its competitive position against Wal-Mart, K-Mart engaged in an image improvement strategy that emphasized the store's atmosphere (Discount Store News, 1990).

The store's name is an information-rich cue to its image. Mention of the store's name thus evokes a vivid store image in consumers' minds. Zimmer and Golden (1988) found that consumers sometimes used store names to describe a prototypical store (e.g., "Like Sears"). The store name represents a store's abstract, gestalt nature, and is a form of the category-based processing perspective of store image suggested by Keaveney and Hunt (1992). We argue that, as a brand's equity increases with the strength of its brand name, so a store's image will be positively related to its store name. Therefore, as the strength of a store name increases, so will the perceived image of the store.

H1: *The more positive the store name (or reputation associated with the store), the more positive the buyers' perceptions of store image.*

Role of Retail Merchandise or Brand Names

Brand name is a commonly used extrinsic cue to infer and/or maintain quality perceptions and can represent an aggregate of information about a product (Richardson, Dick, and Jain, 1994). Della Bitta, Monroe and McGinnis (1981) proposed that a strong brand name helps to control or stabilize the quality perceptions of a branded product even when its price is discounted. In a more recent study, Dodds et al. (1991) also found empirical support for the positive effect of brand name on quality perceptions. Formally we hypothesize that:

H2: *The more positive the brand name (or brand reputation), the more positive the buyers' perceptions of quality.*

Brand name is also expected to positively influence buyers' internal reference prices. Monroe, Grewal, and Compeau (1991) noted that people form an internal reference price

scale based on past experience with stimuli. One component of past experience would be recognition of a brand name. Thus, even when consumers have not had direct experience with a product, exposure to the brand name gives them a certain degree of familiarity. Research evidence supports a positive relationship between brand name and internal reference price (e.g., Bearden, Lichtenstein, and Teel, 1984; Biswas, Wilson, and Licata, 1993). Additionally, brand names may also affect buyers by influencing their internal reference prices through their perceptions of merchandise or brand quality. That is, past studies have investigated the relationships between actual price and quality (see meta-analysis by Rao and Monroe 1989), we propose that the same relationship (or price-quality mapping) holds for internal reference price and perceived quality. Thus, brand names are likely to have both a direct and an indirect affect on buyers' internal reference price.

H3: *The more positive the brand name (or brand reputation), the higher the buyers' internal reference price.*

H4: *There is positive relationship between buyers' perceptions of product quality and their internal reference price.*

Olshavsky (1985) has noted that the quality of the brand could serve as a cue to the image of the store. This suggests that consumers who view brands favorably will have a positive image of the store. This argument has some empirical support. Baker, Grewal and Parasuraman (1994) found that as merchandise quality increased so did store image. Mazursky and Jacoby (1986) discovered that a store's image can be improved by association with strong brands while at the same time a strong store image can be damaged by connection with a poorly perceived brand. Therefore:

H5: *There is positive relationship between buyers' perceptions of product (or merchandise) quality and their store image.*

Retail Price Promotions and Discounts

Retailers often use promotions involving price discounts to increase store traffic and stimulate purchase. The net effect on consumers' perceived quality and value will help managers determine the discount level to use. Adaptation-level theory suggests that a stimulus is evaluated with respect to internal norms representing an individual's composite experience. The adaptation-level for judging the price of an item is called the internal reference price and can be considered the average market price, or a range of average prices for a product class (Biswas and Blair, 1991). Others have referred to it as expected price (Winer, 1986) or a fair price (Kamen and Toman, 1970). Thus, adaptation-level theory pre-

dicts that the price discount (and the advertised reference price in the price promotion or comparative price advertisements) shifts consumers' internal reference prices. If the advertised reference price is close to the consumers' internal reference price range, then the consumers' internal reference price range will shift upward (and vice versa). These

assimilation and contrast effects are very similar to the effects predicted by assimilation-contrast theory.

Assimilation-contrast theory explains how an internal reference price might change. Since reference prices depend on both product experiences and information in the environment (Zeithaml and Graham, 1993), one input into internal reference price is the price discount. Consumers form judgments not on the information itself that is given to them, but on their interpretation of that information. As Olson and Jacoby (1977) note, stimuli is first perceived, then interpreted before it has any effects on judgments and behavior. Latitudes of acceptance thus exist for price evaluations. A price that is within the latitude of acceptance is assimilated and believable, while a price outside the latitude of acceptance is contrasted, and not credible. Thus, within the acceptable price range (based on assimilation theory), a discount (i.e., a constant advertised reference price and a reduction in the selling price) is likely to result in a lower internal reference price. Consistent store price promotions and the temporal affects of such discounting (i.e., being exposed to lower sales prices) will lead to a lower reference price (Grewal and Compeau, 1992; Lichtenstein and Bearden, 1989; Rajenderan and Tellis, 1994).¹

H6: *The greater the price discount (i.e., when the advertised reference price is constant and the sale price is varied), the lower the buyers' internal reference price.*

Price discounts, however, are likely to have a negative influence on perceptions of quality (Blattberg and Neslin, 1990). Perceptions of quality can be explained using self perception theory, one type of attribution theory which describes how consumers explain events. If a consumer purchases a product on discount they often "attribute" the fact that it was on discount because it is a poorer quality product (Dodson, Tybout, and Sternthal, 1978).

H7: *The higher the price discount, the lower the buyers' quality (or merchandise) perceptions.*

Perceived Value

Researchers have posited that value is an evaluation that balances what consumers receive in an exchange versus what they give up (e.g., Dodds, Monroe, and Grewal, 1991; Zeithaml, 1988). Thus, essential components of value perceptions include the price promotion (or the selling price associated with the price offer) and the perceptions of quality of the brand. Blattberg and Neslin (1990) state that, in the presence of a discount, the presentation of a reference price creates a perception of savings. Recent research has suggested that an additional value driver is the internal reference price (Grewal, Monroe, and Krishnan, 1998; Lichtenstein and Bearden, 1989). Grewal et al (1998) argue that if the price paid is less than an individual's reference price, it enhances buyers' value perceptions. The literature review supports the following hypotheses:

H8: *The higher the discount, the higher the value perceptions.*

H9: *There is a positive relationship between internal reference price and value perceptions.*

Finally, past research has suggested that perceived quality is a key determinant of consumers' judgments of value (Dodds, Monroe and, Grewal, 1991; Grewal, Monroe, and Krishnan, 1998). Thus, we test the following proposition:

H10: *There is a positive relationship between brand quality perceptions and value perceptions.*

Purchase Intentions

Purchase intentions have been widely used in the literature as a predictor of subsequent purchase. A number of studies have supported the notion that store image is an important component of store patronage (Nevin and Houston, 1980). More specifically, Buckley (1991) found a link between store image and intention to purchase a product. Past research has found that purchase intention is also positively associated with perceived value (Dodds, Monroe, and Grewal, 1991; Grewal, Monroe, and Krishnan, 1998). Hence, the hypotheses are:

H11: *There is a positive relationship between the store's perceived image and consumers' purchase intentions.*

H12: *There is a positive relationship between value perceptions and purchase intentions.*

Moderating Effects of Consumer Knowledge and Prior Ownership

Monroe, Grewal and Compeau (1991, p. 13) noted that "research on the issue of reference prices must consider the extent that individuals have different degrees of familiarity with the product category and with the different prices charged for various product alternatives." Similarly, Zeithaml (1988) argued that the price-quality relationship is influenced by consumer price awareness and the ability to detect quality variation in a product class. Consumers who are more knowledgeable about product and price information may make different decisions than consumers who are less knowledgeable. Specifically, those who are knowledgeable should be less willing to pay prices that do not reflect the quality of the product compared to those who lack knowledge (Rao and Sieben, 1992).

Rao and Monroe (1988) found that product knowledge moderated the effects of price on consumers' perceptions of quality—price had a greater effect for the low knowledge group as compared to the high knowledge group. Similarly, Biswas and Blair (1991) found that reference price advertisements for an unfamiliar brand affected internal refer-

ence price to a greater extent than they did for a familiar brand. A study by Rao and Sieben (1992) discovered that the upper and lower limits of the acceptable price range increased, then leveled off as knowledge increased. They also found that the extent to which intrinsic (e.g., product features versus extrinsic (e.g., price, brand name) information was used to evaluate quality varied according to the subjects' knowledge levels. Finally, Laroche, Kim and Zhou (1996) discovered that familiarity with a brand creates greater confidence which affects intention to buy the same brand. All these studies, taken together, suggest that consumer product knowledge may moderate the effects of price and other cues (such as brand name and store name) on consumers' internal reference price, product evaluations and purchase intentions. Thus, we will test the boundaries of the proposed model. Because past research does not provide sufficient evidence of the specific effects of knowledge and prior ownership, we do not make any specific predictions.

METHOD

We tested the model through a study at a major state university. Respondents were given a questionnaire and a price-comparison advertisement. The bicycle category was selected due to the high level of familiarity subjects had with products in this category. This category has also been demonstrated to show a strong price-quality relationship (Rao and Monroe, 1989). A $2 \times 2 \times 2$ between-subjects experiment was designed with two stores (Ken's Bicycle Store and Kmart), two brands (Cannondale and Huffy) and two discount levels (\$549/\$499 and \$549/\$249). These experimental conditions were chosen based on a pretest that indicated that the subjects associated low store image with K-Mart and high store image with Ken's Bicycle shop. Ken's Bicycle shop is a local bicycle shop well known for its bicycle-related products and services. The subjects perceived Huffy to have a low brand image and Cannondale to have a high brand image.

While a total of 335 undergraduate students participated in the study, only 309 students completed the survey (92% completed it). The mean age of respondents was 22.5 years, 50.6% of the respondents were male and 75% percent had owned a bicycle at some point in time. In the study, respondents were given a price-comparison advertisement for a bicycle and were asked to evaluate the bicycle shown in the advertisement.

Measurement

The scales used to measure the five latent constructs are shown in Table 1. Dollar estimates provided by the respondents formed the basis for internal reference price. They were asked to estimate the bike's normal price, average market price, and a fair price (Lichtenstein and Bearden, 1989; Urbany, Bearden, and Weilbaker, 1988). Perceived brand quality was measured using six Likert statements (Dodds, Monroe, and Grewal, 1991; Rao and Monroe, 1989). Based on the past studies, perceived value was measured

TABLE 1

| Measurement Model | | | |
|---|------------------|-------------------|--------------------|
| Scale Items | Item Reliability | Scale Reliability | Variance Extracted |
| Perceived Store Image (PSI) | | | |
| The store____ would be a pleasant place to shop | 0.78 | | |
| Attractive shopping experience | 0.79 | | |
| Store image | 0.80 | | |
| Good overall service | 0.78 | 0.94 | 0.80 |
| Carry high quality merchandise | 0.77 | | |
| Helpful salespeople | 0.82 | | |
| Knowledgeable salespeople | 0.83 | | |
| Brand Perceived Quality (BPQ) | | | |
| Likelihood that bicycle will be reliable | 0.79 | | |
| This bicycle appears to be of quality | 0.77 | | |
| This bicycle appears to be durable | 0.75 | | |
| This bicycle appears to be dependable | 0.77 | 0.91 | 0.74 |
| My image of the ____ brand name is | 0.65 | | |
| I view the ____ brand name positively | 0.67 | | |
| Perceived Value (PV) | | | |
| This bicycle appears to be a bargain | 0.84 | | |
| Price is less than what I expect it to be | 0.74 | | |
| Price is less than average market price | 0.73 | | |
| Price is less than what other retailers charge | 0.71 | 0.90 | 0.74 |
| This bicycle is a great deal | 0.72 | | |
| At this price, I would save a lot of money | 0.73 | | |
| Internal Reference Price (IRP) | | | |
| Retailer's normal price | 0.99 | | |
| Average market price | 0.97 | 0.91 | 0.97 |
| Fair price for the cycle | 0.97 | | |
| Purchase Intention (PI) | | | |
| I would purchase this bicycle | 0.92 | | |
| I would consider buying at this price | 0.90 | 0.92 | 0.92 |
| The probability that I would consider buying | 0.94 | | |

Notes: For each construct, the item reliability, scale reliability, and variance extracted are provided. Variance extracted was calculated using the formula provided by Fornell and Larcker (1981). Fornell and Larcker (1981) suggested that the variance extracted for any two constructs should be greater than the square of the parameter estimate between them. All of the constructs met that criterion. Bagozzi and Yi (1988) suggested that composite reliability should be greater than or equal to 0.60 and variance extracted should be greater than or equal to 0.50. All of the measures met this criteria.

using six Likert statements (Dodds, Monroe, and Grewal, 1991). The willingness to buy construct was measured using a three item scale (Dodds, Monroe, and Grewal, 1991). Perceived store image was measured using seven Likert statements based on prior research by Baker et al. (1994).

ANALYSIS AND RESULTS

Data Analysis

Anderson and Gerbing (1988) have indicated that proper measures of latent constructs are a prerequisite for the analysis of structural relationships. They recommend a two step process to ensure this. First the measurement properties were assessed to verify that the scales were unidimensional and reliable. Secondly, Lisrel VII was used to assess the relationship between the latent constructs and to test the eleven hypotheses proposed in this paper.

Measurement Properties of the Scales

The items used to measure the latent constructs in the model are provided in Table 1. Item reliability, average variance extracted, and construct reliability are also shown (all are acceptable based on the criteria suggested by Bagozzi and Yi, 1988). For all five scales (store image, brand quality, internal reference price, value and willingness to buy) the factor loadings (λ 's) were high and significant ($p < .001$), satisfying the criteria for convergent validity. Discriminant validity was assessed using Anderson's (1987) criteria: the correlation between two latent constructs plus or minus two standard errors must not include one. All five latent constructs satisfied this criteria. Fornell and Larcker (1981) also suggest that discriminant validity can be assessed by determining whether the variance extracted estimates for two constructs are greater than the square of the correlation estimate (from the path model) between them. The five constructs in this study satisfied this criterion.

TABLE 2

Correlations between Latent Variables and Experimental Variables

| | IRP | BPQ | PSI | PV | PI | DISC | BN | SN |
|------|-------|-------|------|------|------|------|-------|------|
| IRP | 1.00 | | | | | | | |
| BPQ | 0.42 | 1.00 | | | | | | |
| PSI | 0.01 | 0.12 | 1.00 | | | | | |
| PV | 0.34 | 0.44 | 0.16 | 1.00 | | | | |
| PI | 0.28 | 0.52 | 0.19 | 0.64 | 1.00 | | | |
| DISC | -0.43 | -0.04 | 0.12 | 0.60 | 0.40 | 1.00 | | |
| BN | 0.45 | 0.55 | 0.01 | 0.43 | 0.41 | 0.02 | 1.00 | |
| SN | -0.03 | 0.05 | 0.78 | 0.09 | 0.06 | 0.07 | -0.02 | 1.00 |

Notes: Full Sample Estimates - N = 309

IRP = Internal Reference Price

PSI = Perceived Store Image

PI = Purchase Intention

BN = Brand Name

BPQ = Brand perceived Quality

PV = Perceived Value

Disc = Discount

SN = Store Name

to be independent to avoid interpretational confounds. The loading of each indicator on its latent construct was set at 1.0 (both LX and LY) and the TE for each latent construct was set to each construct's unique factor variance at $[(1.0 - \alpha \text{ scale}) * s^2]$ as proposed by many researchers (e.g., Jöreskog and Sörbom, 1989). The correlations between the latent constructs and the experimental variables are shown in Table 2.

The overall fit of the structural model was encouraging. Though the chi-square test for the overall fit was significant at the 0.001 level, the goodness-of-fit index was 0.93. The chi-square statistic is sensitive to sample size and therefore one should not reject the model based on the chi-square statistic alone (Bearden, Sharma, and Teel, 1982; Bagozzi and Yi, 1988). The root mean square residual for the structural model was only 0.062. The Bentler and Bonett's (1980) normed index was 0.89 indicating an adequate fit. The results indicate a parsimonious model.

Test of Hypotheses

A substantial portion of the variance in the buyers' perceived value and willingness to buy is explained by the model. The results are shown in Table 3. The squared multiple correlations of the structural equations for internal reference price, perceived brand quality, perceived store image, perceived value, and purchase intention are 0.418, 0.301, 0.621, 0.846, and 0.409. Of the twelve hypothesized direct effects, eleven are supported, significant at $p < 0.05$ level.

Store name had its predicted positive effects of buyers' perceived store image ($t = 22.19$, H1 supported). Brand name had its predicted positive effects on perceived brand quality ($t = 11.46$, H2 supported). Brand name and perceived product quality positively influenced buyers' internal reference price as hypothesized ($t = 6.29$, H3; $t = 4.24$, H4). Perceived brand quality also had a significant positive effect on perceived store image ($t = 2.44$, H5).

TABLE 3

Estimates for the Proposed Model

| Hypothesis | Path | | Hypothesized sign | Full Sample | |
|------------|------|-----|-------------------|-------------|--------------|
| | From | To | | Std. | Est. T-value |
| 1 | SN | PSI | $\gamma_3 > 0$ | 0.78 | 22.19 |
| 2 | BN | BPQ | $\gamma_4 > 0$ | 0.55 | 11.46 |
| 3 | BN | IRP | $\gamma_2 > 0$ | 0.33 | 6.29 |
| 4 | BPQ | IRP | $\beta_1 > 0$ | 0.22 | 4.24 |
| 5 | BPQ | PSI | $\beta_2 > 0$ | 0.09 | 2.44 |
| 6 | DISC | IRP | $\gamma_1 < 0$ | -0.42 | -9.60 |
| 7 | DISC | BPQ | $\gamma_5 < 0$ | -0.03 | -0.68 |
| 8 | DISC | PV | $\gamma_6 > 0$ | 0.88 | 34.55 |
| 9 | IRP | PV | $\beta_3 > 0$ | 0.63 | 22.36 |
| 10 | BPQ | PV | $\beta_4 > 0$ | 0.22 | 8.52 |
| 11 | PSI | PI | $\beta_5 > 0$ | 0.10 | 2.22 |
| 12 | PV | PI | $\beta_6 > 0$ | 0.63 | 14.28 |

Overall Statistics For Structural Equation:

| | Full Sample |
|-------------------------------------|-------------|
| Squared Multiple Correlations | |
| IRP | 0.418 |
| BPQ | 0.301 |
| PSI | 0.621 |
| PV | 0.846 |
| PI | 0.409 |
| Chi square statistic with 16 d.f. = | 101.90 |
| Goodness of Fit Index = | 0.93 |
| Adjusted Goodness of Fit Index = | 0.84 |
| CFI | 0.94 |
| Delta | 0.93 |
| Rho | 0.89 |

Price discount had its predicted negative effect on buyers' internal reference price ($t = -9.60$, H6), suggesting that price discounts will tend to lower the internally held judgment scale concerning prices for a product-price category. However, contrary to our expectations ($t = -0.68$, Hypothesis 7), price discount is not related significantly to perceived brand quality even though the directionality was consistent with the hypothesis. Price discount had its hypothesized positive effect on buyers' perceived value ($t = 34.55$, Hypothesis 8). As the result shows, the influence of price discounts on perceived value is very strong.

Moreover, there is a positive relationship between perceived brand quality and perceived value ($t = 8.52$, H9). As hypothesized, internal reference price strongly influenced perceived value ($t = 22.36$, H10). Perceived store image positively influenced a consumers' purchase intentions ($t = 2.22$, H11). Perceived value had its predicted positive effects on buyers' willingness to buy ($t = 14.49$, Hypothesis 12). The result supports past findings that perceived value and image of the store play an important in the consumer choice process.

The Moderating Effect of Knowledge and Prior Ownership

Two self-reported objective measures of knowledge and one self-reported subjective measure of product knowledge formed the basis for the knowledge construct. The subjective measures tapped respondents' cycling activity: miles driven in a week and number of days of cycling in a month. The self-reported subjective measure of product knowledge measured respondents' product familiarity on a seven point scale with 1 being "very knowledgeable" and 7 being "not very knowledgeable". After standardizing the items, they were combined to form one knowledge scale. The coefficient of alpha for the three-item knowledge scale was 0.74, considered to be adequate by consumer researchers (Bagozzi and Yi, 1988). The sample was divided at the median value. Subjects who scored less than the median were treated as "low knowledge". The results are shown in Table 4.

Respondents in the "high knowledge" group are very highly influenced by the brand name. It is likely that brand name evokes chunks of information for the "high knowledge" group as opposed to the "low knowledge" group. While the perceived store image influenced the purchase intent of "low knowledge" group, its effect was minimal for the "high knowledge" group. For both the groups, price discounts strongly influenced perceived value.

It is felt that product experience is likely to affect the evaluation process. The sample was divided along the ownership. Information regarding cycling activity and self-reported knowledge for both the groups is shown in Table 4. Clearly, as the Table shows, the owners are more knowledgeable about the product compared to non-owners. The structural models for the two groups (owners and non-owners) were also tested. The results are shown in Table 5. The results were similar to those of the two knowledge groups. Brand name had a greater role on internal reference price for owners, store image a greater role on purchase intentions for non-owners and discounts had an equal role on value perceptions. It must be noted that the two knowledge groups and the two owner/not-owner groups had a fair amount of overlap (e.g., 62 out of 71 non-owners were also classified as not knowledgeable and 157 out 246 owners were classified as knowledgeable).

Importance of Predictor Variables

Very often, decisions taken by a retailer simultaneously influences (directly/indirectly) many other marketing variables. For example, price discounts offered by a retailer affect

TABLE 4
Owners versus Non-owners—Knowledge Scale

| | Owners (n = 246) | | Non-owners (n = 71) | | T-Value |
|--|------------------|-----------|---------------------|-----------|---------|
| | Mean | Std. Dev. | Mean | Std. Dev. | |
| Self Reported Product Knowledge Scale (Know) | 4.32 | 1.70 | 2.41 | 1.43 | 10.700 |
| Miles driven in a month (miles) | 74.44 | 138.81 | 4.69 | 21.05 | 74.95 |
| Number of Days of Cycling in a month (Days) | 10.44 | 10.12 | 0.70 | 2.62 | 34.91 |

TABLE 5

Model Estimates for Owners, High Knowledge Group, Non Owners and Low Knowledge Group

| Hypothesis | Path | | Hypothesized Size | Cycle Owners Group | | | High Level Knowledge Group | | | Non Owners Group | | | Low Level Knowledge Group | | |
|---|------|-----|-------------------|--------------------|--------------|----------------------------|----------------------------|------------------|--------------|---------------------------|--------------|-------|---------------------------|--|--|
| | From | To | | Cycle Owners Group | | High Level Knowledge Group | | Non Owners Group | | Low Level Knowledge Group | | | | | |
| | | | | Std. | Est. T-value | Std. | Est. T-value | Std. | Est. T-value | Std. | Est. T-value | | | | |
| 1 | SN | PSI | $\gamma_3 > 0$ | 0.64 | 13.22 | 0.79 | 16.14 | 0.63 | 6.78 | 0.77 | 15.29 | | | | |
| 2 | BN | BPQ | $\gamma_4 > 0$ | 0.55 | 8.50 | 0.74 | 13.75 | 0.18 | 1.53 | 0.28 | 3.62 | | | | |
| 3 | BN | IRP | $\gamma_2 > 0$ | 0.33 | 5.58 | 0.44 | 4.78 | -0.01 | -0.03 | 0.25 | 4.03 | | | | |
| 4 | BPQ | IRP | $\beta_1 > 0$ | 0.30 | 5.07 | 0.11 | 1.23 | 0.24 | 2.45 | 0.30 | 4.81 | | | | |
| 5 | BPQ | PSI | $\beta_2 > 0$ | 0.08 | 1.66 | 0.05 | 1.10 | 0.05 | 0.54 | 0.14 | 2.69 | | | | |
| 6 | DISC | IRP | $\gamma_1 < 0$ | -0.26 | -5.10 | -0.35 | -5.66 | -0.54 | -5.64 | -0.53 | -9.60 | | | | |
| 7 | DISC | BPQ | $\gamma_5 < 0$ | -0.04 | -0.62 | -0.02 | -0.29 | -0.17 | -1.48 | 0.00 | 0.02 | | | | |
| 8 | DISC | PV | $\gamma_6 > 0$ | 0.58 | 13.54 | 0.82 | 26.92 | 0.75 | 6.89 | 0.93 | 17.09 | | | | |
| 9 | IRP | PV | $\beta_3 > 0$ | 0.43 | 8.92 | 0.60 | 17.54 | 0.39 | 3.48 | 0.68 | 11.63 | | | | |
| 10 | BPQ | PV | $\beta_4 > 0$ | 0.31 | 6.59 | 0.25 | 7.89 | 0.30 | 3.21 | 0.10 | 2.02 | | | | |
| 11 | PSI | PI | $\beta_5 > 0$ | 0.07 | 1.36 | 0.04 | 0.61 | 0.31 | 3.22 | 0.21 | 3.18 | | | | |
| 12 | PV | PI | $\beta_6 > 0$ | 0.65 | 13.40 | 0.65 | 10.69 | 0.51 | 5.33 | 0.54 | 8.09 | | | | |
| Overall Statistics For Structural Equation: | | | | | | | | | | | | | | | |
| Squared Multiple Correlations | | | | | | | | | | | | | | | |
| IRP | | | | 0.36 | | | | 0.41 | | | | 0.39 | 0.48 | | |
| BPQ | | | | 0.23 | | | | 0.55 | | | | 0.06 | 0.08 | | |
| PSI | | | | 0.42 | | | | 0.63 | | | | 0.40 | 0.62 | | |
| PV | | | | 0.59 | | | | 0.88 | | | | 0.46 | 0.71 | | |
| PI | | | | 0.43 | | | | 0.43 | | | | 0.36 | 0.34 | | |
| Chi square statistic with 16 d.f. = | | | | 63.57 | | | | 102.59 | | | | 31.86 | 80.73 | | |
| Goodness of Fit Index = | | | | 0.94 | | | | 0.89 | | | | 0.91 | 0.89 | | |
| Adjusted Goodness of Fit Index = | | | | 0.87 | | | | 0.76 | | | | 0.79 | 0.77 | | |
| CFI | | | | 0.93 | | | | 0.89 | | | | 0.90 | 0.88 | | |
| Delta | | | | 0.91 | | | | 0.88 | | | | 0.83 | 0.86 | | |
| Rho | | | | 0.88 | | | | 0.82 | | | | 0.82 | 0.80 | | |

TABLE 6

Total Path Coefficients (direct + Indirect) for the Proposed Model

| <i>Full Sample (N = 309)</i> | | | | | | | |
|---------------------------------|-------------------------------|-----------|-----------|------------|------------|------------|-----------|
| <i>Dependent Constructs</i> | <i>Independent Constructs</i> | | | | | | |
| | <i>DISC</i> | <i>BN</i> | <i>SN</i> | <i>IRP</i> | <i>PBQ</i> | <i>PSI</i> | <i>PV</i> |
| IRP | -0.425 | 0.449 | — | — | 0.221 | | |
| PBQ | -0.033 | 0.548 | — | — | — | | |
| PSI | -0.033 | 0.047 | 0.781 | — | 0.086 | — | |
| PV | 0.610 | 0.402 | — | 0.627 | 0.357 | — | — |
| PI | 0.379 | 0.255 | 0.076 | 0.393 | 0.230 | 0.098 | 0.628 |

perceived brand/merchandise quality, internal reference price, perceived value and purchase intent. Furthermore, perceived brand quality and internal reference price affect perceived value. Therefore, it is useful to examine the total effects of a variable, not just the direct effect in understanding the nature of influence exerted by that variable (see Table 6). The total effect is the sum of direct and indirect effects. For example, price discount is hypothesized to have a direct, positive influence on perceived value. Price discount exerts negative influence on perceived value through its effect on perceived brand quality and internal reference price. While the direct effect of price discount on perceived value is 0.88 (very strong), the total effect of price discount on perceived value is only 0.610. The total effect of price discount is tempered because of its effect on perceived brand quality and internal reference price. The retailer, while trying to create value through price discounts, reduces its effect on value because of its negative effect on perceived brand quality and internal reference price. This again reinforces our earlier point that marketing variables need to be studied together to develop a better understanding of their effects on perceived value and purchase intention.

It is interesting to note that all the experimental variables, namely, brand name, price discount, and store name exert positive influence on purchase intent. Price discount is the most important variable for predicting purchase intent, followed by brand name and store name.

DISCUSSION AND CONCLUSIONS

This study incorporated the experimental variables: store name, brand name and price discounts directly in the model and thereby provided a way to assess their effects on the consumers' evaluation of the product. The results demonstrate that our model is effective in explaining buyers' response to these external stimuli and has important retail implications for improving store image and selecting products (also brands) by retail buyers. Correctly designing price promotion strategies is critical to managing price strategies, brand equity, and company's profitability.

reduce consumers' internal reference price and more likely to maintain the brand's image (Folkes and Wheat, 1995). Retailers may benefit from alternating these price promotions, some weeks using discounts, other weeks using rebates or coupons.

Price discounts have a negative effect on the buyers' internal reference price. Retailers typically want customers to perceive their products to have high reference prices so perceived savings are greater when a discount is offered. Thus, they should make sure that words such as "sale" or "special" are used on discounts so consumers believe that the discount is only temporary. Furthermore, past research has demonstrated that just the use of semantic phrases or indications of sales can further stimulate consumers' interest (Inman, McAlister, and Hoyer, 1990) and further enhance the effectiveness of these promotions. However, retailers need to be careful of what cues are used as past research demonstrates the effectiveness of these semantic cues (e.g., regular price/sale price; price vs. compare at/sale price) are contingent on the discount size and consumers' shopping interest level (search vs. evaluation) (see Grewal, Marmorstein, and Sharma, 1996).

Influencing Consumer Internal Reference Prices

Rajendran and Tellis (1994) have argued that internal reference price may be influenced by consumers' recall of prices from memory for frequently bought items. However, for durable items, such as one used in this study (bicycle), internal reference price may be more heavily influenced by advertised prices and prevailing market prices. It is important for managers to understand the reference points/ranges used by consumers in designing price promotions.

Contrary to our conceptual model, the study did not find a significant relationship between price discounts and perceived brand quality. While one reason for this finding may be that brand image and store image may off-set the adverse effect of price discounts another explanation may involve the temporal effects of price promotions. We argue that only frequent price promotions will adversely affect a brand's perceived quality. Future research should address the issue of whether repeated exposures to price discounts reduce brand quality and equity. An important conclusion of this research is that carefully managed price discounts will positively influence perceived value without any adverse effect on brand's perceived quality, thus enabling retailers and manufacturers to successfully deliver high value.

High vs. Low Knowledge Consumers

It is interesting to note that high knowledge consumers use brand name to a greater degree to assess perceived quality than do low knowledge consumers. This finding would be consistent with the research by Rao and Sieben (1992) suggesting that high knowledge consumers are likely to use extrinsic cues if and when they feel these cues are accurate and reliable indicators of high quality. Clearly, in the bicycle marketplace "Cannondale" is

considered a premium brand. Thus, knowledgeable consumers are using appropriate signals to assess the brand's quality.

It is instructive to note that price discount influenced internal reference price to a greater degree for the low knowledge group than for the high knowledge group. This explains why for the low knowledge group price discount did not produce as strong an effect on perceived value and purchase intent. Interestingly, compared to low knowledgeable group, high knowledge group used less information to make judgments. In other words, low knowledge group was swayed by all the information provided to them. Retailers must tailor their promotion strategies to differentially affect knowledge groups. Retailers promoting a new brand for which consumers are likely to have a low level of knowledge need to also highlight the store cues. They need to further develop and highlight these store-related cues (e.g., store name, location, return-policies) in their promotional flyers.

Substantive Findings

This study makes several important theoretical contributions. First, it has been shown both conceptually and empirically that internal reference price is influenced by price discounts, brand's perceived quality, and brand name. Also, the direct and indirect effects of price discounts, brand name and store name explained 41% of the variance in purchase intention. Therefore, although these three cues are not the only cues consumers are likely to use in assessing intentions to buy, they are certainly key variables that should be included by retailers when examining the effectiveness of their merchandising strategy. Brand name and price discounts explain 85% of the variation in perceived value. Retailers, therefore, must pay particular attention to merchandise selection and price discount strategies as they play an important role in shaping consumers' perceptions of value.

Limitations and Avenues for Future Research

In conclusion, although our study provides some interesting insights on consumers' responses to price promotions, brand name and store name, its findings should be cross-validated with a non-student population and diverse product categories. Contrary to our conceptual model, the study did not find a significant relationship between price discounts and perceived brand quality. While one reason for this finding may be that brand image may off-set the adverse effect of price discounts another explanation may involve the temporal effects of price promotions. We argue that only frequent price promotions will adversely affect a brand's perceived quality. Future research should address the issue of whether repeated exposures to price discounts reduce brand quality and equity.

An important conclusion of this research is that carefully managed price discounts will positively influence perceived value without any adverse effect on brand's perceived quality, thus enabling retailers and manufacturers to successfully deliver high value. In this study, perceived value was treated as one latent construct. However, recent research (Grewal, Monroe, and Krishnan, 1998) suggests that perceived value has two components:

transaction value and acquisition value. A particularly interesting issue for future research is to understand the effects of external marketing stimuli on the two value components. The model seems to hold well for two boundary conditions (knowledge and ownership). Additional measurement items should be developed for the knowledge construct to enable one to expand the boundary conditions of the proposed model.

Past research suggests that merchandise quality, store environment, and service quality influence store image (Baker, Grewal, and Parasuraman, 1994). Our research did not capture all aspects of store image and therefore the results are limited to the study's context. The influence of store image in the consumer decision-making process established in this study suggests that future research examining the antecedents of product purchase intentions include store name and/or store image. Further, the model tested in this paper could be extended to other products. For example, would store image have similar effects (in conjunction with value) for convenience products, or for services? It could be argued that store image may be even more important in the purchase of a service because the service encounter takes place in the "store", and thus includes elements of the store image, such as the physical environment. Also, all elements of store image were not captured in this study. Therefore, future research could include more aspects of this construct.

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NOTE

1. It must be noted that if the discount was manipulated via a constant selling price and different levels of advertised reference price, a higher level of discount (or advertised reference price) is likely to result in a higher internal reference price.

REFERENCES

- Anderson, James C. (1987). "An Approach For Confirmatory Measurement and Structural Equation Modeling of Organizational Properties," *Management Science*, **33** (4): 525-541.
- Anderson, James C. and David W. Gerbing. (1988). "Structural Equation Modeling in Practice: A Review and Recommended Two Step Approach," *Psychological Bulletin*, **103** (3): 411-423.
- Bagozzi, R.P. and Y. Yi. (1988). "On the Evaluation of Structural Equation Models," *Journal of the Academy of Marketing Science*, **16** (Spring): 74-94.
- Baker, Julie, Dhruv Grewal, and A. Parasuraman. (1994). "The Influence of Store Environment on Quality Inferences and Store Image," *Journal of the Academy of Marketing Science*, **22** (4): 328-339.
- Bearden, William O., Donald R. Lichtenstein, and Jesse E. Teel. (1984). "Comparison Price, Coupon, and Brand Effects on Consumer Reactions to Retail Newspaper Advertisements," *Journal of Retailing*, **60** (Summer): 11-36.

- Keaveney, Susan M. and Kenneth A. Hunt. (1992). "Conceptualization and Operationalization of Retail Store Image: A Case of Rival Middle-Level Theories," *Journal of the Academy of Marketing Science*, **20** (2): 165-175.
- Krishna, Aradhna. (1991). "Effect of Dealing Patterns on Consumer Perceptions of Deal Frequency and Willingness to Pay," *Journal of Marketing Research*, **28** (November): 441-451.
- Laroche, Michel, Chankon Kim, and Lianxi Zhou. (1996). "Brand Familiarity and Confidence Determinants of Purchase Intention: An Empirical Test in a Multiple Brand Context," *Journal of Business Research*, **37**: 115-120.
- Lichtenstein, Donald R. and William O. Bearden. (1989). "Contextual Influences on Perceptions of Merchants-Supplied Reference Prices," *Journal of Consumer Research*, **15** (September): 55-66.
- Mazurksy, David and Jacob Jacoby. (1986). "Exploring the Development of Store Images," *Journal of Retailing*, **62** (2): 145-165.
- Monroe, Kent B., Dhruv Grewal, and Larry D. Compeau. (1991). "The Concept of Reference Prices: Theoretical Justifications and Research Issues," working paper, University of Illinois, Champaign-Urbana, IL.
- Murphy, Ian P. (1997). "Interactive Marketing News," *Marketing News*, (August 4): 10.
- Nevin, J.R. and Michael Houston. (1980). "Images as a Component of Attractiveness to Intra-Urban Shopping Areas," *Journal of Retailing*, **56** (Spring): 77-93.
- Olshavsky, Richard. (1985) "Perceived Quality in Consumer Decision-Making: An Integrated Theoretical Perspective." Pp. 267-296 in J. Jacoby and J. Olson (eds.), *Perceived Quality*. Lexington, MA: Lexington Books.
- Olson, Jerry C. and Jacob Jacoby. (1977). "Consumer Response to Price: An Attitudinal, Information Processing Perspective." Pp. 73-86 in Yoram Wind and Marshall G. Grenberg (eds.), *Moving Ahead With Attitude Research*. Chicago: American Marketing Association.
- Rajendran K.N. and Gerard J. Tellis. (1994). "Contextual and Temporal Components of Reference Price," *Journal of Marketing*, **58** (January): 22-34.
- Rao, Akshay R. and Kent B. Monroe. (1988). "The Moderating Effect of Prior Knowledge on Cue Utilization in Product Evaluations," *Journal of Consumer Research*, **15** (September): 253-264.
- _____. (1989). "The Effect of Price, Brand Name, and Store Name on Buyers' Perceptions of Product Quality: An Integrative Review," *Journal of Marketing Research*, **26** (August): 351-357.
- Rao, Akshay R. and Wanda Sieben. (1992). "The Effect of Prior Knowledge on Price Acceptability and the Type of Information Examined," *Journal of Consumer Research*, **19** (September): 256-270.
- Richardson, Paul S., Alan S. Dick, and Arun K. Jain. (1994). "Extrinsic and Intrinsic Cue Effects on Perceptions of Store Brand Quality," *Journal of Marketing*, **58** (October): 28-30.
- Urbany, Joel E., William O. Bearden, and Dan C. Weilbaker. (1988). "The Effect of Plausible and Exaggerated Reference Prices on Consumer Perceptions and Price Search," *Journal of Consumer Research*, **15** (June): 95-110.
- Walker, Chip. (1991). "What's in a Name?" *Supermarket Business*, May 01, **46** (5): 79.
- Winer, Russell S. (1986). "A Reference Price Model of Brand Choice for Frequently Purchased Products," *Journal of Consumer Research*, **13** (September): 250-256.
- Zeithaml, Valarie A. (1988). "Consumer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence," *Journal of Marketing*, **52** (July): 2-22.
- Zeithaml, Valarie A. and Karen L. Graham. (1983). "The Accuracy of Reported Reference Prices for Professional Services." Pp. 607-611 in Richard P. Bagozzi and Alice M. Tybouts (eds.), *Advances in Consumer Research*, Vol. 10. Association for Consumer Research.
- Zimmer, Mary R. and Linda L. Golden. (1988). "Impressions of Retail Stores: A Content Analysis of Consumer Images," *Journal of Retailing*, **64** (Fall): 265-293.