

GROCERY STORE PRICING AND ITS EFFECT ON INITIAL AND ONGOING STORE CHOICE

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This article details the determinant bundle of store choice and the role of price as one of the major components in initial and ongoing store selection. Through a literature review and empirical research, the author confirms the results of over forty years of research into consumer price knowledge but questions internal reference price (IRP) theory. Implications for management are discussed.

Consumers in EDLP, discount, HILO, and HILO/Value stores were randomly surveyed with unaided responses noted for shopper type and reasons for initial and ongoing store choice. The results show that, while most shoppers may have a market basket reservation price, they do not have a specific sense of product price or internal reference price when they shop. This lack of IRP may also affect initial and ongoing store choice.

INTRODUCTION

For initial store choice, regardless of markets, cultures, and demographics, "locational convenience and low prices are the top-ranked determinant attributes" (Arnold, Oum, and Tigert 1983, p.157). In another report, respondents from *Drug Store News* magazine ranked eleven store choice factors. Pricing was listed as third by the respondents, store location near home or work was number one, and knowledgeable staff ranked second (Maline 1995). There is strong evidence that there is a group of loyal shoppers that routinely select their grocery store based strictly on price. There is also evidence that there are different classes of shoppers, who may have considered price at some point, but now are loyal to a given store based on some bundle of store choice determinants of which price is only one component (Saporito 1995).

Much has been written in the areas of store choice and price perception relative to grocery product selection. However, what do we really know about why consumers continue to choose one store over another and what role price plays in the ongoing choice decision? This paper will look at consumer price perception and how it affects store loyalty. The review

and new empirical research conducted for this paper will attempt to determine whether a sense of price not the actual price or price range is the basis of the store choice pricing determinant and whether it combines with other determinants for ongoing loyalty. Implications for management will be discussed, as current beliefs of grocery executives may need to be altered based on a chain's pricing policy.

Additional factors for consideration are the other specific determinants in the store choice bundle and their possible influence on the pricing determinant. Internal and external reference price theory, adaptation-level theory, range theory, socio-economic factors, local competition, store pricing formats (HILO, HILO/Value, EDLP, and discount), and time utility all combine with shopper types to affect individual shopper behavior of where to shop. While not studied, the use of UPC pricing formats may mitigate price checking and comparisons as most products are no longer marked with their price and on-shelf pricing may be hard to read or hard to find especially in crowded categories with multiple choices and with deliberate merchant intervention (Miyazaki, Sprott and Manning 2000). A literature review is necessary to organize direction to these and other considerations and to help guide the empirical research effort.

Four Hypotheses Are Presented

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- H₁:** Consumers know the exact price of products they buy on a regular basis.
- H₂:** Consumers use their internal reference price as a primary basis for price knowledge.
- H₃:** Consumers initially select their grocery store based primarily on location and not price.
- H₄:** Consumers use store pricing as a major determinant in ongoing store loyalty.

LITERATURE REVIEW

Many shoppers may have developed a habit of ongoing price search from their initial store choice effort, which may have occurred years ago. While these consumers may not shop competitively, they will be somehow aware of current price differentials between stores (Urbany and Dickson 1996). However, in terms of actual customer switching or opportunistic shopping, up to 15 percent of shoppers actually cross-shop for specials (Urbany, Dickson and Sawyer 2000). There are other studies that attest to the importance consumers place on pricing in initially choosing and then continuing to shop at a given store (Dickson and Sawyer 1990; Woodside and Trappey 1992; Bell, Ho and Tang 1998; Bell and Lattin 1998). Some similar results were seen in conducting research for this paper. In contrast, in doing the research for this paper, while low or competitive pricing was revealed as one of two major determinants in initial store choice, it was only one of many determinants bundled into a reason for ongoing store loyalty.

Exact Price Knowledge

Retail grocery executives overestimate the number of consumers who switch stores due to price specials. In more recent efforts, researchers find that executives "still tend to overestimate aggregate price comparison behavior and cross-store shopping" and "at the same time, we also find that managers simultaneously underestimate consumer newspaper readership, in-store search for specials and stockpiling" (Urbany, Dickson, and Sawyer 2000, p. 243). As opposed to prior efforts, this research found that executives were fairly accurate as to the percentage of consumers who are loyal customers versus those who are multiple store shoppers in the total market. In the process of doing empirical

research for this paper, it was found that grocery executives still believe that consumers know the exact price of a high number of frequently purchased products.

However, research by many others shows that 8-62.5 percent of consumers know the actual prices of products, depending on the product category, even for those products that they buy on a regular weekly basis. These data come from a review and report on the results of sixteen separate studies conducted by others. The studies indicate that, on average, only 30-55 percent of consumers know the actual prices. Decades of research support these findings, confirming that only some consumers know exact prices (Dickson and Sawyer 1990; Monroe and Lee 1999). As such, consumers may be using some prior pricing information which they subconsciously draw on when making a product decision, such as whether it is expensive, competitive, or a deal. Consumers' internal reference price may have been formed and affected by some prior experience or outside stimulus such as television advertising, a store flyer, or word-of-mouth of a friend (Monroe and Lee 1999). Research conducted for this paper supports these beliefs but shows some lower numbers, as results depend on each product in question and the category each is in (such as fresh bakery or canned fruit).

Store Loyalty

For ongoing store loyalty, other determinants interact with the pricing determinant to form a total bundle or separate smaller bundles of choice factors. This phenomenon was measured in a comprehensive store loyalty intentions model. Here, shopper perceptions were measured in multiple constructs, which act as groupings of specific determinants. Relative price (versus price of similar products at other stores), sales promotion, and perceived value were three of the constructs. Other non-price related construct groupings of store appearance, operations, service, and merchandise quality and breadth were also included (Sirohi, McLaughlin and Wittrink 1998). Other studies touch on the effects of combinations of specific determinants such as price or competitive pricing, quality of goods carried, width and breadth of lines, brands versus private label, shopping ease (wide aisles, fast check-out, easy-to-reach shelves), store format, store atmosphere or shopping experience,

quality of the service personnel, food freshness and store cleanliness (Arnold, Oum and Tigert 1983; Woodside and Trappey 1992; Bell, Ho and Tang 1998). However, for store loyalty intention, quality-of-service and dollar value were rated as first and second with “no direct price impact on store loyalty intention (and only a modest indirect price effect)” (Sirohi, McLaughlin and Witrink 1998, p. 233).

Empirical findings on store loyalty reveal the importance of location in initiating that loyalty. The data indicate that, while the figures have dropped in recent years, consumers exhibit a 60 percent loyalty factor and spend, on average, about twice as much as other kinds of shoppers in their first choice store. This should act as additional encouragement to retailers to think more strategically on how to influence that first choice decision and to build repeat purchase (Knox and Denison 2000). Socio-demographic factors will also come into play, such as what income/education level one has attained and whether one has a car and is capable of driving. Such variables can be more important than what competitive stores offer, especially in pricing strategies and individual local store promotion (Hoch et al. 1995). In fact, some research points to the fact that the poor actually pay more for their groceries because of the lack of inner-city chain stores. Non-chains force the poor to pay an increase of 14-18 percent or more for their market basket of groceries versus the suburbs, simply because of location and their inability to reach stores with cheaper prices (Chung and Myers 1999).

Recently, attention has been paid to the value concept as a way that consumers may bundle determinants into a single choice package. Here, for an overall value effect, price is balanced by other things, which the store offers such as ambience and helpful staff. Executives see store value as the engine that links customer loyalty to profits. Customers who have shopped a store for a long period will get greater value from it and are “less price sensitive” (Reichheld 1996, p. 49). However, the most visible way to retain these customers appears to be in the use of the frequent buyer card and by offering multiple in-store discounts within product categories (brand versus brand or brand versus private label). The card is a way to reward the frequent customer, enhance the in-store specials, and to help with the customer’s sense of at least competitive pricing versus the store’s competition (Reichheld

1996).

Management of customer value or loyalty management has received much attention of late as a valuable component for continued retail success. Many believe that value should be more important to a retailer than quality alone since “value is quality that the consumer can afford” (Sinha and DeSarbo 1998, p. 236). This is a perception that can be developed, nurtured, and expanded upon, as seen with some grocery chains like Publics, Shaw’s, and Harris Teeter. While maintaining competitive prices, these chains attempt to add to the quality of their offerings by improving the shopping experience through better ambience, presentations, and service. However, before this management process can begin, a grocery chain must determine what constitutes the value construct for its consumers, as it can be multi-dimensional with many heterogeneous considerations. Some believe that a customer’s perceived value is simply a trade-off between price and quality. Others contend it is much more complex and may be defined by numerous other factors such as demographics, perceived benefits, quantities, store type, and the dimensions of service, products carried, and ambience (Sinha and DeSarbo 1998). Different classes of shoppers can have one, many or all aspects weighing in on their value perception and continued loyalty. Consumer value perceptions may be a way to explain the role of price to ongoing store loyalty, where consumers have a sense of store prices, shop for specials within categories at the store, and combine this activity with their overall opinion of store value as evidenced by their market basket.

Determinants Of Store Choice And Store Formats

In the *Drug Store News* survey, consumers “value their time as much as – or more than – their money (within reason)” (Maline 1995, p. 7). Consumer respondents, in another survey, listed a combination of determinants as a clean environment, helpful employees, speedy checkout, quality products and low prices. The report notes that no one chain delivers on all of those choice components and that lower rated chains got business because they were conveniently located. Stores that were at the top of the choice list had employees who were courteous, with fast checkout and clear aisles, but not necessarily low prices (Consumer Reports 2000). However, in a

review of the viability of retail attraction models and their ability to predict store choice based on numerous variables, one finds that it is practically impossible to consider all the store choice variables that may apply due to problems such as measurement difficulty and variability resulting in misspecification error correlated to location (Rust and Donthu 1995).

Becker's (1965) store choice model, derived from household economics, is still held by many, where "retail demand elasticity may be related to age, education, income, frequency of product purchase, car ownership, and time of week" (Brinkley and Conner 1998, p. 275) and household differences in price search may affect store selection. For other researchers, factors of "enjoyment, income, age, the price of search time, presence of young and teenage children, daily use of a microwave oven, and the percentage of a market basket filled with brand items" (Kolodinsky 1990, p. 89) are critical to explaining variations in information search and time spent.

Does this information help with understanding ongoing consumer loyalty for any one given chain? This is an important question, especially where many suburban locations can have four or five different chain stores, locally situated. Researchers continue to show that these stores are usually found within a primary two-to-five-mile grocery store trading radius of a shopper's home (Huff 1964; Knox and Denison 2000). To others, this distance is consumer-defined as the store with the most convenient location or it is researcher-defined as the store with nearby or distant customers, answering the question "please name the supermarket closest to your home" (Woodside and Trappey, 2001). The selections may also include numerous category competitors like the Wal-Mart Super Store or a Sam's Club and limited-offering specialty food stores. While segmentation and the numbers aggregate for specific store choice, does this explain the primary store selection process and shopping habits of the individual consumer resulting in her or his continuing store loyalty?

Intuitively, if store selection and loyalty were based purely on price, Sam's and Wal-Mart should have the 25-30 percent of the market that is considered price sensitive (Zellner 1998) and the supermarket chains should continue to hold the bulk of the rest of the market. Actually, if price were the main selector, then

the discounters would have even larger shares than suggested.

However, if one compares market share numbers for the \$440 billion market (Taylor 1999), the 25-30 percent discounter share numbers do not hold true. It must be that some shoppers who consider themselves price shoppers actually compare and choose on the basis of price and something else such as store assortment or quality of goods carried. EDLP stores claim that they have the lowest prices everyday; HILO stores stress weekly specials (Hoch, Dreze and Purk 1994). A further distinction would see HILO/Value stores as those retailers that stress weekly price savings in conjunction with some other major store-delivered service for a better shopping experience which includes store appearance in conjunction with wide selection, special departments and higher quality employees yielding a greater value position. In the research done for this paper, shoppers noted such combinations in making their choice of where to shop. In verbatim responses, they noted multiple reasons for why they continued to shop at a given store, even though the interviewers asked them for their one main reason for shopping where they did.

Search Behavior and Reference Price Theory

Since it has been proven time and again over the past 40 years that consumers do not know the exact price of the products they regularly buy, how then do they use price in store choice? Did they develop, as some suggest, an internal reference price for each product in their initial choice and simply return to that as a checkpoint, altering it from external cues such as advertising? While that may seem possible, how would they practically do that since they buy many multiple of goods from week to week? Are they using their internal reference price on each item or is it possible that consumers really no longer use specific prices? Rather, they develop a sense of category and store reference price for the store to which they choose to stay loyal.

Even if price is only one aspect of the determinant mix, the various theories of search behavior and choice still do not explain how consumers use price in the decision process, especially when they do not know exact prices, and where some shoppers either

do not know the price at all or where their guess is considerably outside of an acceptable range of price knowledge. It seems that one must look closer at consumers' processes of developing and using a reference price as their key to price consideration. One way a price becomes a reference price is when consumers see and internalize the price as displayed on a shelf, in an advertisement, through special in-store display, or other means of communication. This displayed product price is an external reference price (ERP) and it may be compared to other products in the process of internalization. Another way of developing a reference price would be through the consumers' past experience with the product or product category and as retained in their conscious or subconscious memory. This is an internal reference price. For buyers to make a selection, using price in part or in total, they must internalize the ERP to form an IRP or draw on their existing IRP to effect a decision (Monroe 1990; Monroe and Lee 1999).

To better understand the theories behind this process, one should begin with an application of Helson's (1964) adaptation-level theory integrated into, and applied to, a theory of behavioral pricing for reference price formation. The "internal reference price has been hypothesized to be an adaptation level that depends on recent price experiences" and where "consumers compare a market price to an internal reference price when judging the attractiveness of the market price" (Janiszewski and Lichtenstein 1999, p. 353). Thaler (1985) posited that this process results in transaction utility, where the actual price paid is compared to its internal reference price by the buyers and deemed acceptable by them before purchase. The higher the utility, the closer the actual price is to the IRP. In addition, one should consider Volkman's (1951) range theory, where consumers "use the range of remembered price experiences to set a lower and upper bound of price expectations, and that the attractiveness of a market price is a function of its relative location within this range" (Janiszewski and Lichtenstein 1999, p. 354). The Weber-Fechner law (for consumer-acceptable product price ranges as thresholds and for promotional campaign response) and assimilation-contrast theory (for consumer response to prices inside and outside a latitude of acceptance) must also be considered in this discussion (Devinney 1988).

Through price anchoring, consumers are likely to change their internal reference price upward when exposed to a higher-than-IRP-advertised price (ERP), if they found the new price to be believable. The IRP itself may not be an exact price, but recalled as a price range as an acceptable internal standard, with high/low anchors (Urbany, Bearden, and Weilbaker 1988). Since it has been confirmed that consumers do not remember exact prices, it is quite likely that they have developed an IRP range for a product class and use that range each time they consider purchasing a brand or private labeled product within a certain product group. This is termed an expected or anticipated price range by others where consumers "contrast observed prices with their acceptable range" (Winer 1986, p. 251) at the point of purchase.

However, how does one explain supposedly price- or value-conscious consumers who have no idea of the prices of items that they buy regularly? In other words, based on studies that have shown that consumers do not remember prices even after having just purchased the product, would there not be some shoppers who cannot present even a price perception or price range for their regularly purchased products? If such cases exist, then would not their reservation price be used instead of IRP when considering purchase (or perhaps price is no longer checked after initial purchase for low-involvement, routine problem solving, relatively low-priced, regularly purchased, convenience products)? Also, in other non-IRP instances, it is likely that consumers will check prices for all the products in the category? Then do they make their choice based on their reservation price and the level of quality desired for the prices charged for the alternatives? If consumers' reservation price for steak is \$5 per pound, and all they can find are private label or branded steaks ranging in price from \$7-9 per pound (aside from looking for substitute goods such as chicken), these consumers may not purchase the steak. Even though they can develop an IRP for the products offered at point-of-purchase, it exceeds their reservation price and may inhibit purchase. In how many cases do consumers shop for groceries with no IRP but with a definite reservation price?

In operationalizing the reference price construct, one would find that there are at least eight concepts for the internal criterion of reference price. While most would agree that a reference price is "a standard

against which observed prices are compared” (Devinney 1988, p. 48), other notable authors have listed reference price as meaning a fair or just price, a price frequently changed, the last price paid, reservation price/upper threshold limit, lower threshold, price of the brand usually bought, average of price charged for similar goods, and expected future price. From these conceptual discussions have come “really five different, independent operationalizations of the concept of reference price: just price, reservation price, lowest acceptable price, expected price, perceived price (Devinney 1988, p. 49). While it is beyond the scope of this paper to analyze each of these concepts, missing from the discussion is a consideration of operationalization of no internal reference price. Is this where reservation price is applied and therefore covers the no internal reference price issue; or is it possible that some consumers only internalize a price when ready to purchase and they are in the category? Is it then that shoppers develop a reference price from the comparison and decide which brand to purchase, promptly erasing the price from internalization and retention after purchase? Perhaps the empirical efforts for this paper can shed some further light on this no-IRP aspect of consumer purchase. Additionally, can reference price theory also be applied to initial and ongoing store choice? It would seem from the discussion above that such choices could have a reference price, as a store is a product, providing a combination of service and goods to the customer, with the ability to communicate pricing information to shoppers for their comparison and internalization.

PRIMARY RESEARCH AND METHODOLOGY

It has been shown that price recall accuracy is significantly affected by research design. As a result, this research effort considered a monetary incentive to respondents, size of response task, and an opportunity for respondents to give a “don’t know” response. Unfortunately, since the research was conducted on a small budget, incentives were not possible. However, the interviewers were students who used their student status as part of their appeal to the consumers’ altruism, regardless of demographics. Task size and

response alternatives were controlled, as directed by Estelami and Lehmann (2001).

A major metropolitan area in the southeast was selected for consumer study. With the help of local grocery store management, a list of the top selling 53 products was developed (Exhibit 1) by national or store brand. These are the products to which management felt shoppers were the most price-sensitive competitively and for the price per se. This was based on management’s belief that these products were the ones that consumers bought on a regular basis within key product categories. As such, customers would know the exact product prices.

Marketing research students at a local college were recruited and trained to conduct the random sample telephone survey, which was structured to obtain information from the primary household shopper. Pre-testing of the questionnaire showed that many respondents had difficulty in answering more than ten product price association questions. In addition, based on the pre-test, if a respondent knew or felt confident in guessing at more than six of the ten product prices, she or he would tend to know a large portion of the 53 prices. This was also confirmed in a focus group. Product price association response was not affected by the addition of other types of questions, as the respondents’ telephone disconnects and/or refusals were minimal in the pre-test and in the actual survey. Total time on the telephone was between five to ten minutes per respondent, with ten additional shopping questions and four demographic questions asked and answered within that time period.

As a crosscheck to the management-supplied prices, store checks were conducted on all 53 products in the four format stores, with the tallies noted at the top of each column (Exhibit 1). In these checks, there were two types of HILO stores seen: regular and value. Regular HILO format stores looked similar to discount and EDLP stores, but differing in price, product width and breadth assortment and personal services, such as offering pre-cooked or partially cooked meal replacements. HILO/Value stores design in a more pleasurable shopping experience by combining the traditional HILO advantages with the freshness of a farmer’s market and a food emporium/meal replacement atmosphere. Generally, it was found that EDLP stores were 10 percent

cheaper on their shelf price than HILO and HILO/Value stores. HILO and HILO/Value stores were 20-30 percent higher than discount stores. Most HILO and HILO/Value stores were competitive within this format in their branded and private label products at shelf price.

Based on focus group input, the survey was prepared and tested by the student interviewers with a sample drawn randomly from a computerized telephone list of consumer households within the city region. Students contacted consumers by telephone using telephone calling cards. Before proceeding with the interview, they confirmed that they were talking to the primary shopper, who was typically female.

RESULTS

Applying the confidence interval approach, two hundred and sixty-five usable primary shopper returns were processed for a response rate of 69 percent of the 384 random samples desired. The usable total was derived from data collected by six student interviewer groups of four to six members per group who captured from 30 to 50 consumer responses per group. Data were entered onto numbered survey forms and inputted into a master data matrix using Microsoft Excel, which was then inputted into and converted by SPSS, Version 10, for analysis. Verbatims were captured and reported separately, with each group presenting unaided responses segmented by major subject such as location, which included "close to home", "near my home" or the likely,

for tabulation as a location response. The 93 student surveys were processed and tabulated separately.

Results of the unaided random consumer sample show, that while location and/or location convenience and price were reasons given for initial store choice, there are other reasons for selection, such as store layout, breadth of line, store atmosphere, shopping ease, personnel/service, and quality/freshness. Interviewers were not able to probe for the meaning of convenience but as was seen in the focus group and student surveys, convenience can mean convenient location or convenience in store amenities. When primary shoppers were asked unaided what is the main reason they now shop at the chosen location (after initial selection), the HILO/Value sample respondents

presented 33.6 percent for location, 28.3 percent for convenience, and 11.5 percent for cleanliness. Not surprisingly, price became a determinant for the total sample, which showed 29.2 percent for location, 22.5 percent for convenience, and 21.6 percent for price. When all cells are combined for the question of what was the initial main reason for choosing the grocery store at which they now shop, the physical location factor at 45.3 percent of the total is the number one determinant of initial store choice. Convenience is 13.6 percent of the total. If one combines these factors, but uses only that percentage of respondents likely to interchange convenience with location as determined below, then the results show that 49 percent of respondents see location as the main determinant in initial store choice.

In reviewing the four hypotheses, the results show that: As to H_1 : Consumers know the exact price of products they buy on a regular basis: This hypothesis is not supported by the data. In fact, few consumers knew the exact price of grocery products supposedly purchased on a regular basis. These data concur with over 40 years of similar research where consumers could not recall the prices of recently purchased products (Monroe and Lee 1999).

As to H_2 : Consumers use their internal reference price as a primary basis for price knowledge: This hypothesis is also not supported by the data, since a large number of respondents did not know the price of the products they purchased on a regular basis. While H_2 is not supported, it is possible that if the wider definition of reference price is used, then this hypothesis could be supported. Here, one would see consumers coming into the category and comparing alternative product prices, developing a reference price, and then deciding on the product that best fits their needs. However, the interaction of perceived quality, the effect of higher priced products, and P.O.P. displays and packaging may also interact with the establishment of a reference price under the instantaneous category review circumstances. In considering adaptation-level theory and its application to reference pricing, consumers will somehow adapt to focal, contextual, and organic cues. Since it has been shown that shoppers are not good processors of information, often developing heuristic short cuts, supposed reference price response at category point-of-purchase by shoppers with no prior price

knowledge may be misleading (Monroe 1990).

As to H₃: Consumers initially select their grocery store based primarily on location and not price: This hypothesis is supported in initial store choice behavior, but it is not supported for ongoing store loyalty. The data consistently show that store location and price consistently came up number one and number two choices in initial store choice. For ongoing choice, however, shoppers listed a number of reasons out of a bundle of determinants used for store choice. Price, in fact, was not always at the top of the list.

As to H₄: Consumers use store pricing as a major determinant in ongoing store loyalty: This hypothesis is not supported as respondents indicated that they apply a bundle of determinants, with the exception of price shoppers, in deciding whether to continue to shop or not shop at a given location. As to price considerations, per se, over 40 percent of HILO/Value shoppers would not consider changing their current store choice unless prices increased by 20 percent or more. For the entire sample, 32 percent of shoppers would not change unless prices increased by 20 percent or more.

DISCUSSION

The literature review reveals that consumers, when confronted with a complex purchasing decision, will group multiple features into a higher single determinant. As such, the determinants for store choice are presented as five or six key points. While there is agreement with some of these determinants, no two authors list the same choice items. For this study, factors were determined based on focus group response and the determinant list from various articles. However, the factors were not read to respondents. The unaided survey response indicated that location, convenience, price, selection, service/friendliness, selection and assortment, quality, freshness, parental/friend recommendation and cleanliness are all major factors. For initial store choice, location, convenience, price/loyalty cards, parents, cleanliness and value were most mentioned.

While location is critical for consumers, it is only a first step in a consumer decision process that requires search of the retail options and formats available within the PTA that best match the consumers' needs.

Once so ordered, consumers then apply the determinant bundle to choose the primary store where they will spend the bulk, but not necessarily all, of their grocery shopping dollars. In some cases, location convenience continues to be a major consideration. In others, multiple determinants are applied. Once applied, however, there is little reason to switch unless consumers are price shoppers or those with the time to search for values elsewhere, such as with category-specific shoppers. In addition, with certain consumers, grocery shopping does not constitute their entire food budget as some consumer groups include meal replacement (take-out or restaurant options) as part of their weekly grocery or restaurant alternative consideration.

One must be careful in not rushing to judgment here because consumers say they have no knowledge of the price of a product. Reference price and price range estimation may be expressed in non-specific terms such as "too expensive" or "a real bargain" (Monroe and Lee 1999, p.208) and this could be the basis for the shoppers verbal IRP, IRP range, or IRP perception. Using implicit memory, consumers may be following knowing responses that "are based on a sense of familiarity that reflect the result of automatic or non-conscious processing" (Monroe and Lee 1999, p.216).

CONCLUSIONS

This study supported prior research, confirming that between 13.0 to 76.9 percent of primary shoppers do not know the exact price, depending on the category, of products purchased on a regular basis. Additionally, 30 percent or more of the sample did not know the exact price of 55 percent (29 out of 53) of the so-called known product prices. However, a major finding here is that many respondents not only did not know the exact price, they also could not supply a price range for the product. In other words, they could not guess at a price and gave the answer that they did not know the price. A number of others did not know the price or the range, but said they could guess at the price. In light of Estelami and Lehmann's (2001) efforts, not having the "don't know" measure would have skewed the findings and affected the measurement error. Additionally, they

found that price memory varies across product categories, which was supported by this research. Many of those that said they knew the price or could guess at the price also gave incorrect answers and were not within an acceptable range to qualify as price perception. Prior studies have shown that researchers would accept a price awareness or perception range at the low end of +/-6 percent to a high of +/-19.45 percent of the exact price (Monroe and Lee 1999). Some researchers may question that any consumer who misses a price by almost 20 percent doesn't really have price awareness. More needs to be done here as to what constitutes an acceptable range.

Based on the results of this study, it would appear that consumers do not have price awareness and therefore do not have an internal reference price on most products when shopping. While some researchers have cautioned academics not to rule out price knowledge, it appears that in this study consumers do not have an IRP range or perception and may rely on external reference price in category comparisons at the point of purchase when ready to buy.

Location is a key determinant in store choice. However, it is not the only determinant; and it does not predict or guarantee individual store choice, especially in a dense retail assortment within a consumer's primary trading area. Survey data show that while over twenty percent of shoppers chose EDLP stores, over 55 percent chose HILO stores, with the balance choosing discount, warehouse or specialty formats. Having made their choice, 20 percent of shoppers would need a price increase at their store of 11-15 percent before they would switch. Additionally, between 32 percent of the total sample and 40 percent of the HILO sample would need a 20 percent or higher overall price increase in their store's shopping costs before switching to a competitor. If quality changed (or secondarily, convenience), shoppers would also consider switching to a competitor.

It appears that individual store choice is a two step process: first, a consumer decides on how far to go to shop; second, once the distance and/or time has been decided upon, then choosing which determinant bundle will be used to pick the best format is applied. Under these specifications, it would matter little as to what a grocery chain has to say to influence a shopper unless they are in the consumer's primary trading area. If the

chain is in the area, then the chain's external and in-store communication will help influence a consumer, especially a first time shopper, who gets enough information in this way to help decide on which store to visit.

Management Implications

Based on the content of the practitioner literature, grocery store management has long had a sense of the role of location and the other components in the local store choice determinant bundle. In understanding this, they have applied it to store positioning, format and all the other executional considerations inherent to store choice. Much has been done with customer loyalty cards to retain customers and build store volume. However, management should take another look at how the competition presents itself based on this research and then determine and test what local offers are feasible to draw the competition's customers into the local store. The results of this research shows that an offer of reducing prices of at least 11-15 percent below the competition will get some consumer interest and a 20 percent discount will get a great deal of sampling interest. The literature suggests that once consumers exert some revisit activity, they may continue to shop at that store (Knox and Denison 2000). The critical task

Exhibit 1. 53 frequently purchased items (as defined by chain store executives).

All prices confirmed via price checks.

DESCRIPTION	SIZE	WT.	HILO PRICE \$146.20	HILO/V PRICE \$146.88	EDLP PRICE \$133.86	DISC'T PRICE \$120.20
TOTAL COST						
MERITA OLD FASHIONED BREAD	1.5	LB	1.99	1.99	1.99	1.70
BREYERS YOGURT	8	OZ	0.69	0.65	0.63	0.50
GRADE A LARGE EGGS	1	Doz.	1.05	1.17	1.14	0.82
LAND O' LAKES BUTTER	1	Lb	2.99	2.99	2.89	2.47
PHILADELPHIA CREAM CHEESE	8	OZ	1.39	1.79	1.29	1.08
PILLSBURY CRESCENT ROLLS	8	OZ	1.99	1.99	1.89	1.50
AMERICAN CHEESE (deli)	1	LB	4.99	4.59	3.32	3.48
Premium TURKEY BREAST (deli)	1	LB	4.89	3.99	1.99	5.98
VIRGINIA BAKED HAM (deli)	1	LB	5.89	5.99	5.99	3.98
CLASSIC COKE 12OZ Cans	12 Pk	OZ	4.49	4.69	3.49	3.38
CLASSIC COKE 2 LITER	67.62	OZ	1.29	1.39	1.29	0.98
LAY'S REGULAR	5.5	OZ	1.49	1.49	1.49	1.34
TOSTITOS RESTAURANT STYLE	14.5	OZ	3.29	3.29	3.29	2.00
BREYERS VAN. ICE CREAM	64	OZ	4.69	4.59	4.59	2.97
COOL WHIP TOPPING	8	OZ	1.50	1.50	1.50	0.92
MINUTE MAID Frozen Concentrated OJ	12	OZ	1.69	1.67	1.14	1.34
BOUNTY Paper Towels - BIG ROLL	80.6	SQ	1.89	1.99	1.84	1.42
CAMPBELL CHICK. NOODLE Soup	10.75	OZ	1.09	0.65	0.65	1.08
CASCADE Dish Detergent Powder	45	OZ	2.69	2.49	3.60	1.97
CLOROX BLEACH	128	OZ	2.19	1.29	1.09	1.07
DAWN ULTRA ORIGINAL	14.7	OZ	1.59	1.39	3.29	1.22
DEL MONTE CUT GREEN BEANS	14.5	OZ	0.69	0.69	0.65	0.50
ENFAMIL CONCENTRATE w/ IRON	13	OZ	3.29	2.99	2.97	2.84
FANCY FEAST Cat Food	3	OZ	0.48	0.45	0.40	0.25
FOLGERS Coffee - Vacuum Pack bag	13	OZ	2.69	2.39	2.39	2.27
GERBER Baby FOOD - Peas	4	OZ	0.50	0.50	0.49	0.49
HONEY NUT CHEERIOS CEREAL	14	OZ	3.19	2.99	2.99	2.37
HELLMANN'S MAYONNAISE	32	OZ	2.49	3.19	3.19	2.79
STORE BRAND APPLE JUICE	64	OZ	1.79	1.49	1.99	1.57
DOMINO SUGAR	5	LB	1.89	1.69	1.79	1.67
JIF CREAMY PEANUT BUTTER	18	OZ	2.09	2.19	2.19	1.88
KEEBLER ZESTA SALTINES	16	OZ	1.99	1.99	1.89	1.67
KLEENEX COTTONELLE	4	CT	3.99	2.69	2.69	2.57
KLEENEX WHITE FACIAL TISSUE	1.75	CT	1.39	1.99	1.29	0.94
KRAFT MAC. & CHEESE DINNER	7.25	OZ	0.89	0.89	0.99	0.82
LE SUEUR EARLY PEAS	15	OZ	1.19	1.79	0.89	0.88
NABISCO OREO COOKIES	20	OZ	3.59	3.29	3.19	2.50
PILLSBURY BEST FLOUR - PLAIN	5	LB	1.59	1.29	1.29	1.18
PURINA O.N.E. DRY DOG FOOD	20	LB	15.99	14.99	14.99	14.78
STARKIST Chunk Light Tuna	6	OZ	0.75	0.69	0.69	0.50
TIDE Powder Laundry Detergent	92	OZ	7.19	6.99	9.99	6.97
TIDE Liquid Laundry Detergent	100	OZ	6.99	6.49	6.49	6.00
BONELESS Chicken Breasts	1	LB	4.59	5.77	3.09	2.97
CHOICE LOIN STRIP STEAK BNLS	1	LB	3.77	6.87	1.28	5.58
GROUND CHUCK 80percent LEAN	1	LB	2.59	4.18	1.22	1.79
PORK LOIN CENTER CUT CHOP BNLS	1	LB	4.99	4.99	1.38	3.48
STORE BRAND MILK - Gallon	128	OZ	2.89	2.89	2.89	2.68
STORE BRAND MILK - 1/2 Gallon	64	OZ	1.99	1.89	1.99	1.56
ICEBERG LETTUCE - Head	1	EA	1.29	1.29	1.29	0.97
CHIQUITA BANANAS	1	LB	0.59	0.59	0.57	0.48
FRESH EXPRESS GARDEN SALAD	16	OZ	2.99	1.89	2.89	1.50
RUSSET POTATOES	10	LB	0.79	1.99	3.69	1.87
RED DELICIOUS APPLES	1	LB	1.29	1.29	1.29	0.68

is to uncover what determinant bundle and which offer will get the competition's customers to switch. The survey data indicates that a combination offer that goes beyond price discounting, such as one that appeals to higher quality and convenience, enhanced by at least a 11 percent or more savings in market basket cost, could be a more effective incentive package. If successful, even if one does not become the number one choice, sales, share, and profit gains from being the alternative can be very rewarding, as Avis will attest.

Limitations

A verbal IRP for each product was not tested. In deference to Monroe and Lee (1999), consumers were not presented with actual products and a suggested price; and then asked to comment as to the price being too high, too low or about right for a verbal IRP. More needs to be done here to determine whether such verbal ranges, available through non-conscious processing, will act as the consumers' IRP.

No data or information was available on the determinants of store choice for rural areas. However, much of what is presented here could be used as a framework for consideration and application. In these situations, limited local options may be chosen strictly for location and convenience, whereas distance options may be turned into an event, such as the rural family that makes a day of it visiting the Wal-Mart or Target store an hour away. Here, the complete determinant bundle may be critical.

In addition to the concern for sample randomness expressed above, consumers were asked to recollect why they first chose the store in which they do the bulk of their current grocery shopping. From the demographic response, these consumers appear to be a mix of experienced grocery shoppers. As such, they may not be accurately responding as to what they actually did in their initial choice which may occurred years before. In their perception, many respondents believed their choice was based on location and convenience. However, close to an equal number of other respondents said it was based on a whole host of other determinants such as breadth of line and cleanliness. No one mentioned a vicarious experience or that it was because of what his or her parents did, which a significant number of student responses did

indicate.

Future research

More needs to be done in this area, especially in measuring for the effect of a determinant bundle on rural areas as well as highly dense retail assortment areas such as higher population suburban and intercity areas. In addition, opportunities exist to better understand how consumers, especially the emerging new shoppers, decide on where and what to shop and how reference price or the lack there of may affect the process.

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