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## An Investigation Into Price, Quality and Value, and Their Effects on Sales and Profits

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AN INVESTIGATION INTO PRICE, QUALITY AND VALUE,  
AND THEIR EFFECTS ON SALES AND PROFITS

John W. Fries, B.A.



An Abstract Presented to the Faculty of the Graduate  
School of Lindenwood College in Partial  
Fulfillment of the Requirements for the  
Degree of Master of Business Administration

1992

## ABSTRACT

This thesis will focus on the study of promoting price, quality, and value and the effect they have on sales and profits.

Research reveals that promotion of products with price alone has varied short and long-term effects. Most managers and marketers are only concerned with the short-term effect price promotion has on increasing sales. Long-term effects of pricing should be considered because of their possible harmful effect on sales and profits. Marketers and managers need to better understand how price promotion affects consumers and their buying habits.

The purpose of this present study is to investigate how companies have become more interested in increased sales volume with the use of price promotions at the expense of profits. Specifically, it is hypothesized that marketers need to evaluate consumer's individual buying behavior in terms of pricing and the perception of quality to increase sales and profits. It is important for a marketer to relate both price and

quality in the promotion of the product. Product's sales will increase if the product's promotional activities emphasize quality received for the price paid.

Results from data analysis reveals that the sales from different products (durable and nondurable) react differently to the promotion of price or quality. There is not enough evidence to conclude that the higher the price paid for a product the higher the quality received, and the lower the price paid for a product the lower the quality received. Research does show that this tends to be more true for nondurable goods rather than durable goods.

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Chapter I  
INTRODUCTION

Product Marketing

Fifty years ago, most firms were production oriented. Manufacturers stressed production of quality products and then looked for people to purchase them. Experience has shown that a firm's ability to produce a quality product is simply not enough for it to achieve success in the current business environment. Marketing is also required. Therefore, there are two primary functions for any business organization; production and marketing. The United States has rapidly moved from a production-oriented business system to a marketing-oriented business system (Boone & Kurtz 10).

Marketing has several definitions. Basically, marketing involves five tasks:

1. Finding out what customers want and need.
2. Helping to develop need-satisfying products and services.
3. Informing and persuading customers to try and use products and services.

4. Making products and services conveniently available at an attractive yet profitable price.
5. Keeping customers sold.

For marketing managers to perform these challenging and demanding tasks, they use the marketing mix (Fox & Wheatley 16).

#### Marketing Mix

The marketing mix is the set of four controllable marketing variables that the firm blends to satisfy a chosen target market. The four groups of variables in the marketing mix are product, price, place, and promotion. This mix is used to try and influence the demand for the product being sold. Companies look at their target market and try to plan their marketing mix (Kotler 45).

The product is the goods-and-services the company makes available to the target market. The product focuses on the physical or functional characteristics of the product offered to the customer. Product variables consist of: quality, features, options, style, brand name, packaging, size, services, labeling, product safety, warranties, and returns (Boone & Kurtz 234).

Price is the amount of money consumers need to

spend to obtain the product. This is an important aspect because it determines the revenue to be received by the company. Pricing objectives are profitability and sales volume. Pricing variables consist of: list price, discounts, allowances, payment period, and credit terms (461).

Place or distribution represents the bridge between producer and consumer. By making products and services available when and where the customer wants them, they are easier to obtain. Place strategy variables are channels of distribution, coverage, locations, inventory control, customer service, and transportation (349).

Promotion is the function of informing, persuading and influencing the consumer's purchase decision. Many business people consider this to be the most critical variable in the marketing process. Components of the promotional mix are personal selling and non-personal selling. Non-personal selling includes: advertising, sales promotion, public relations, and publicity. All factors in the promotional mix contribute to efficient marketing communication (437).

An efficient blend or mix of product and service strategy, distribution strategy, pricing strategy, and promotional strategy helps the marketing manager to

coordinate a program to achieve the company's marketing objectives (Kotler 49).

### Promotion Mix

The most critical promotional problem facing the marketing manager is the proper mix of the four variables of promotion: personal selling, advertising, sales promotion, and publicity. Personal selling is the seller's promotional presentation conducted on a person-to-person basis with the buyer. It is a direct face-to-face form of promotion. Selling is the original form of promotion (Boone & Kurtz 375).

Non-personal selling is divided into advertising, sales promotion, and publicity. Advertising is usually regarded as the most important form (377).

Sales promotion techniques include: lotteries, contests, price-reduction coupons, samples and trail offers, premiums, trading stamps, displays, and demonstrations (377).

Public relations and publicity expenditures are small in comparison to personal selling, advertising, and sales promotion. They do provide an efficient indirect communication channel for promoting products. Public relations involves the prestige and image of all

parts of the organization 377).

Advertising's primary objective is to inform, persuade, and reinforce. Customers must be made aware of the product or service through advertising. The advertising must provide enough information to arouse the customer's interest to investigate or purchase the product. Advertising must also concentrate on differentiating the product being promoted from other similar items. Advertising must also be used to reinforce the product to customers that have purchased it previously. Reinforcement is generally used in the maturity stage of the product life-cycle (397).

#### Product Life-cycle

Products pass through a series of five stages called the product life-cycle. These include: development, introduction, growth, maturity, and decline. Each of the stages involve certain characteristics and marketing strategies (Kotler 289).

Product development begins when a company discovers, finds, or develops a new product or idea. During this time sales are zero and the company may invest large sums of money for research and development. There is an expenditure of time, effort, and money

with no offsetting income (289).

During the introduction stage, heavy promotion with large expenditures of money are needed to create awareness and trial of the product. There is also a low dollar return and low profits during this stage. Most product failures occur at this time (292).

The growth stage is a period of product acceptance. Repeat sales show up at this time and competitors may try to imitate the product or service. Profits start to increase as sales increase (292).

The maturity stage is a period of increased competition where the market becomes saturated with products and competitors. Industry sales level off and pricing competition occurs. Profits level off or decline because of increases in marketing efforts to defend existing business. This is usually the longest stage of the cycle (293).

Finally, products reach the decline stage where sales decline. This is a period where most products experience severe price competition at break-even or below cost pricing. It is also a time to decide if the product should be withdrawn from the market (294).

### Mature Markets and Products

Most products are in the maturity stage of the product life-cycle, and therefore most of marketing management deals with mature products. Kotler defines marketing management as:

the analysis, planning, implementation, and control of programs designed to create, build, and maintain beneficial exchanges with target buyers for the purpose of achieving organizational objectives. (10)

In mature markets, many companies are trying to sell similar products. Sales continue to rise but eventually level off as the market becomes saturated with products. As the market becomes saturated, profits will also level off and then begin to drop. Price cutting may be needed to maintain the share of the market. Price cutting may be self defeating and competitors may cut the prices too. Companies attempting to increase their sales and market share must do so at the expense of competitors. Reduced prices result in decreased revenue for all firms in the industry unless the price cuts produce enough increased purchases to offset the loss in revenue on each item sold. Each product has a certain price elasticity. Price elasticity deals with the perceived need and

resulting demand for a product (Boone & Kurtz 211).

In the maturity stage, differences among competing products diminish as competitors discover the products characteristics and promotional characteristics most desired by the market. Heavy promotional outlays emphasize subtle differences among competing products, and brand competition intensifies (211).

During the maturity stage of the product life-cycle, marketing managers can use both persuasive product advertising and reminder-oriented product advertising. Persuasive product advertising is a competitive type of promotion used to develop demand for a particular product or brand. Reminder-oriented product advertising is used to reinforce previous promotional activity by keeping the product name in front of the public (401).

Management may also want to use market modification strategies to increase the sales of their products. In this case, they need to look for new users and new market segments. They may even look for ways to increase usage among existing customers. Another strategy may be to reposition the product to appeal to a larger or faster growing segment (401).



Managers can also change product characteristics like quality, features, or style to increase sales and attract new users. These changes may help the product stand out from other existing similar products. Packaging is sometimes changed to give the product a newer look. The product may stay the same, but the packaging can reflect trends or fads (Fox & Wheatley 184).

In competitive mature markets, marketing managers become concerned with brand loyalty and repeat sales. Small brands generally attract less loyalty among their buyers than large brands. The less loyal customers are to products, the less likely for repeat sales. Product formulation, price, distribution, advertising, promotions, and market segmentation all affect brand loyalty and repeat sales (Ehrenberg 82).

Promotion has grown in importance, becoming the most popular tool in the marketing mix. With tougher market conditions and shrinking profits, this has forced marketers to use promotion to fight for increased market share and sales. A look at the cost for marketers using promotion has revealed that there are disastrous short and long-term costs. Most marketing managers are not fully aware of this happening (Jones 145).

### Promotion of Mature Products

Since World War II, markets in the United States have been steadily maturing and stagnating. During the 1970's, the number of stabilized markets overtook the number of growing markets. In the 1990's, stable or mature markets are much the rule and growth markets are the exception. An examination of customer usage data collected by Medimark Research shows that only 13 out of 150 large consumer goods markets grew by more than 10% in 1989 (146).

The stagnation in the markets has affected manufacturers in two ways. First, manufacturers find it hard to grow and improve profits. Secondly, manufacturers have become accustomed to declining income (146). Some strategies that manufacturers are using to improve market share and profits are:

1. Promotions are the main marketing tool used. This is generally a high-cost activity.
2. Manufacturers are starting to look for business overseas to increase profits and market share.
3. Manufacturers are trying to reduce costs by cutting R&D and advertising. This can be disastrous for

future growth.

4. Mergers and acquisitions are becoming more popular and common, despite their rising costs.

Companies are trying to adjust their marketing mix to reflect changing times in the market. They will do whatever it takes to increase market share and sales volume (152).

During the 1970's, marketing managers got into the habit of increasing list prices of their products and then making promotional sale price cuts to make the product look like the price had been lowered, when in reality, it had not. They did this to help increase the sales of their products. This had little effect on profits as manufacturers did not increase their sales volume (147).

The costs of promotion created by these strategies to boost short-term volume at competitor's expense are showing up as long-term cost too. Many products have failed due to poor marketing management and not using the proper marketing mix (148).

### Summary

Of course, the manufacturer's and the marketing manager's goal is high sales through efficient

marketing. They are striving to achieve profits through sales volume and customer satisfaction. Profits decline during the mature stage of the product's life, due to increased competition and increases in promotional costs. Promotions are creating massive short-term costs and bringing about worrisome long-term problems. The high cost of promoting products is eroding the profits of mature products. Consequently, marketing managers need to be sure they are achieving profits with appropriate promotional expenditures.

Products can be evaluated by two methods: price or quality. This equates to value to the customer. There are many empirical studies that try to explain the price-quality relationship, but they are not all in agreement.

#### Statement of Purpose

The purpose of this study will be to investigate how companies have become more interested in increased sales volume with the use of price promotions at the expense of profits. The paper will attempt to show that companies need to understand how price promotion affects consumer's purchasing behavior and how sales are affected by these promotions. Companies need to promote

quality and value along with price to achieve their short and long-term objectives.

## Chapter II

### LITERATURE REVIEW

During the 1970's, the number of mature markets overtook the number of growing markets. Now, more than ever, marketing managers are turning their attention to the increasing numbers of mature markets (Jones 145). Marketing managers are responsible for the development of long range and yearly plans for sales and profits. However, research reveals that managers have neglected their responsibility for controlling profitability. They need to not only be responsible for increasing sales volume and market share, but they also need to examine where the company is making or loosing money. (Kotler 534).

#### Sales Promotion

John Philip Jones, chairman of the advertising department at the Newhouse School of Public Communications at Syracuse University, researched sales promotions short-term and long-term costs. He discussed how the pursuit of profit has given way to the desire for increased sales volume.

He found that manufacturers regard sales volume and market share as the keys to their future.

Manufacturers believe they need to increase sale volume through sales promotion. Companies are pouring money into sales promotions to increase sales. Research shows this rarely stimulated repeat sales which affects the long-term effects of increased sales and profits. There are measurable short-term effects on sales, but the manufacturers have to spend large amounts of money to increase sales in a no growth market. Jones states, "the price of promotion causes sales to rise, but once the promotion stops, sales return to their original level". The reason for this is promotion aims to move merchandise by bribing the retailer and consumer (146).

Jones also researched how promotions can draw competition into a promotional war, a situation where more than one company is trying to promote competing products at the same time. Research showed that the long-term effect of this was the elimination of profit from the total market. He concluded that mature products should be marketed with little promotion and advertising, but not to expect any growth. These products can maintain a low level of profitable sales with minimal promotion and advertising (152).

### Price Promotion

Sales promotions have an important role in the marketing efforts of organizations. A recent survey indicated that more than \$65 billion was spent on pricing promotions, almost 71% more than the amount spent on media advertising. Walters and MacKenzie researched recent reports that suggested price-based promotional activities were the predominant form of competition between retailers and that even greater emphasis will be placed on these activities by retailers in the coming years (51). They found that there are two major approaches to the study of price promotions. The first and most common approach was how price promotions affect individual purchase behavior. The second approach was to study price promotions and measure the impact of various promotional offerings on sales (52).

The research tested several hypotheses about direct and indirect effects of price promotions on store sales, traffic, and profit. Three categories of promotions were examined: loss leader promotions, advertised and unadvertised in-store price specials, and double coupon promotions. They examined the impact of these three types of price promotions on store traffic, sales of



promoted and nonpromoted products, and store profit (52).

Their results revealed that loss leaders had no effect on store profits, because they failed to stimulate either loss leader sales or store traffic. Double couponing only influenced sales of the promoted items, which influenced store profits. Finally, there was little support for the idea that price promotions stimulated sales of nonpromoted merchandise (62).

Robert D. Buzzell, John A. Quelch, and Walter J. Salmon, senior faculty at the Harvard Business School, researched the high cost of price promotion and its effects on sales and profits. In 1978, advertising accounted for 42% of the marketing budget and price promotion 58%. In 1988, advertising slipped to 31% and price promotion rose to 69% (146). Price promotion consists of short-term financial incentives to encourage the purchase or sale of a product or service. Price promotion includes: consumer promotion (coupons, rebates, and price-off), trade promotion (discounts, allowances, and free goods) (450). Even though promotions are costly, they are necessary to increase sales of mature products. The authors, in their research on price promotion, found that a reason for the

use of aggressive price promotion was that top management is concerned with meeting quarterly earnings targets. This leads to the need for increased sales volume at the expense of profit. The researchers concluded that price promotion should be a last resort in the marketing mix. Product improvement, more effective advertising, and better packaging that clearly differentiates the product in a positive way are the best ways to reduce promotional spending and its costs. Research and development was the best way to differentiate and to avoid the necessity of promotion (146).

The researchers also studied price promotion from the manufacturer to the distributor. They found that pricing promotions that ran periodically created peaks and valleys in distributor purchasing. This encouraged distributors to buy larger quantities at a lower price for projected future sales. This did not increase overall sales, it only promoted periodic purchasing patterns for distributors. This creates higher manufacturing expenses, and inflated selling and administrative expenses from manufacturers as well as distributors. This was passed on to the consumer, costing them billions of dollars a year. They found

a way to smooth the expense peaks and valleys was a policy of everyday low purchase price, where a retailer arranges to buy a particular product from a manufacturer on an as-needed basis at a weighted average price reflecting both the proportion of merchandise recently bought on a deal basis and the proportion bought at the regular price. In return, the retailer agrees to support the product with a certain number and type of promotional events. This would help eliminate trade price promotion (147).

Sunil Gupta also studied the effectiveness of pricing promotion or price cuts on sales by breaking down the sales "bump" during the price promotion period into sales increase due to brand switching, purchase time acceleration, and stockpiling. The researchers investigated the sales "bump" by studying the impact of price promotions on consumers decisions for when, what, and how much to buy. If marketers would breakdown the sales "bump" during the promotion period into sales increase due to brand switching, purchase time acceleration, and stockpiling, they would better understand the effectiveness of a sales promotion (343).

Gupta in her research on price promotion found that price cuts may have both positive and negative

effects. A consumer may see a price cut as a good deal and may stockpile the product or just purchase the product sooner than needed. A price cut may be used as a promotion to enhance brand's value, therefore the probability of being purchased will increase (347).

Gupta analyzed a study on sales of coffee brands which indicated that more than 84% of the sales increase due to price promotion came from brand switching, 14% of the sales increase were due to purchase acceleration, and less than 2% were due to stockpiling. Almost all of the sales increases were due to price cuts from brand switching. Gupta concluded that price cuts do not affect consumers' purchase time decisions (352).

#### Pricing Strategies

Gerard J. Tellis, in his research on pricing strategies, compares the different pricing strategies, emphasizing the principles underlying each strategy while demonstrating the relationship among strategies. He defined pricing strategy as, "a reasoned choice from a set of pricing schedules take aim at profit maximization within a specific period of time". Tellis classified pricing strategies into three groups: differential pricing, competitive pricing, and product

line pricing (146).

Differential pricing includes: second market discounting, periodic discounts, and random discounts. For example, the same product can be sold to customers under a variety of prices. Competitive pricing includes: penetration and experience curve pricing, price signaling, and geographic pricing. One example might include a company pricing their product below competitors in the same market and thus driving them out. Product line pricing includes: price bundling, premium pricing, and complementary pricing. This is used when a company has a set of related products like General Mills selling different food products together (148).

The research also revealed different purchasing characteristics of customers and what type of pricing strategy the firm should use. Companies have different pricing objectives. Some objectives may be to vary prices among customer segments, exploit competitive positions, and balance pricing over product line. Legal restraints in relation to the type of pricing strategy are also discussed (148).

Kapil Bawa and Robert W. Shoemaker, Professors of Marketing at Stern School of Business, New York

University, researched couponing which is another form of price promotion. They researched the incremental sales from a direct mail coupon promotion and its affect on profits. Despite the large scale and rapid growth of couponing, there were increased concerns about the profitability of these promotions. Research indicated that most coupons were not cost effective because they do not generate sufficient incremental sales to cover the cost. Incremental sales are the additional sales that are beyond the normal levels of sales generated by the promotion. The finding showed that profitability of coupon promotion was directly dependent on its ability to generate incremental sales. It was not determined whether it was more profitable to mail coupons to buyers or nonbuyers of the product being promoted (66).

From a management point-of-view, enhancing the incremental sales response to a promotion was the key to improving profitability. Bawa and Shoemaker found significant differences in the levels of incremental purchasing between various demographic segments. This finding implied that managers can enhance the profitability of direct mail coupon promotions by targeting specific market segments. They also discovered that direct mail coupon promotions may have a

small exposure effect in addition to the redemption effect. Finally, long-term effects of target marketing cannot be clearly made. Long-term effects of couponing on sales will not be significant in relation to the 64% short-term increase in sales (77).

Additional findings revealed that households that would have purchased the item in the first place were more likely to redeem a direct mail coupon for that item. In addition, a promotion could result in a large number of redemption purchases but still be unprofitable if those purchases would have been made anyway. The authors conclude that high redemption rates may actually undermine profitability by reducing the price via coupons for sales that would have occurred without a coupon. Therefore, coupons should not be measured in the amount of redemptions, but in terms of its ability to generate incremental sales or profits (77).

Scott A. Neslin, Professor at Dartmouth College, and Robert W. Shoemaker of New York University, also researched the long-term effects of using coupons as a form of price promotion. They investigated lower repeat rate of sales after price promotion purchases. Their results revealed that cents off coupons undermines the consumers repeat purchase rate. The authors describe an

alternative explanation for a lower repeat rate of sales. They felt that the promotion temporarily attracts a disproportionate number of consumers with low purchase probabilities. When the repeat rate of those consumers using cents off coupons were averaged with repeat rates of those that would have bought the brand even without a promotion, the average rate of sales after a promotion was lower (205).

R. M. Grant researched another form of price promotion called cash discounts for retail customers. Results indicated that the form of payment by the retail customer affects the company's profits and the price the set for their products. Grant found that retailers did not find it profitable to offer cash discounts to their customers. The use of the credit card as payment is a better way to increase profits compared to cash payments. Cash discounts involved additional point of sales and administrative costs. The problems of administration increased substantially once it was recognized that cost differentials exist between cash and checks, and more substantially between bank credit cards (Visa and MasterCard) and travel and entertainment cards (American Express, Diners club) (146).



Ingene and Levy further discussed cash discounts and reviewed Grant's article concerning cash discounts. Ingene and Levy argued that cash discounts were considerably more complex than Grant had presented. They believed that some customers were deal-prone and that others were deal-averse. Deal-proneness may broaden the range over which cash discounts are advantageous to the retailer, since these discounts are a type of a "deal". Current gasoline sales to the consumer will illustrate this point. If the customer pays with cash, the price of the gasoline is 4 cents less per gallon. In contrast, Shell advertises that cash or credit is the same low price. Credit card customers are then paying for at least part of the retailer's differential cost of credit acceptance. They found that the existence of deal-prone customers enables the retailer to raise the list price. This broadens the range over which discounts for cash may be profitably offered (148).

Price promotion is not only done by retailers, but it is also done by manufacturers to help them promote their products. Rajiv Lal, Associate Professor of Marketing and Management Science at Stanford University, researched manufacturers trade deals and retail price

promotions. He found that manufacturers were spending increasing sums of money on trade promotions with the hope of providing incentives to retailers to temporarily lower retail price of their brand. Some expenditures exceeded the advertising budget for the brand. The author questioned why these manufacturers preferred to offer substantial price reductions for a short period of time and then raise the price to its normal level rather than permanently reducing the price. He found that manufacturers continually question the profitability of trade promotions and were concerned with whether to promote products. They were also concerned with what should be the amount of the discount to retailers and whether these discounts should differ across markets. Results showed that trade promotion, if passed on to the consumer by the retailer, lead to short-term increases in sales of the brand without changing the long-term market share. He stated that promotions cannot be avoided because of the size of the deal prone segment in these products. Any attempt to move away from this may lead to a significant decline in market share, if their competitors continues with a similar promotional policy. Manufacturers' trade promotions are therefore viewed as a result of "prisoner dilemma". The author concluded

that manufacturer trade deals and subsequent price promotions were profitable only if the number of switching was large enough, the manufacturers did not discount their future too heavily, and the minimum markup required by the retailer to carry the brand was not too large (428).

Joseph P. Guiltan studied another type of pricing promotion, the price bundling of services. According to Guiltan, bundling is, "the practice of marketing two or more products and/or services in a single package for a special price". The research showed that price bundling appears to be a function of the degree to which it stimulates demand in a way that achieves cost economies. The purpose of the research was to identify the demand conditions under which price bundling can be an effective marketing tool. There was usually some price incentive to purchasing bundles. One type of bundling is mixed. Mixed bundling allowed the consumer to either purchase one or more of the services individually or to purchase the bundle. In other situations, bundling may take the form of add-on services. The customer may purchase a single core service (e.g., a car wash) or may select additional services (e.g., vacuuming) that are sold only with the core service at a single bundled

price (75).

Managers can elect either of two forms of mixed bundling. In mixed-leader bundling, the price of one of the two products is discounted when the other product is purchased at the regular price. In the mixed joint form, a single price is set when the two products are purchased jointly (75).

The purpose of the research was to identify the conditions under which each form of mixed bundling was most likely to be effective in pricing services. The researchers concluded that bundling works best if the firm is operating in a competitive market and that both services or products have a complimentary relationship (76).

Price quantity discounts is another way managers use price promotions. Wilcox, Howell, Kuzdrall, and Britney investigate price quantity discounts and some implications for buyers and sellers. Price quantity discounts may give buyers cost-lowering opportunities. To lower cost per unit, buyers may order in quantities larger than they need and enter prearranged resale (pooled buying) agreements or brokerage situations. Price quantity discounts has been criticized as one of the major factors contributing to

the emergence of gray markets. Gray markets exist when surplus goods reenter the market through unanticipated and frequently unauthorized channels (60).

There are several reasons for the use of price quantity discounts from a seller's perspective. Sellers can save by selling fewer, larger orders to their customers. It can also be used as a tool for achieving channel cooperation (61).

The researchers conclude that price quantity discounts are neither good or bad, but rather that many factors must be considered in assessing the advisability of their use (68).

Manufacturers do not only use price as a way to promote their products, but many wish to have control over the retail price of their product. Resale price maintenance, or the suggestion and enforcement of retail prices by a supplier on its resellers, provides manufacturers with the means of control over the distribution of their products that may be desired for a variety of reasons. However, this is vertical restraint of trade and can have antitrust implications (Sheffet 82).

This study also analyzed and examined how price promotion was not always reducing the price of a

product, but maintaining a steady or consistent resale price. This helped reduce competition between retailers by providing consistent pricing policies. Customers also purchase the product when needed, not just when it is on sale. Sheffet and Scammon examine the practice of resale price maintenance, the reasons for its use by manufacturers, and court rulings regarding its legal status. They also developed a set of guidelines to aid manufacturers in establishing and maintaining pricing policies that will be both legal and desirable (82).

James M. Lattin, Professor of Marketing and Management Science at Stanford University, and Randolph E. Bucklin of the University of California, wrote about the effects of price and promotion on brand choice behaviors. They researched how frequent price discounting blurs the distinction between deal price and the suggested price of a product. If a consumer expects deals, it becomes the rule rather than the exception. Discount prices lose their ability to boost sales. The researchers believe that to use discounting effectively, managers must understand the relationship between pricing and consumer expectations (299).

The research concluded that consumers form expectations based on their exposure to promotional

activity and that expectations influence the patterns of brand choice. Consumers established a reference price for a brand or product. The reference price was shaped by the past pricing activity of the brand. The consumer then evaluated the future price of the brand in relation to the reference point or price. His response was then related to the difference between the two prices. Therefore, the consumer response to an unexpected price decrease was greater than the response to an expected price decrease. Promotional activity in many product categories may be training consumers to buy on promotion. The consumer does not buy the product if it is not being promoted or the price is not lower than the reference price (309).

Barbara E. Kahn and Therese A. Louie, Associate Professors of Management at the University of California, also studied the effect of price promotion on brand choice and consumer loyalty. They found that the use of price promotion by marketing and management was increasing at very large rates. As managers use of promotions has escalated, researchers have become more interested in how promotions work. With this increased research, the authors have found conflicting empirical results as to the long-term effect of promotion on

sales. Most researchers agree that price promotion increased sales in the short-term, but there is concern and disagreement of its long-term effect (279).

The researchers investigated through three laboratory experiments ranging from a computer simulation of purchases to actual product used by subjects. The study showed how in store price promotion affects market share after the promotion has been terminated or retracted. They found that the long-term effects of promotions on brand share depend on three variables. The switching patterns of subjects, the patterning of the promotions, and whether one or more brands were promoted at a time. If only one brand was being promoted and the consumer was usually loyal to that brand, brand choice probably and usually declines from prepromotional levels once the promotion was terminated. If the consumer tends to switch among brands without promotion, or if several brands were being promoted, this decline did not occur (288).

Price promotion is used to compare competitive products and to compare the price of a product to itself. Albert J. Della Bitta analyzed comparative pricing and how consumers perceived the pricing. The purpose of his research was to provide evidence on how



individuals evaluated comparative price advertisements. Comparative price advertisements compares the sale or discounted price to the retail price. The consumer must decide whether the lower price is acceptable in relation to the higher reference price. The purpose of sale advertisement is to enhance the shopper's perceptions of value and to increase their interest in the product. A shopper may not be sufficiently convinced by the offer and therefore may continue to search for other brands or a lower price. The research concluded that a perception of value may be necessary to encourage the purchaser to buy the product (425).

#### Price-Quality Perceptions

Akshay R. Rao and Kent B. Monroe, discussed the effect of price and brand name on buyers' perceptions of product quality. They investigated how price and brand were an indicator of quality. The research revealed that there was little consensus on how one perceived the price-quality relationship. Price manipulation reveals significant influence on perceived quality; that is, people judge quality by price. The authors found that consumers view high price as high quality and lower price as low quality. They also discovered that the

effect of brand name on perceived quality was slightly higher. They concluded that there was a closer relationship between low price-low quality than high price-high quality (356).

In a recent study by Monroe, the effects of price, brand, and store information on buyer's perceptions of product quality and value, as well as their willingness to buy were studied. His results showed that price had a positive effect on perceived quality, but a negative effect on perceived value and willingness to buy.

Favorable brand and store information positively influenced perceptions of quality and value, and consumer's willingness to buy (307).

Price was both an indicator of the amount of sacrifice needed to purchase a product and an indicator of the level of quality. At the same time, the higher price represents a monetary measure of what must be sacrificed to purchase the good, leading to a reduced willingness to buy if the price was too high (308).

Therefore the author concludes that the external cues of price, brand name, and store name were three cues that influenced perceptions of product quality and value, and therefore the willingness to buy (308).

Lichtenstein and Burton discussed the relationship between perceived and objective price-quality. They conducted four studies to assess the accuracy with which consumers perceived price-quality relationship. Their results indicated that consumers perceive objective price-quality relationships with only a modest degree of accuracy. Their findings also showed that price-quality perceptions were more accurate for nondurable products than for durable products. The authors concluded that consumers price-quality perception appears to be a function of product type. They also concluded that many people were not willing to expend the time and effort required to search for objective comparisons of products (429). Additional research on dealing with price and price/quality relationships was studied by Curry and Riesz. They recognized that price and quality were important tactical and strategic variables for a marketing manager. Their research was motivated by the fact that there was little empirical data available on the behavior of price or the correspondence between price and quality over time. Their study showed that the relationship between price and quality was reduced over time which suggested that as price flexibility declines, competition may occur in the form of

promotional expenditures rather than relative quality improvements. The authors formed three hypotheses:

1. The mean price of all brands within a product form declines over time when prices are expressed in constant dollars.
2. The price variance within a designated product form declines in magnitude over time.
3. The correspondence between price and a measure of relative product quality for brands with a designated product form increases over the duration of the product life cycle (39).

The data found strongly indicated that prices fall over time among brands in a competitive product form. This finding was consistent with price declines expected from experience-curve-driven cost reductions. The findings also showed that price variability narrows over time and that this effect probably occurred to some extent over all stages of the product life cycle. The authors stated that managers often attempt to shape and extend life cycles through product and market changes. The authors concluded that over time, managers of competing brands transfer expenditures from quality improvements to marketing communications and price promotions (46).

The results of the three hypotheses dealing with the affect of price/quality on sales showed that a firm currently positioned in the high price and high quality range must shift its resources to marketing communications that informs the customer about its quality features. Price reductions in this category will be ineffective for this product because it is well established in the high price end of the market. If price is reduced too much, customers will be confused with lower quality brands. Therefore, to obtain the best price for your product, the promotion of quality features should be promoted, not price (46).

Valerie A. Zeithaml investigated consumer perceptions of price and quality, and also examined perceived value. Her research centered around the managing of price, quality, and value. Price is easy to define, but quality and value are difficult to differentiate from each other. Information for the research was from reviewing previous research, company interviews, a focus group interview, and 30 in-depth consumer interviews (2).

The author defined perceived price as, "what is given up or sacrificed to obtain a product". Pricing was divided into objective price (the actual price of

the product) and perceived price (the price that is encoded by the consumer). Most of the research supports the distinction between objective and perceived price. Studies showed that consumers do not always know or remember actual prices of products. Instead, they remember prices in a way that had meaning to them. Results showed that 54.2 to 60.6% of consumers purchasing grocery items checked prices at point of purchase. Among the consumers not checking prices, 58.5 to 76.7% stated that price was not important. Other studies show that price awareness differs among demographic groups. The greatest level of price awareness being in consumers who are female, married, older, and do not work outside the home. Attention to prices was likely to be for higher priced goods. An additional factor contributing to the gap between objective and perceived price was the tendency for the same brands to be priced differently across stores or for products of the same type and quality to have wide price variances (11).

The author found that monetary price was not the only sacrifice perceived by consumers. If consumers cannot find products on the shelf, or if they must travel distances to buy them, a sacrifice has been made.

If consumers must expend effort to assemble durable products or time to prepare goods, and if time and effort does not provide satisfaction to the consumer in the form of recreation or hobby, a sacrifice has been made (11).

Price-perceived quality relationship was also studied. Some consumers depend on price as a clue to quality. Evidence supports both arguments of high-price, high-quality and low-price, low-quality (11).

The author concluded that management needs to have a better understanding of quality, value, and price, and what it means to consumers. Managers would be able to improve brand positions and sales through more precise market analysis and pricing strategy and pricing promotion (17).

Gerard J. Tellis studied the relationship between promotion and product quality. His findings were that the relationship between promotion and quality was stronger when quality was produced at lower cost and consumers are less responsive to advertising. This was more likely during the latter stages of the product life cycle (64).

The author's findings showed that managers should not view advertising as a substitute for quality in the

marketing mix. The growth of low priced, high quality products of foreign firms suggests that this point has not been understood adequately. Promotion cannot be used as a guide for high or low product quality (70).

Tellis, in a similar study relating to price and value, discussed the impact of best value, price-seeking, and price aversion on consumer choices. Price and quality were the most general attributes on which brands are chosen. The author investigated how quality was more difficult to assess before and after a purchase. Inferior quality can be a long-term problem for manufacturers to overcome. They break price/quality into three categories: best value, price-seeking, and price aversion. Best value is choosing the brand with the least overall cost in terms of price and expected quality. Price-seeking is choosing the highest priced brand to maximize expected quality, and price aversion is choosing the lowest priced brand to minimize the cost (34).

The author believed that the three categories were related to each other. The authors were more interested in the price-seeking strategy. The question, "how do consumers trade off price, objective quality, and perceived quality based on price when choosing a brand".



They found that consumers may infer quality from price (36).

#### Advertising versus Price Promotion

Advertising and price are two key marketing variables. One widely held managerial belief is that increased advertising will tend to decrease consumer brand price sensitivity. This implies that increases in advertising is likely to be more profitable in the long run compared to price promotions. It is suggested that a dollar spent on advertising will have a greater long-term benefit compared to the same dollar spent on price promotion (Krishnamurthi 119).

Krishnamurthi's findings from studying advertising and price promotions recommends that managers pay more attention to the mix between advertising and price promotions. Results showed increased advertising serves to decrease price sensitivity, thus it can prevent potentially costly price promotions and competitive retaliation. Also, frequent price promotions can erode a product's image compared to advertising which tends to promote the product's image. Advertising was both beneficial for short and long-term sales and growth (128).

Products or services whose value change over time was examined by Leonard M. Lodish. He found that consumer's sensitivity to price typically will also change over time as the value changes, e.g., last year's model car or appliance is not worth the same as this year's model and the consumer is not willing to pay the same price for it. Price changes as demand changes. Price is determined by inventory on hand, anticipated demand during that period, forecast demand in future periods, and pricing decisions that will be made during those periods (205).

Tellis, in a recent study, analyzed the tradeoff between advertising and price discounting. He studied empirical analysis of 262 observations from published studies. He found that price elasticity ratio is higher for mature products than for products of the early stage of the life cycle, and for nondurable goods than for durable goods. These findings suggest that price discounting may be more profitable than an advertising increase for nondurable goods and mature products (161).

The reasons given for the increase in price elasticity over the cycle were that customers were likely to be better informed about products as the products mature. This increased knowledge about the

brands, especially their availability, prices, and discounts, makes consumers more price conscious. Second, consumers in the early life cycle were likely to be less price sensitive than later entrants because of their focus on novelty and not economy. Third, because competition is more intense in the mature stage, consumers will be better able to shop around for a good price (161).

Advertising elasticity was higher during the introductory stage for several reasons. Consumers were actively seeking information about product attributes and therefore were influenced by informative advertisements. Advertising created awareness and interest. In the mature stage, most customers have had considerable experience with the product and had a fairly good idea which product they preferred. Therefore informative advertising of mature products was not very relevant (165).

Bremmaor measures the short-term effect of in-store promotion and retail advertising on brand sales. He found that 12 leading national brands tended to be less responsive to price deals than the other brands.

His study involved six product categories with 5% and 15% price reductions, and how these sales were

affected with advertising and without advertising. He concluded that there was a close relationship to the amount of price reductions and the advertising of those reductions. It was different for different types of products depending upon if it was perishable or if the product was bulkier than other types of products.

#### Summary

The literature reviewed clearly indicates that price promotion alone will increase short-term sales, but long-term profits will suffer because consumers will not buy products if the pricing is not discounted. Consumers learn to wait for sales. Managers and marketers are interested in both short and long-term sales and profits. The research showed that through product differentiation, a higher quality product that was purchased for the same price as an inferior product, would give the consumer more value for his money. Consumer's are interested in the value they receive for their purchase, not just the price they pay.

#### Statement of Hypothesis

Marketers need to evaluate consumer's individual buying behavior in terms of pricing and the perception

of quality. It is important for a marketer to relate both price and quality in the promotion of the product. Specifically, it is hypothesized that product's sales will increase if the product's promotional activities emphasize quality received for the price paid.

### Chapter III

#### SELECTIVE REVIEW AND EVALUATION OF RESEARCH

The effect of price on quality perceptions is a topic that has been of great interest to marketers. Research suggests that price is an indicator of quality. The impact of price varies significantly across consumers and products being judged. There is also related research on the relationship between price and "objective" quality. Objective quality has been defined as the "unbiased measurement of quality based on characteristics such as design, durability, performance, and safety". (Lichtenstein 429)

The first price-objective quality study was done by Oxenfeldt in 1950. This type of study on objective quality was similar to that done by Consumer Reports. Consumer Reports evaluates products using objective quality measures, based on expert ratings from independent testers. These ratings are based on laboratory tests, expert judgement of purchased samples, and user opinion surveys. Lichtenstein studied the relationship between perceived and objective price-quality. His research addressed three hypotheses:

1. There is a positive relationship between perceived and objective price-quality relationships.
2. The correlation between price-perceived quality and price-objective quality is lower for individuals who have a price-perceived quality schema or a no price-perceived quality schema than for individuals who do not have either such schema.
3. The correlation between price-perceived quality and price-objective quality is higher for nondurable goods than for durable goods (432).

From the results of the studies, the authors drew three conclusions:

1. There appears to be a positive, but not strong, correlation between the perceived and the objective price-quality relationships.
2. Perception accuracy appears to be moderated by product type. Across all four studies, consumers held more accurate price-quality perceptions for nondurable products than for durable products.
3. There seem to be up to four distinct clusters of consumers based on price-quality

perceptions: a price-perceived quality schema group, a nondurable price-perceived quality schema group, a durable price perceived quality schema group, and a no price-perceived quality schema group (440).

The authors studied products in 15 product categories which were selected from 145 product categories. Eight of the categories were durable goods and seven were nondurable goods. Products ranged from color TVs to paper towels (432).

Respondents in the study were 220 undergraduate business majors at a major state university. Data collected was in a class room setting (432).

The authors found that there was an overall low correlation between price-quality perceptions and price-objective quality relationships which the authors concluded that consumers were poor estimators of price-quality relationships. This was especially true for durable products. Consumers did show some degree of accuracy in their price-quality perceptions of nondurable products (440).

Results did reveal that consumers, across all categories, felt that the higher the price the higher





the quality and the lower the price the lower the quality. The authors' reasoning for consumers evaluating products this way was that they felt manufacturers dealt on a cost-plus basis and costs were higher for products having better materials and produced by skilled crafts people. In addition, the "you get what you pay for" advertising may serve to reinforce the price-quality schema (441).

The authors discussed certain limits on their study. Objective quality ratings were taken from Consumer Reports to assess the accuracy of perceptions of quality. Individual tastes and preferences vary from one consumer to the next. Also, other ways to assess price-quality perceptions were through product knowledge and product experience (actually using the product repeated times). Another limitation was that Consumer Reports does not rate all products in a specific category (441).

A limitation not discussed was the type of respondents used. The authors used people with similar interests in their studies and type of education. They needed to cover a wider range of people from age to educational experiences to get a wider range of opinions. Also, was the class room setting the best

place to conduct this study? When people make purchases it is usually in the market place (441).

In another study, Curry discussed how price and quality were the two most basic strategic options open to a product manager. The research traced the pricing changes for a durable product over the product's life cycle and reasons for the changes. The three hypotheses tested were: (1) real prices decline over time among brands competing in a specific product form, (2) these prices also converge, and (3) the correlation over time between price and product quality becomes more precise (37).

The data strongly suggested that prices, net of inflation, steadily fell over time among brands in a competitive product form. These findings were consistent with price declines expected from experience-curve-driven cost reductions (38).

Results also suggested that price variability narrows over time and this effect probably occurs to some extent over all stages of the product life cycle. Also, over time managers of competing brands transfer expenditures from quality improvements to marketing communications and promotions which reduce profits (40).

The authors believed that the measurement of

product quality was a much greater problem than price measurement because researchers disagree on the meaning of "quality". There was no current available research method which can address effectively the difficult issues associated with price and quality measurement (45).

The authors studied the limitations of the study in four categories: price measure, quality measure, representativeness, and statistical methods. The first three categories were tied closely to the limitations associated with using Consumer Reports (46).

The issue of the validity of prices published in Consumer Reports could be criticized as not reflecting what actually happens in the market since they were averages of what shoppers paid when purchasing the varieties for testing or the list price. This suggests that prices used in assessing the price-quality relationship may not reflect geographic location, store type, city size, etc.(46).

The validity of the quality rankings published in Consumer Reports was also questioned. They may not include seller characteristics like postpurchase repair and service levels. Biases are greatest for products that involve aesthetics or style (47).

Representativeness is, "the extent to which the assessment of price trends and the correspondence between price and quality accurately reflect the marketplace". The testing company must decide which product categories to test, which brands to include, which items to evaluate, and where to obtain those items (47).

Another study reveals the effect of price, brand name, and store name on buyer's perception of product quality. Rao and Monroe reviewed the literature dating back to Scitovsky (1945). They suggested that people may judge quality by price. They pointed out that such behavior was not irrational. It simply reflected the belief that the forces of supply and demand would lead to a natural ordering of products on a price scale, leading to a strong positive relationship between price and quality. Research has shown that there is a positive correlation between price and quality.

The authors tested four hypotheses by performing a multiple regression analysis on the data set using the weighted price-perceived quality effect sizes as the dependent variable. The regression model tested the relationship between the price-perceived quality effects and price level, size of price manipulation, number of

cues, and research design.

The authors found relevant research studies by examining the references of previous review articles and conducted a computer bibliographic search. Because the hypotheses pertain to methodological variations across laboratory experiments, only laboratory studies involving one or more price, brand, and store cues were used in the review. A final set of 36 studies that collectively reported 85 effects of price, brand name, or store name on perceptions of quality were used in the analysis and tests. The products used ranged from nondurable products (eg., butter, margarine) to durable goods (capital equipment) (353).

The regression analysis showed that the relative strength of the price manipulations had a significant effect on the observed price-perceived quality relationship. When buyers did infer a positive relationship between price and product quality, they were likely to compare the price of the product against another price. If the actual price was perceived as significantly different from the reference price, the higher price option was likely to be perceived as being of higher quality. The key point was that judgements of quality based on price information are comparative and

perceived differences in prices lead to relative judgements that product quality varies significantly.

The authors discovered a lack of consistent results across studies due to variables like type of research design and strength of price manipulations.

Suggestions for future research were how quality perceptions are formed and how these quality perceptions influence perceptions of value, product or service benefits, and eventual choice.

Limitations in the research that were not mentioned include using past research and comparing products from 20 years ago to more recent products. Research techniques have also changed over the years. It would have been better to study articles that were more current.

In a similar article, Monroe studied the effects of price, brand, and store information on buyer's perceptions of product quality and value, as well as their willingness to buy. His results showed that price had a positive effect on perceived quality, but a negative effect on perceived value and willingness to buy. Favorable brand and store information positively influenced perceptions of quality and value, and consumer's willingness to buy.

He tested eight hypotheses by using a 5 X 3 X 3 factored between subjects with five price levels, three brand levels, and three store levels. He tested calculators and stereo headset players.

The author did not address limitations on his study, but did discuss that this was the first empirical article to examine the effects of price, brand, and store on perceptions of quality and value as well as purchase intentions.

Future research was suggested to use not only lower priced items but a wider range of products, prices, situations, settings, and populations.

In a related study, Zeithaml studied consumer perceptions of price, quality, and value. The author wanted to show that through consumer perceptions of price quality, and value, shopping behavior and product choice were determined. The purpose of her research was to define the concepts of price, quality, and value from the consumer's perspective, relate the concepts in a model, and develop propositions about the concepts by examining the available evidence in support of the propositions. A means-end model relating price, quality, and value was constructed and a perceived quality diagram was made (3).

The author reviewed previous research and conducted an exploratory investigation of quality and value in the product category of beverages. Company interviews, a focus group interview, and 30 in-depth consumer interviews were conducted by free-elicitation approaches that generated qualitative data which supplemented previous research and served as the basis for 14 propositions (3).

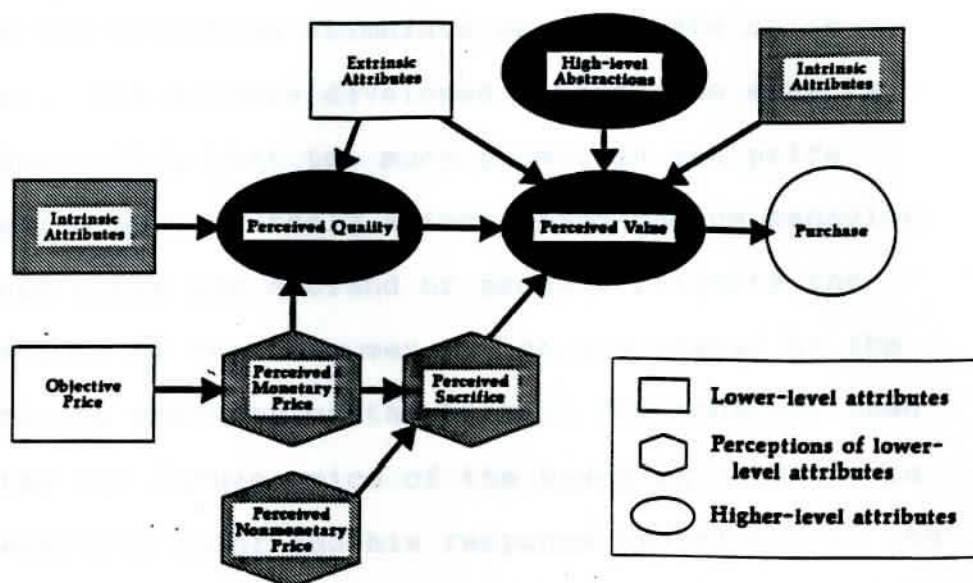
In the exploratory phase of the research, cooperation was obtained from a national company that markets three distinct product lines of beverages: a line of 100% fruit-flavored children's drinks, a line of 100% fruit juices, and a line of tomato-based juices. In-depth interviews were held with the marketing research director, the senior products manager for juices, two company strategic planners, and the president of the company's advertising agency. Open-ended questions pertained to issues such as company knowledge about quality and value perceptions of consumers, ways the company determined those perceptions, and how quality and value were communicated to consumers (3).

A focus group interview on the topics of quality and value in beverages was held in three metropolitan



areas across the United States. Participants were recruited to fit the demographic profile of purchasers of fruit and tomato based beverages. All participants were women between the ages of 25 and 49 and all had at least one child younger than 10 years of age. Participants were screened to ensure recent usage of fruit or tomato beverages. The moderator's questions covered such topics as the meaning of quality and value, and the role of price in quality and value judgements. The data generated was in the form of protocols and means-end maps for individual consumers. Patterns of responses and observed similarities across individuals form the results for this type of exploratory study. When the descriptive data from the executive and focus group interviews were combined, the observations and insights provided a frame work for speculating about the concepts and their relationships (5).

## A Means-End Model Relating Price, Quality, and Value



Patterns of responses from the exploratory can be grouped into four consumer definitions of value: (1) value is low price, (2) value is whatever I want in a product, (3) value is the quality I get for the price I pay, and (4) value is what I get for what I give. Each of these definitions was then broken down even further to give a more detailed definition (13).

An understanding of what quality and value mean to consumers helps improve brand positions through more precise market analysis and segmentation, product

planning, promotion, and pricing strategy.

Lattin and Bucklin, in another study revealed the effects of price and promotion on brand choice behavior. Pricing and promotion stimulate an immediate sales response. The authors developed a reference effects model suggesting that too much promotion and price discounting may adversely affect brand choice behavior. Reference price for a brand or product reflects the expectations of the consumer, which are shaped by the past pricing activity of the brand. The consumer then evaluates the future price of the brand in relation to this reference point and his response is related to the disparity between the two. Even though price promotion makes the brand more attractive and increases consumer response, a consumer exposed to frequent price promotion may become accustomed to finding the brand available on promotion at a discounted price. This shift in reference point changes the way the consumer looks at the choice problem. The result is a diminished level of consumer response to the brand, a wear out effect over time for promotion and price discounting. For manufacturers, the implication is that overly intensive promotion may increase expectations and ultimately undermine consumer response. The authors illustrate

these effects for ground coffee (300).

The researchers studied the pricing and promotional activity for four brands of coffee in six stores for 50 weeks. There was a considerable variation in pricing activity (\$1.58 to \$2.91) as well as frequent promotion. The data showed a strong negative correlation between price and promotion - a special discount in price was almost always accompanied by some type of feature or display (303).

Coffee purchasers were selected by choosing those who had made at least three purchases of any of the four brands in any of the six stores. A small number of purchasers were eliminated because they had purchased more than 100 lbs. of coffee. This left 577 purchasers who purchased ground coffee on 4720 purchase occasions during the period (304).

The findings of the authors suggested that promotional activity has significant reference effects on consumer response. The findings were well supported in the research study. The authors took data from a large number of people over an extended period of time. The models they made could also be adapted to other situations (309).

Future research would be to extend their model to

consider the reference effects of price and promotion on category purchase incidence. An example would be that consumers may be more likely to time their purchases to coincide with deal periods, which would redistribute demand over time (309).

The research in these articles studied the relationship between perceived price, quality, and value and their effects on consumer purchasing behavior. This information is necessary for marketers to understand so they can position their products to increase short and long-term sales and profits.

Price	Product	Product Type	Price
1.00	Color TV		2.00
2.00	Color TV		1.00
3.00	Color TV		2.00
4.00	Color TV		3.00
5.00	Color TV		4.00
6.00	Color TV		5.00
7.00	Color TV		6.00
8.00	Color TV		7.00
9.00	Color TV		8.00
10.00	Color TV		9.00
11.00	Color TV		10.00
12.00	Color TV		11.00
13.00	Color TV		12.00
14.00	Color TV		13.00
15.00	Color TV		14.00
16.00	Color TV		15.00
17.00	Color TV		16.00
18.00	Color TV		17.00
19.00	Color TV		18.00
20.00	Color TV		19.00
21.00	Color TV		20.00
22.00	Color TV		21.00
23.00	Color TV		22.00
24.00	Color TV		23.00
25.00	Color TV		24.00
26.00	Color TV		25.00
27.00	Color TV		26.00
28.00	Color TV		27.00
29.00	Color TV		28.00
30.00	Color TV		29.00
31.00	Color TV		30.00
32.00	Color TV		31.00
33.00	Color TV		32.00
34.00	Color TV		33.00
35.00	Color TV		34.00
36.00	Color TV		35.00
37.00	Color TV		36.00
38.00	Color TV		37.00
39.00	Color TV		38.00
40.00	Color TV		39.00
41.00	Color TV		40.00
42.00	Color TV		41.00
43.00	Color TV		42.00
44.00	Color TV		43.00
45.00	Color TV		44.00
46.00	Color TV		45.00
47.00	Color TV		46.00
48.00	Color TV		47.00
49.00	Color TV		48.00
50.00	Color TV		49.00

## Chapter IV

### RESULTS

Pricing research is of great interest to researchers in studying the effect of price on quality perceptions. Researchers also study if price can be an indicator of quality.

Lichtenstein and Burton studied the relationship between perceived and objective price-quality. Their results ranked the relationship between perceived and objective price-quality relationships of durable (D) and nondurable goods (ND).

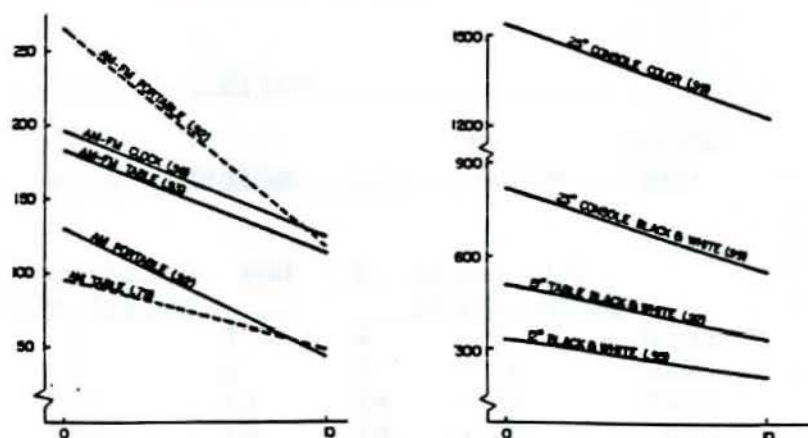
Price-perceived quality	Product	Product Type	Price-objective quality relationship	Price-perceive quality
1.	Stereo receiver	D	.01	6.20
2.	VCR	D	-.11	6.13
3.	Portable color TV	D	.06	6.06
4.	Microwave oven	D	.36	5.91
5.	Food processor	D	.34	5.30
6.	Clock radio	D	.38	4.96
7.	Blow dryer	D	.37	4.79
8.	Trash bags	ND	-.07	4.62
9.	Peanut butter	ND	.23	4.45
10.	Paper towels	ND	.66	4.36
11.	Oil popcorn popper	D	.04	4.20
12.	Frozen french fries	ND	-.48	4.16
13.	Laundry detergent	ND	-.73	4.03
14.	Dishwashing liquid	ND	.64	3.84
15.	Orange drink	ND	-.49	3.76

Price- perceived quality rank	Product	Product Type	Most likely price (\$)
1.	Stereo Receiver	D	212.64
2.	VCR	D	303.43
3.	Portable color TV	D	281.64
4.	Microwave oven	D	252.16
5.	Food processor	D	63.92
6.	Clock radio	D	22.55
7.	Blow dryer	D	16.44
8.	Trash bags	ND	2.15
9.	Peanut butter	ND	1.84
10.	Paper towels	ND	.82
11.	Oil popcorn popper	D	19.02
12.	Frozen french fries	ND	1.92
13.	Laundry detergent	ND	2.75
14.	Dishwashing liquid	ND	1.58
15.	Orange drink	ND	1.90

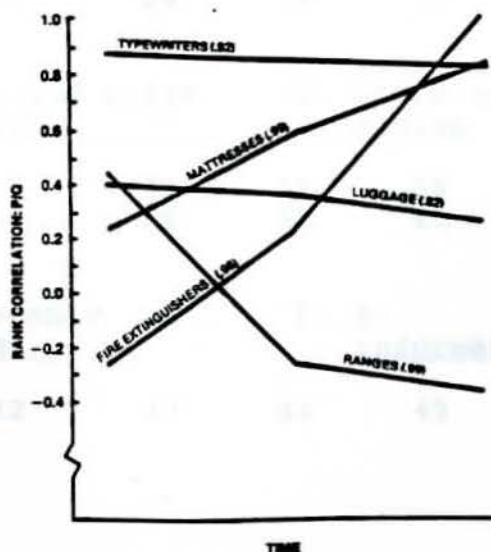
D= durable  
ND= nondurable

In another study, Curry analyzed prices and price/quality relationship. Prices tend to decline over time.

Real Prices Over Time for Various Product Forms



Trends in Rank Correlation Between Price and Quality Over Time



\*The number in parentheses is the  $r^2$  value for the linear trend fit to the time series of rank price versus quality correlations.



Dodds, Monroe, and Grewal studied the effects of price, brand, and store information on buyer's product evaluation. They used a 5 X 3 X 3 factorial design. The number in each cell represents a cell number.

### Research Design

		Price				
Brand name	Too high	High	Medium	Low	No Price	Store name
		A. Price, brand, and store design			E. Brand and store design	
High	1	2	3	4	5	High
High	6	7	8	9	10	Low
Low	11	12	13	14	15	High
Low	16	17	18	19	20	Low
		B. Price and brand design			F. Brand-only design	
High	21	22	23	24	25	No
Low	26	27	28	29	30	No
		C. Price and store design			G. Store-only design	
No	31	32	33	34	35	High
No	36	37	38	39	40	Low
		D. Price-only design			H. No information	
NO	41	42	43	44	45	No

## Analysis of Variance Results

<u>Effects</u>	Anova (5 X 3 X 3) design d.f.	Quality
<b>Calculator</b>		
Price (P)	4	9.54
Brand (B)	2	62.92
Store (S)	2	9.77
P X B	8	.32
P X S	8	.14
B X S	4	2.38
P X B X S	16	.81
Residual	540	
<b>Stereo headset player</b>		
Price (P)	4	4.36
Brand (B)	2	88.81
Store (S)	2	7.99
P X B	8	2.00
P X S	8	.55
B X S	4	3.46
P X B X S	16	.65
Residual	540	

Summary of Price, Brand, and Store Effects for  
Multiple Designs

Design	d.f.	Perceived quality				Perceived value				Willingness to buy			
		Calculator		Stereo		Calculator		Stereo		Calculator		Stereo	
		F	$\eta^2$	F	$\eta^2$	F	$\eta^2$	F	$\eta^2$	F	$\eta^2$	F	$\eta^2$
<i>Price effects (main effects)</i>													
A (P × B × S)	3,192	4.34*	.06	.07	.00	14.26*	.18	16.78*	.21	4.32*	.06	11.67*	.15
B (P × B)	3,96	1.55	.05	.95	.03	6.60*	.17	10.59*	.25	1.92	.06	4.54*	.12
C (P × S)	3,96	1.41	.04	5.51*	.15	3.83*	.11	4.03*	.11	2.40*	.07	1.42	.04
D (P)	3,48	3.57*	.18	4.08*	.20	10.05*	.39	6.14*	.28	2.22*	.12	1.55	.09
<i>Price effects (linear trend)</i>													
A (P × B × S)	1,192	10.91*	.05	.20	.001	42.22*	.18	49.74*	.21	11.86*	.06	33.74*	.15
B (P × B)	1,96	3.05*	.03	.96	.01	17.25*	.15	30.09*	.24	3.29*	.03	13.18*	.12
C (P × S)	1,96	3.67*	.04	15.61*	.14	10.58*	.10	7.59*	.07	5.76*	.06	1.22	.01
D (P)	1,48	10.59*	.18	10.21*	.18	26.00*	.35	18.05*	.27	4.55*	.09	4.22*	.08
<i>Brand effects (main effects)</i>													
A (P × B × S)	1,192	63.45*	.25	97.52*	.34	23.18*	.11	13.79**	.07	34.04**	.15	26.74**	.12
B (P × B)	1,96	23.77*	.20	31.04*	.24	7.51*	.07	9.13*	.09	7.46*	.07	16.09*	.14
E (B × S)	1,48	18.23*	.28	31.75*	.40	—	—	—	—	—	—	—	—
F (B)	1,24	2.50	.09	11.49*	.32	—	—	—	—	—	—	—	—
<i>Store effects (main effects)</i>													
A (P × B × S)	1,192	2.40	.01	4.70*	.02	.51	.003	3.49**	.02	.17*	.001	6.12**	.03
C (P × S)	1,96	20.66*	.18	7.05*	.07	3.10*	.03	.75	.01	5.28*	.05	4.59*	.05
E (B × S)	1,48	1.45	.03	1.07	.02	—	—	—	—	—	—	—	—
G (S)	1,24	2.31	.09	5.19*	.18	—	—	—	—	—	—	—	—

\*Significant at  $p < .10$ .\*\*Significant at  $p < .05$ .\*\*\*Significant at  $p < .01$ .

\*Significant brand name-store name interaction.

Average Main Effects of Independent Variables

Independent variables	Treatment condition	Combined effect size ( $\eta^2$ )		
		Perceived quality	Perceived value	Willingness to buy
Price	Alone	.190	.335	.105
	With brand	.040	.210	.090
	With store	.095	.110	.055
	With brand and store	.030	.195	.105
	Weighted average	.064	.195	.091
Brand	Alone	.205	—	—
	With price	.220	.080	.105
	With store	.340	—	—
	With price and store	.295	.090	.135
	Weighted average	.275	.087	.125
Store	Alone	.135	—	—
	With price	.125	.020	.050
	With brand	.025	—	—
	With price and brand	.015	.010	.015
	Weighted average	.054	.013	.027

Rao and Monroe studied the effect of price, brand name, and store name on buyer's perceptions of product quality. Their results were:

Stem and Leaf Plots and Statistical Summary:  
Price-Perceived Quality Effects

n2 Stem	Leaf
.8	7
.7	0
.6	3
.5	0 0 5
.4	---
.3	0 8
.2	0 1 3 5 5 6 8
.1	0 0 0 1 1 1 1 1 4 4 4 7 9
.0	0 0 0 0 0 1 1 1 1 1 1 1 2 2 3 4 5 6 6 6 6 7 8

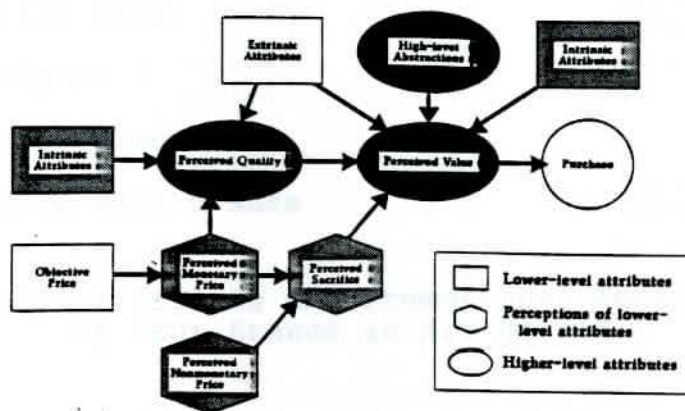
(K=54)

Summary Statistics (all results)

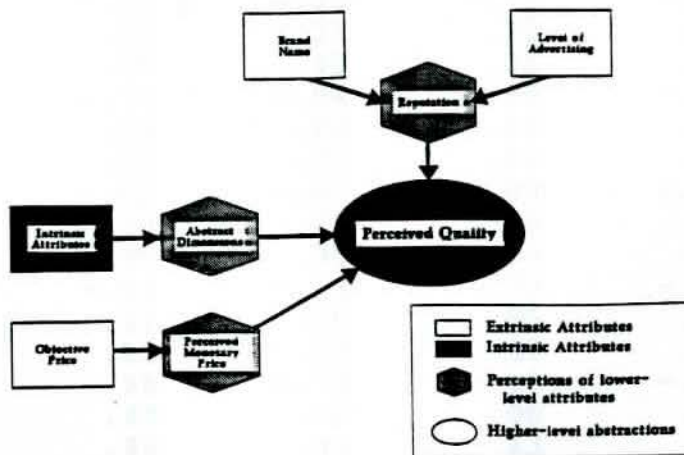
Weighted mean, n2	.12
Weighted standard deviation, s	.148
Standard error	.017
95% confidence limit	±.033
X2 (53)	79.22

Zeithaml, in a related study, constructed different models showing consumer perceptions of price, quality, and value.

A Means-End Model Relating Price, Quality, and Value



The Perceived Quality Component



Lattin and Bucklin researched the effects of price and promotion on brand choice behavior for coffee.

Their results were:

Brands

1. Hills Bros.
2. Folgers
3. Maxwell House
4. Chock Full O'Nuts

Summary of Pricing and Promotional Activity  
by Four Brands in Six Stores

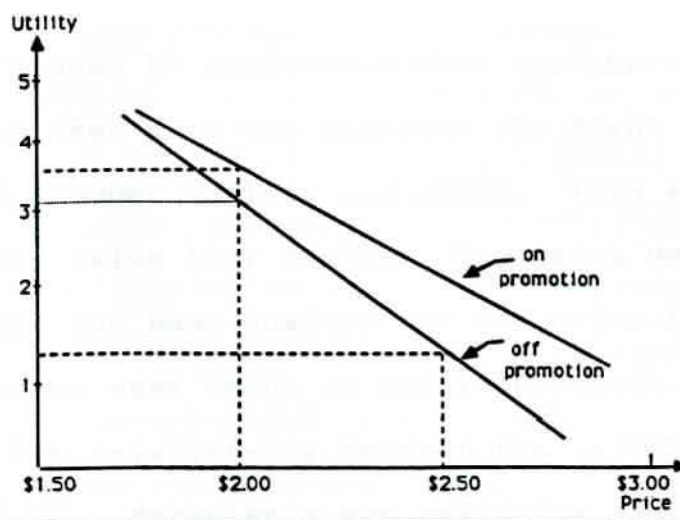
	Brand 1	Brand 2	Brand 3	Brand 4
Store 11	.18 a	.23	.19	.33
	.11 b	.16	.20	.45
	-.63 c	-.73	-.62	-.84
Store 12	.23	.33	.22	.29
	.16	.45	.32	.35
	-.73	-.84	-.60	-.83
Store 13	.19	.22	.09	.18
	.20	.32	.12	.39
	-.62	-.60	.03	-.73
Store 14	.33	.29	.18	.23
	.45	.35	.39	.39
	-.84	-.83	-.73	-.62
Store 15	.31	.28	.06	.24
	.51	.27	.39	.28
	-.56	-.73	-.15	-.58
Store 16	.22	.18	.06	.21
	.32	.39	.13	.25
	-.60	-.73	-.12	-.58

a Standard deviation of price (in dollars).

b Proportion of weeks on promotion.

c Correlation between price and promotion.

Consumer Utility as a Function of Price and Promotion, Showing the Effect of a Promoted Price change From \$2.49 (Unpromoted) to \$1.99



## Chapter V

### DISCUSSION

#### Summary

Marketer's need to understand what customers want and demand, and then give the customer the right combination of product quality and price. This gives the customer the value they desire. Consumers want to be sure they get the best quality for the price they are paying. Consumers want value in their purchases.

Value is the relationship between the variables of price and quality. Marketer's are realizing that they need to emphasize quality received for the price paid. If marketers understand what customers value and how to add value to their product or service, they will help ensure short and long term sales and profits for their company. Value is what marketers should be all about. Marketers who figure out how to add value to their product will thrive in some markets. At the worst, they will be in a stronger position to survive down markets.



## Price

Price can be examined from a consumer's point of view and a business point of view. Price is the major focus of the exchange process. Price is also what a company charges for an item in order to make a profit. Prices are set based on external factors like: demand for the product, competition, and environmental factors. Internal pricing decisions that affect price are marketing objectives, marketing mix strategies, and costs. Many consumers believe that the price charged for an item is based upon the cost to make the product plus the profit desired by the company. Companies have a variety of pricing strategies available to them. Some of these strategies include cost-based pricing, buyer-based pricing, and competition-based pricing. Some major considerations for marketers when setting the price for a product are product costs, competitor's prices, and consumer perceptions of value. If the price is set too low, there is no possible way to make a profit. If the price is too high, there will be no demand for the product. Marketers need to know price elasticity, or how responsive demand will be to price (Kotler 314).

Finally, the customer decides whether the price set by the company is too high, too low, or set just right. The consumer compares the price of the product to the perceived values of using the product. If the price equals the value, the consumer is more likely to purchase the product.

### Quality

Quality was defined by Lichtenstein and Burton in terms of objective quality or perceived quality.

Objective quality is an unbiased measurement of quality based on characteristics of the product. Perceived quality is the relationship between what one pays for a product and the quality one associates with the price paid. Their research revealed that there appears to be a positive, but not strong, correlation between the perceived and objective price-quality relationships.

Research revealed that the price of a product affects the perceived quality. Consumers showed a significant variance of opinions across individuals and product categories when they related price to quality. Factors that affect price-quality perceptions are the amount of search time one has to compare products, the perceived risk of the purchase, the frequency of the

purchase, the price level of the product category, the product class, and the price range of the product category.

Research also showed that consumers perceive objective price-quality relationship with a modest degree of accuracy. Price-quality perceptions were more accurate for nondurable products than for durable products. When a consumer purchases a product based on the price asked, and the quality received, the product has a particular value (high or low).

### Value

Zeithaml defined value in her study as having different meanings for different customers. The first definition equated value with low price. For example, when a coupon is used, a greater value is perceived.

The second definition of value considers the measure of usefulness or want satisfaction that results in purchase. Value here encompasses all relevant choice factors. These factors include both quantitative and qualitative, subjective and objective, which make up the shopping experience. Value is whatever the customer seeks in making decisions as to which store to shop or which product to buy.

The third definition of value equates quality perceived for price paid. This can be further broken down into value is price first and quality second, value is the lowest price for a quality brand, or value is affordable quality. Value is a tradeoff between what a customer pays and what is perceived, quality. These three definitions can be combined into an overall definition: perceived value is the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. What is received varies among consumers (i.e., some may want volume, others high quality, still others convenience) and what is given varies (i.e., some are concerned only with money expended, others with time and effort), which represents a tradeoff of the give and get components.

Value is different than quality because value is more individualistic and personal than quality. Value unlike quality involves a tradeoff of give and get. Quality is thought to be more of the get component in the value equation.

### Conclusion

An understanding of the relationship between price, quality, and value, and what it means to consumers,

offers marketers a better understanding for improving brand positions through more precise market analysis and segmentation, product planning, promotion, and pricing strategy. Marketer's need to be oriented to value marketing. This will help companies to better position their products to ensure short and long-term sales and profits.

The hypothesis, product's sales will increase if the product's promotional activities emphasize quality received for the price paid, is not clearly stated in the literature. The literature shows that there are different types of products where price and quality are perceived to be more closely associated. There is not enough evidence to conclude that the higher the price the higher the quality, and the lower the price the lower the quality. This tends to be more true for nondurable goods rather than durable goods.

When companies try to adjust the price of the product down, they will get immediate short term sales. When the product price is reduced too many times and the consumer becomes accustomed to the product being on sale, consumers will not buy the product unless it is on sale. Prices can be adjusted in a number of ways: couponing, rebates, quantity discounts, sampling, price

markdowns, deferred billing, and low or no interest rates.

The research shows that these price discounts can lead the consumer to feel differently about products. They may feel that a lower price means that the product cost less to make, therefore the quality has been reduced. Indirect ways of reducing prices for durable goods like 0% interest, 90 days same as cash, or deferred billing are ways to make products more affordable. This cost reduction does not reflect on the quality of the product. It makes the product easier for more people to buy. Companies are increasing the number of people in their target markets for their products. This is happening in the markets like automobiles, furniture, and clothing.

For durable goods, research shows that pricing changes for durable goods. Real prices tend to decline or converge over the product's life cycle. Marketers need to make their product more appealing or desirable to consumers. This can be done by adjusting the quality of the product.

Adjustment in quality can be done in various ways. Quality is both perceived and objective. Quality also has different meanings to different people as mentioned

earlier. Some companies may need to improve the quality of the product or even reduce the quality because it may be too high of a quality and too high of a price. Inferior quality can be a source of long-lasting irritation and inconvenience to the company. Once the product has been perceived as having poor or low quality, it is difficult to change the consumers impression of the product.

#### Limitations

There are some limitations in this study that should be noted. Even though price can be defined with some accuracy, quality and value cannot. Quality and value have different meanings to different people. You cannot make conclusions or generalizations about products because there are so many different categories of products. Even when a particular type of product is studied as in Consumer Reports, not all products can be studied or reviewed.

This study was primarily directed toward products that were in the mature stage of their product life cycle. It did not take into account the service industry such as the health care field, repairs of all types, or even education. It is a very difficult area

to research, because the services industry may not be consistent.

Other limitations are that the study should have been reduced to studying a specific product in addition to past and current data.

#### Suggestions for Future Research

Results from these studies raise a variety of issues to be examined in future research. One area of investigation may be the effects advertising has on perceived quality. Does advertising increase the perceived quality of a product? On the other hand, are price cuts more profitable than increases in advertising? Does advertising enhance the product's nonmonetary attractiveness and do price discounts provide a monetary incentive to buy the product.

When perceiving quality, what factors influence some consumers to perceive that higher prices are associated with higher quality and others to perceive that this relationship holds for no product categories? This may be based on the fact that consumers do not take as much time researching about the items that they are going to purchase. Therefore, how can the promotion of the product being sold be more informative so the



customer knows that this the product they want to buy?

To study value is very difficult. Value is perceived differently by people. Researchers and people form different definitions and opinions about value because it is perceived. Marketers need to study if there are some similarities in the value perceptions between what types of people; gender, age, origin, demographics, income level, or similar interest to name a few. Marketers would be more successful if they knew what their customer valued.

The study of price, quality, and value leave many questions to be answered and current research has only answered a small portion of these questions.

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