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Reference Price Effects: The Role of Multiple Internal Reference Prices and Semantic Cues.

Balaji Chandrasekaran Krishnan
Louisiana State University and Agricultural & Mechanical College

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REFERENCE PRICE EFFECTS:
THE ROLE OF MULTIPLE INTERNAL REFERENCE PRICES
AND SEMANTIC CUES

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
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by

Balaji C. Krishnan
B.S., Marathwada University, 1989
M.B.A., Bombay University, 1991
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ABSTRACT

The purpose of this dissertation is two fold. The first objective is to assess the effect of price promotion on consumers’ evaluation of the value of the deal independent of the specific IRP used by consumers. Towards this end, a subjective measure called “perceived fairness of the offer price” is introduced in a model hypothesizing relations among transaction utility, acquisition utility, and perceived value of the deal. The proposed model was compared to an existing model designed to predict and explain perceived value of the deal using a survey-based methodology, in the first study. Results indicate that the proposed model has a better fit and the proposed construct better predicts the value of the deal. The second objective of this dissertation is to study the effect of semantic cues on consumers’ perceptions about the value of the deal, search intention and shopping intention. These effects were determined using two 2x2x2 experimental designs in the second and third studies. In the second study the price level ($249 vs. $399), nature of price comparison (between store vs. within store) and cue concreteness (concrete vs. abstract) were manipulated. Results indicate that semantic cues affect consumers perceptions of value and search intentions at moderate price levels. At exaggerated price levels there is no effect of cue concreteness. At moderate price levels, the concrete price cue is more effective than abstract cues in the case of between store price comparison. Also, the between store price comparison is more effective than the within store price comparison in the case of concrete cues. In the third study, the location where the ad is viewed (at home vs. in store), nature of price comparison (between store vs. within store), and cue concreteness (concrete vs. abstract) were manipulated. Results indicate that semantic cues affect consumers' evaluation of the price promotion when the consumers
view the ad at home. When the consumers view the price promotion in the store, the semantic cues do not seem to affect their evaluation.
CHAPTER 1. DISSERTATION OVERVIEW

Introduction

Research on price promotions has recently garnered a lot of attention. This is largely because marketers spend more than $5 billion on price promotions per annum (Friedmann and Haynes 1990) and because price information is a significant cue in consumer decision-making (Ramaswami 1992). Consumers often evaluate an advertised offer by comparing the offering price with some external or internal standard. These standards are referred to as "reference prices" and consumers get important product information like quality by examining the deviations of a brand's price from the reference price (Jacobson and Obermiller 1990). Most researchers accept that in a retail environment internal reference prices (IRP) affect consumers' evaluation of a price deal. However, there is no consensus on which specific IRP is used by consumers in the evaluation process, and there is a lack of consensus regarding how semantic cues in reference price ads influence consumers' price perceptions and search and behavioral intentions.

This dissertation has two goals. First, it aims to advance the pricing literature by examining IRP in a far less complex and resolvable manner than that suggested by extant research. A second goal of this dissertation is to extend existing knowledge pertaining to semantic cues in the reference price context. An attempt was made to determine the type of semantic cues that a marketer might use for maximizing the consumers' value perceptions and shopping intentions. Hence, this dissertation is likely to benefit both the academic and the practitioner. The remainder of this chapter is organized as follows: First, an introduction to IRP is provided. Next, the objectives of
this dissertation are outlined using expectancy-value models and utility theories. This is
followed by a brief review of the literature on semantic cues. The likely confounds in
this area of research are noted and a solution is proposed based on the economics of
information and attribution theories. Finally, a brief outline of the methodology is
described.

Conceptualization of Reference Points, IRP and ERP

Rosch (1975) defined a cognitive reference point as any stimulus in relation to
which other stimuli are seen. This definition of a reference point has been used to
define a reference price as "a cognitive reference point for incoming price stimuli"
(Zeithaml and Graham 1983). Kahneman (1992) points out that reference points are
important in decision making because outcomes are compared to them, are coded, and
are evaluated in terms of this comparison. In the context of pricing, the reference point
that a merchant provides or one that the consumer brings to the market place is termed
as the reference price.

Reference prices have been classified as Internal Reference Price (IRP) and
External Reference Price (ERP). IRPs are prices stored in memory on the basis of
perceptions of actual, fair, or other price perceptions. IRPs may be the result of a
number of factors including price last paid, expected future price, and number of times
the product has been purchased. ERP is provided by observed stimuli in the purchase
environment and is supplied by the merchant in an attempt to influence the consumer’s
IRP. Another function of the ERP is to make the offer price attractive by comparison.
Hence, ERP is always larger than the offer price. As an example of IRP, ERP, offer
price and their relationships, consider the following: if a consumer perceives the price
of a brand to be $100 and the brand is advertised as "A $125 Value, Your Price $110," the IRP, ERP and the offer price are $100, $125, and $110, respectively. Unlike this example, the IRP that a consumer brings to the decision environment may or may not be anywhere near the actual price for the product. However, this reference price is still critical to the evaluation because it serves as a standard for evaluating the price that the consumer encounters (Morris and Morris 1990).

Consumer purchase evaluations are based on a comparison of offering price to the internal reference price or price range. Consequently, any influences on the IRP necessarily affect price perceptions. In a purchase scenario, the marketer offers the product for a price and depending on whether it compares favorably or not to the IRP, the consumer may decide to buy/not buy the product on offer. Hence, IRP is an important concept that must be understood.

There have been several operationalizations of the IRP construct in the literature. IRP can be a single price or an acceptable price range (Lichtenstein and Bearden 1989); IRP has been viewed as adaptation level, lowest, and highest market prices (Monroe 1990); expected future price (Jacobson and Obermiller 1990); fair price (Lichtenstein and Bearden 1989); aspiration, market, and historical prices (Klein and Oglethorpe 1987); normal price perceptions (Biswas and Blair 1991; Lichtenstein and Bearden 1989); average market price (Urbany et al. 1988); and lowest market price (Biswas and Blair 1991). Biswas (1992) emphasized that it is important to examine multiple IRPs that might influence a consumer's value perceptions. Additionally, Biswas, Wilson and Licata (1993) observe that it is possible that internal reference prices may not be the same for all consumers and may not necessarily be the same for
an individual consumer over purchases and over time. Others also point out that IRP may be multidimensional in nature (Jacobson and Obermiller 1990; Winer 1988). If indeed IRP is a multidimensional construct, what dimensions can be used to fully define the IRP that consumers use in a variety of situations?

In attempting to answer this question, Chandrasekaran and Jagpal (1995) proposed a Unitized Internal Reference Price (UIRP), which is a function of the fair price, lowest price seen, highest price willing to pay, and normal price. However, contrary to their expectations, it was observed that consumers did not combine the multiple reference points to form a single, well-defined IRP. It was further found that consumers' use of reference prices varies according to the product category. This is in agreement with Kahnemann (1992, p.305) who states that, "the process by which consumers use multiple reference points and the manner in which these multiple reference points compete and combine is as yet unresolved."

To summarize, the importance of understanding the IRP used by consumers in different situations cannot be overstated. There is some agreement that IRP is a multidimensional construct, and that we do not as yet know how consumers combine these multiple IRPs stored in memory, and which IRP they decide to choose at any given instance. The dissertation will attempt to specify an antecedent of consumers' value perceptions, based on IRP, which may solve the above-defined problem.

**IRP, Transaction Utility Theory, and Expectancy-Value Models**

**Transaction Utility Theory**

In Thaler's (1985) seminal piece on transaction utility theory, he defines a transaction utility model as consisting of two kinds of utility - acquisition utility (AU),
and transaction utility (TU). Acquisition utility depends simply on the value of the goods received \((p')\) compared to the price paid \((p)\). Transaction utility on the other hand depends on the outlay \((p)\) as compared to some reference price \((p^*)\). Formally, it is defined as "the value of paying \(p\) when the expected or reference price is \(p^*\)". In this context, \(p^*\) is determined by "fairness." Thaler goes on to say that "fairness" depends in large part on cost to the seller. The reference price used in evaluating the merits of a deal would include what the consumer feels are reasonable overheads (i.e., cost to the seller includes reasonable overheads and profits), and can be viewed as the "reasonable" or "just" price for the product. Thaler's model to determine the value of the deal is provided in Figure 1.1.

![Thaler's model of Perceived value of the Deal](image)

**Thaler's model of Perceived value of the Deal**

**Figure 1.1**

An example of TU is that most consumers are willing to pay a much higher price for a bottle of beer at a luxury hotel than at a small convenience store. The acquisition utility for the bottle of beer is the same in both situations (the intrinsic "value" of the bottle of beer remains the same). However, if the convenience store
charged the same for the bottle as a nearby luxury hotel, it would be viewed as an "unfair" price because the cost of supplying the bottle of beer is perceived as being lower for the convenience store. Thus, Thaler (1985) suggests that the reference price used in evaluating the merits of a deal would depend largely on what is perceived to be "reasonable" or "just." This is also in agreement with the view espoused by the expectancy-value model.

**Expectancy Value Model**

Most consumer decision-making models are based on the information-processing paradigm, and have largely ignored the motivational aspects of consumer decision making (Bettman and Sujan 1987). In her research, Dabholkar (1994), introduced choice into an attitudinal framework. She compared four different choice models and found that the expectancy comparison model, based on expectancy-value components, found the most support. In this dissertation, a similar attempt is being made by incorporating a motivational model (expectancy-value model) in a consumer decision-making scenario.

In a consumer decision-making scenario, the expectations that a consumer brings to the decision-making environment are either confirmed or disconfirmed based on the stimuli encountered. If the stimuli encountered confirm consumer expectations, then the decision making is simple; it is based on confirmation. However, if the expectations are disconfirmed, then the consumer may engage in cognitive processing to determine if the expectation needs to be revised, or whether the stimuli is unfavorable in comparison with the prior expectations. As Feather (1982, p. ix) notes, "the focus of expectancy-value models in psychology is on cognitive models that relate action to the perceived attractiveness or aversiveness of expected consequences. A person's behavior is seen to
bear some relation to the expectations that the person holds and the **subjective value of the consequences** that might occur following the action (emphasis added)."

Based on the above rationale, Thaler's (1985) model (Figure 1.1) of evaluation of the deal, which includes TU and AU, is revised to include "perceived fairness of the offer price" in lieu of TU. The perceived fairness of the offer price may be defined as the **consumers' overall perception of the offer price based on either a single IRP or a combination of multiple IRPs that he may bring to the decision environment.**

Perceived fairness of the offer price is a holistic assessment of the offer based on the mental arithmetic involved in the consumer decision making process. By contrast, TU as defined by Thaler (1985) is the difference between the outlay and the reference price (IRP), and is a numerical value associated with the offer. As such it is likely that the mental arithmetic consumers use to form fairness perceptions includes a calculation of TU. However, given that TU is a single numerical index, it may not be rich enough, relative to "perceived fairness of the offer price," in explaining substantial amounts of variance in "perceived value of the deal." It is a function of the offer price and the consumers' IRP. As discussed earlier, the process by which consumers combine various internal reference points is not clear (Kahneman 1992). Hence, in Figure 1.1, it is not clear which of the multiple TUs are likely to be combined and how.

The major advantage of the model proposed in Figure 1.2 is that it is easy to assess "perceived fairness of the offer price" using a subjective measure. It also helps to overcome uncertainties regarding a specific IRP that the consumer may choose to use to evaluate an offer, or the way in which these multiple reference points are combined. Irrespective of the specific IRP used by a consumer, this subjective measure helps to
determine the effect TU and/or AU will have on consumers' perception of the value of the
deal. The ability of these two models to predict "perceived value of the deal" is compared
in Study One.

![Proposed Model](image)

**Proposed Model**

*Figure 1.2*

**Effects of Semantic Cues**

Advertisers use particular phrases that give additional meaning to prices provided
in reference price ads. These phrases are called “semantic cues” and are contextual
Semantic cues are classified as contextual variables because consumers perceive external
reference prices and offering prices in the “context” of the particular semantic cue that the
advertiser employs (Monroe 1990).

Contextual variables provide the situation or setting in which the consumer
receives pricing claims. Adaptation level theory suggests that the effect of focal cues
(specific discounts) may be influenced by organic cues and contextual cues. As such
contextual variables may be important factors in influencing consumers’ acceptance of
retail price claims. Lichtenstein and Bearden (1989) found that the contextual variables of consistency and distinctiveness influence internal price standards and purchase evaluations. Attribution and economics of information theories provide useful paradigms for investigating issues related to contextual cues.

**Consistency and Distinctiveness versus Within and Between Store Cues**

Based on attribution theory, Lichtenstein and Bearden (1989) found that the contextual variables of consistency and distinctiveness did influence the internal price standards and purchase evaluations. They define consistency of a sales promotion as the frequency with which a product or a group of products is advertised on sale by a merchant or a retailer. Distinctiveness of a sales promotion by a merchant retailer is defined as how the offer (sale) price compares with what the competitors normally charge. Though the authors found that low consistency and high distinctiveness positively affected purchase evaluations, there remained the question of which of these two had a greater effect. Hence it was important to find which of the two types of cues – low consistency and high distinctiveness – was more effective (Lichtenstein et al. 1991).

Lichtenstein et al. (1991) operationalized the consistency and distinctiveness of the ads by manipulating the semantic cues in the ad rather than providing information about the advertising pattern of the retailer, as was done in the earlier study. This was a more realistic scenario, as the consumer is seldom provided information about the advertising pattern of the retailer. In their study, though, the operationalization of the consistency construct may have been problematic because a cue such as "$_____ Value, Sale $____$" may not imply anything about how often the product has been
advertised on sale in the past. Even though Lichtenstein et al. (1991) termed the above cue as "low consistency" based on a pretest, one could argue that the same cue may be used for a product promoted heavily. Hence, the basis of categorizing the cue as low or high consistency is not clear in this case. However, the distinctiveness of the ad would be clear using “Compare at $____, Our Price $____” or “Seen Elsewhere $____, Our Price $____”, which are the cues used by the authors.

Grewal, Marmorstein and Sharma (1996) studied semantic cues from a different perspective. They equated what Lichtenstein et al. (1991) referred to as consistency to within-store promotions and distinctiveness to between-store promotion. They further added a dimension to the consumers' evaluation process by including the place at which the decision is made. Based on the economics of information (Stigler 1961), Grewal et al. (1996) argue that in case the customer is at the point of purchase (i.e., the store), the within-store promotion (Regular price/Sale Price) is likely to be more effective. The customer in this case may find the effort to compare prices with different stores too demanding. However, if the customer is at home, the between-store promotion (Compare at/Sale Price) is likely to be more effective, as the customer expends much lesser energy in comparing the prices across stores. They found evidence to support their assertions.

**Effects of Cue Concreteness**

While these studies have provided valuable information about how and why semantic cues are effective, there may be other factors influencing the perception of

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1 The authors conducted a pretest in which the respondents were asked to identify a cue as being either low or high on both consistency and distinctiveness. This may have forced the respondents to classify cues which may have led to confounds.
semantic cues. Ford, Smith, and Swasy (1990) found that consumers were more skeptical of subjective or imprecise advertising claims. When examining the effect of concreteness of copy in print ads in general, MacKenzie (1986) found similar results. Consumer believability in each of these studies was higher in the case of concrete claims. From an economics perspective, Nelson (1974) argues that consumers attempt to maximize the utility of their purchase decisions by searching for information until the perceived marginal cost of search exceeds its marginal value. Concrete price claims are likely to decrease the marginal benefit of searching for more information, in comparison to an abstract claim. Hence, consumers may find a higher utility and form more positive evaluations of concrete price claims.

In a pricing context, if consumer believability were to affect the evaluation process, then one would expect concrete price claims such as "Last Week $____, Now $____" and "Named Retailer $____, Our Price $____" to be more effective than claims such as "A ____ Value, Now $____" or "Seen Elsewhere $____, Our Price $____", as the latter claims are more vague. In the latter set of cues it is not clear as to "if and when" the prices were actually higher or who is the retailer that is being compared with, while it is clear in the former set of cues. If cue concreteness were to play a role in affecting the consumers' evaluation process, then it may be possible to additionally explain the reason for the effectiveness of these semantic cues.

In sum, three studies were conducted in this dissertation. In the first study, which was survey based, "perceived fairness of the offer price" was compared with TU in measuring "perceived value of the deal." This was done by comparing an existing
model (Figure 1.1) with the proposed model (Figure 1.2) using regression-based techniques. In Study 2, a 2x2x2 experimental design was used to study the effect of discount levels (moderate vs. exaggerated discounts), nature of price comparison (between-store vs. within-store) and cue concreteness (abstract vs. concrete) on consumers' value perceptions and behavioral intentions. In Study 3, a 2x2x2 experimental design was used to study the effect of nature of price comparison (between-store vs. within-store) and cue concreteness (abstract vs. concrete) in combination with the location of the consumer's decision (at home vs. at store) making on consumers' value perceptions and behavioral intentions.
CHAPTER 2: LITERATURE REVIEW

This chapter traces the development of the literature along several streams. The first part of the chapter presents reviews of the theories used to elucidate consumer use of internal price standards and responses to external prices. Specifically, adaptation level theory is first discussed followed by reviews of assimilation-contrast theory, anchoring and adjustment framework, and Thaler's utility theory.

The second part of the chapter provides a detailed discussion of the Internal Reference Price (IRP) construct. The discussion involves identification of multiple operationalizations of the construct, examining how these standards are formed, and critical evaluation of the roles played by the multiple IRPs in consumers' judgment of price promotion or offer. The second part of the chapter also presents a discussion of the Expectancy Value Model and proposes a new construct "perceived fairness of the offer price." A modified model of Thaler's utility theory is proposed by substituting the "transaction utility" with "perceived fairness of the offer price."

The third part of this chapter focuses on the literature related to semantic cues and their effects on consumers' evaluation of a price promotion or offer. In particular, the role of semantic cues is first examined, followed by a discussion of attribution theory that has been used to explain the effects of these cues. Following these discussions, a critical evaluation of the current literature on semantic cues is presented with particular focus on the concepts of consistency, distinctiveness, within-store cues, and between-store cues. Finally, this chapter examines the issue of cue concreteness and identifies possible confounds in the manipulation of semantic cues in the existing literature.
The fourth and final part of this chapter presents hypotheses related to the three major issues examined in this dissertation. First, it is hypothesized that the subjective construct "perceived fairness of the offer price" will have a higher predictive power in determining the perceived value of the deal, rather than TU(s). Next, hypotheses are generated regarding the relative importance of the nature of the price comparison (between-stores and within-stores), and cue concreteness (abstract and concrete). Hypotheses are also generated regarding the interaction of these two conditions. Finally, hypotheses are generated regarding the effectiveness of the above mentioned cues at different locations - namely at home and at the store.

**Theories of Reference Price Effects**

The existence of an internal standard which consumers use to evaluate an observed price is suggested by several psychological theories that have been used to explain reference price effects. These theories suggest that a consumer's response is based on an evaluation of price in relation to some point of reference (Lattin and Bucklin 1989). The theories that are most commonly used to explain these effects are adaptation-level theory (Helson 1964), assimilation-contrast theory (Sherif 1963), anchoring and adjustment framework (Tversky and Kahneman 1974), and transaction utility theory (Thaler 1985).

**Adaptation-Level Theory**

Adaptation-level theory is a framework widely used to explain consumer responses to price (cf. Gotlieb and Dubinsky 1991; Della Bitta and Monroe 1973; Monroe 1973). According to this theory, an individual's behavioral response to a stimuli is a function of the pooled effect of three classes of stimuli: *focal, contextual,*
and residual.\textsuperscript{1} The focal stimuli are those to which the individual is directly responding. In a pricing context, the focal stimulus is the price at which the product of interest is being offered. In the case of a price-based brand choice decision, the focal stimuli are the set of prices of the alternative brands of the product class that the shopper encounters. The contextual stimuli (or background cues) are "all other stimuli in the behavioral situation providing the context within which the focal cues are operative" (Della Bitta and Monroe 1973, p. 359). An example of contextual stimuli in the shopping environment would be point-of-purchase promotional displays. Finally, the residual stimuli relate to previous purchase experiences such as price-last-paid or some notion of "fair price" (Nwokoye 1975).

The adaptation level formed as a function of the three classes of stimuli is the frame of reference that is used to make a judgment of the focal stimuli. According to adaptation-level theory, contextual stimuli influence the consumer's adaptation level price. The fact that consumers compare the price of a target product to an IRP and use the IRP in making judgments has been confirmed by a large number of empirical studies (cf. Della Bitta, Monroe and McGinnis 1981; Gotlieb and Dubinsky 1991; Petroshius and Monroe 1987; Winer 1986). However, one limitation of this literature is that while it does suggest that consumers use an IRP as a standard against which other prices are judged, it does not suggest the composition of this IRP. The theory suggests that the IRP may be predicated on prior exposure to prices (Gotlieb and Dubinsky 1991; Nwokoye 1975). Thus, it could depend on the price of rival product offerings, the last price paid, the lowest alternative price, the highest alternative price, etc. (Della Bitta

\footnote{\textsuperscript{1}Although Helson (1964) referred to these as "residual stimuli," Della Bitta and Monroe (1973) referred to these as "organic cues."}

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and Monroe 1973). Further, this IRP will change over time as the consumer adapts to changing conditions (Lattin and Bucklin 1989).

**Assimilation Contrast Theory**

Another theory used to explain reference price effects is assimilation-contrast theory. It holds that consumer response depends on whether an encountered price is within a certain price range that is viewed as acceptable by the consumer. The price range is formed from the consumer's previous experience and is referred to as the individual's reference scale or psychological scale (Monroe, Grewal, and Compeau 1991). The important part of the price range is the upper and lower price limits or endpoints (Gabor and Granger 1966; Monroe and Venkatesan 1969). The upper and lower price limits establish the price thresholds above and below which a product may be viewed as belonging to a separate (higher or lower priced) category (Rao and Sieben 1992).

Assimilation-contrast theory points to the importance of the magnitude of the price range (the difference between the end points of the range of acceptable prices). A consumer's response to a price is determined, to some extent, by these end points in the range (Monroe 1977; Parducci and Perrett 1971; Parducci 1974). Monroe (1990, p. 63) describes how consumers react to a new price (an external reference price) based on this price range they hold:

When a new price is introduced at or near the end (high or low) of a current series of acceptable prices (price range), the buyer's judgment is displaced (moves) toward this new price and a new reference price is assimilated into the price range; the buyer will then consider the new product as a reasonable substitute for the present product. However, when this new price is too remote (outside) from the current price range, the price may be perceived as belonging to another product-price category -- the contrast effect.
Thus, according to this theory, the reference scale is continuously changing as new stimuli are encountered. The new stimuli serve as an anchor, and an assimilation effect occurs when the reference scale is displaced toward these new values. A contrast effect occurs when the new stimuli are perceived as being different from the reference stimuli (Monroe, Grewal and Compeau 1991). Hence, according to the assimilation and contrast theory exaggerated reference prices or exaggerated discount claims should be rejected (contrasted).

It has, however, been observed by Biswas and Blair (1991), Lichtenstein and Bearden (1989), and Urbany, Bearden and Weilbaker (1988) that exaggerated or implausible prices are not entirely rejected by consumers. Though consumers are skeptical about the claims and discount the discount that is being offered, they are still influenced and have a more positive evaluation of the claim than plausible reference prices (Gupta and Cooper 1992). These results were contrary to what assimilation and contrast theory suggests. A framework suggested by Biswas and Burton (1993, 1994) to study the effects of tensile price promotions may explain why exaggerated reference prices may positively influence consumers' perceptions and behavioral intentions.

**Anchoring and Adjustment Framework**

Biswas and Burton (1993, 1994) have proposed the anchoring and adjustment process (Tversky and Kahneman 1974) as a framework that may be used to examine the effects of tensile price claims. In this process, an initial starting point-relevant or irrelevant- is used as the anchor for a judgment or estimation of values of unknown objects. This anchor is then adjusted to reflect implications of other information provided by external sources such as the semantic or focal cues. However, the
adjustments are generally insufficient and lead to estimates that are biased in the
direction of the initial anchor (Slovic, Fiscoff, and Lichtenstein 1982).

One example of this process is provided by Tversky and Kahneman (1974) in
which subjects were asked to estimate the percentage of African countries in the United
Nations. The examiner first spun a wheel-of-fortune to provide an initial number. The
subject had to decide if the number was higher or lower than the actual percentage and
provide their estimate. The findings of the study indicated that the highly artificial
anchors provided by the numbers on the wheel had strong and significant effects on the
estimates of the percentage of African countries in the United Nations. The median
estimates were 25 and 45 African countries in the United Nations when the anchors
were 10 and 65, respectively.

In a reference pricing context, it is quite likely that the implausible or
exaggerated reference prices act as anchors. Anchoring and adjustment framework
suggests that even "experts" can make insufficient adjustments based on irrelevant
information provided to them. For example, Northcraft and Neale (1987) examined the
effects that completely uninformative list prices would have on professional real estate
agents (who are considered experts in judging the value of homes). The findings
indicated that the completely uninformative list price had a strong effect on lowest
acceptable offer price, estimates of selling and purchase price, and estimates of value
because of insufficient adjustments to the anchor. Consumers and even experts, thus,
adjust their reference prices relative to this anchor point and hence are actually
influenced by it. This may explain the anomalous results arrived at by earlier
researchers (Biswas and Blair 1991; Gupta and Cooper 1992; Lichtenstein and Bearden 1989; Urbany, Bearden and Weilbaker 1988).

**Transaction Utility Theory**

In Thaler's (1985) seminal piece on transaction utility theory, he defines the total utility of a purchase as the sum of acquisition utility and transaction utility. Acquisition utility depends simply on the value of the goods received \( p' \) compared to the price paid \( p \). Transaction utility, on the other hand depends on the outlay \( p \) as compared to some reference price \( p^* \) i.e., the perceived merits of the "deal." Formally, it is defined as "the value of paying \( p \) when the expected or reference price is \( p^* \)." In this context, \( p^* \) is determined by "fairness." Mathematically, total utility is expressed by Thaler as:

\[
\text{Total Utility} = \text{Acquisition Utility} + \text{Transaction Utility}
\]

Thaler further states that a more generalized form of this function is:

\[
\text{Total Utility} = \text{Acquisition Utility} + \beta (\text{Transaction Utility})
\]

where, \( \beta \) is the weight given to transaction utility. In the standard theory \( \beta = 1 \).

Krishnamurthi, Mazumdar and Raj (1992) also note that for brand loyal customers \( \beta \) may be lesser than 1 while for brand switchers \( \beta > 1 \).

Thaler goes on to say that "fairness" depends in large part on cost to the seller. The reference price used in evaluating the merits of a deal would include what the consumer feels are reasonable overheads (cost to the seller includes reasonable overheads and profits) and can be viewed as the "reasonable" or "just" price for the product. While the total utility a consumer derives from a purchase is a sum of the transaction utility and acquisition utility (Thaler 1985), the subjective weights that they...
assign to these components may vary (Krishnamurthi, Mazumdar and Raj 1992). When consumers are primarily interested in the product's need satisfying properties, a price change primarily affects the acquisition utility, as consumers are less likely to view the purchase price either as a loss or as a gain relative to their IRP. When the focus is on paying less than the IRP, the transaction utility component receives a greater weight.

An example of transaction utility is that most consumers are willing to pay a much higher price for a bottle of beer at a luxury hotel than at a small convenience store. The acquisition utility for the bottle of beer is the same in both situations (the intrinsic "value" of the bottle of beer remains the same). However, if the convenience store charged the same for the bottle as a nearby luxury hotel, it would be viewed as an "unfair" price because the cost of supplying the bottle of beer is perceived as being lower for the convenience store.

Thus, the focus of Thaler's (1985) transaction utility theory is the importance of \( p^* \) (reference price), and how deviations from \( p^* \) are likely to affect consumers' evaluations of a particular deal. Thaler states that \( p^* \) is determined by "fairness" and the fairness depends in large part on the \textbf{cost to the seller}. Subsequent researchers have focused on the deviations of the actual price from a particular reference price (Krishnamurthi, Mazumdar, and Raj 1992; Urbany, Bearden, and Weilbaker 1988; Urbany, Bearden, Kaicker, and Borrello 1997). The focus in these studies seems to be on the deviation of the actual price from what is considered a fair market price or some other IRP rather than on fairness perception based on the cost to the seller.
Operationalizations of Internal Reference Price

Rosch (1975) defined a cognitive reference point as any stimulus in relation to which other stimuli are seen. This definition of a reference point has been used to define a reference price as "a cognitive reference point for incoming price stimuli" (Zeithaml and Graham 1983). Having used psychological theories to establish that consumers do in fact compare prices they encounter to a standard of reference that is called the IRP, the next stage is to understand exactly what this standard is.

Adaptation-level theory seems to suggest that the IRP is a weighted geometric mean of past observed prices (Monroe 1977). The use of past-observed prices as a point of reference has been suggested by some of the earliest studies on price perception (Scitovsky 1944-45). Ölander (1970) claims that consumers use the modal price of several past purchases as their reference price. Uhl (1970) (as reported in Winer 1988)) suggests quite simply that the reference price for a good is the last price that a consumer paid for that good. Gabor (1977) also used last price paid (which he referred to as "price image") as the appropriate reference price.

More recently, Mayhew and Winer (1992, p. 64) used "[p]rices last paid or charged for each brand the last time a category purchase was made" as the IRP used by consumers. Using scanner panel data, they justified the use of the last price paid on the basis of the fact that several exponential smoothing models fitted to the data found an optimal smoothing constant of zero. Further, they used the justification that other researchers had also used this approach to measuring IRP (e.g., Putler 1989; Raman and Bass 1988). Winer (1986) tested the extrapolative expectations hypothesis which suggests a reference price predicted by the previous period's price adjusted for a trend.
Kalwani, Yim, Rinne, and Sugita (1990) used a formulation of reference price that includes a variable that considers the effect of past prices. Specifically, they define the influence of past price as being a weighted log mean of the prices encountered at the previous five purchase occasions. Some other researchers have considered the range of prices that are used as an IRP.

A related price standard that is increasingly being used in the literature is an expected average market price (Biswas 1992). The advantage of using an expected market price as a comparison standard is that it allows for variations in expected prices on the basis of expected price fluctuations. That is, in a situation where the price for a product varies by season (for example produce items), using the weighted log mean of prices encountered at the previous five purchase occasions discussed earlier may not be valid. Although the mean of past prices may be low, a consumer may be willing to pay a higher price for the product if the perception of the "normal price" for the product has gone up. For example, Blair and Landon (1981) implicitly used a market price - the normal price (price normally charged by the retailer when the product is not being advertised) as their measure of IRP by assuming the difference between the normal price and the advertised price to be an inferred measure of perceived dollar saving. Supporting this, Urbany and Dickson (1991, p. 46) operationalize IRP as the "range of prices normally charged by the retailer when the product is not on special."

Lichtenstein and Bearden (1989) provide a comprehensive and detailed view of IRP. They present several market-based IRP standards that could be used by consumers in their evaluation of an observed price. The standards used are: (1) the range of perceived normal (expected marketplace) prices, (2) the perception of lowest
marketplace prices, (3) the IRP range, and (4) the latitude of acceptable prices. These were operationalized on the basis of consumers' estimates of the "normal" price, "lowest" price, and "fair" price for the product. Also focusing on the "normal" and "lowest" marketplace prices, Biswas and Blair (1991) separate the price comparisons into two parts: a comparison with the estimated lowest price available (perceived shop-around saving) and a comparison with the estimated normal price at the store (perceived saving). Winer (1986, p.251) provides another definition of reference price as "the consumer's perceived current price of a brand; it could also be termed an anticipated price because it is the price a consumer expects to observe at point-of-purchase."

In contrast to these historical views of reference price, Jacobson and Obermiller (1990) argue that expected future price is of considerable importance in a purchase decision. Jacobson and Obermiller (1990) question Winer's (1986) conceptualization of reference price as price anticipated at the point of purchase and argue that it is not strictly an expectation of future price. Based on neoclassical economic theory, they suggest that to a true utility-maximizing consumer, past prices and expectations of current price play no role. The "true" value of a good depends on what it will cost in a subsequent time period and on the cost of delaying that purchase. No matter what the past price is, if a consumer expects the price of an item to be lower in the future; he or she is likely to delay purchase of that item (assuming a low cost of delaying purchase) to that future point. Therefore, these authors suggest that past prices or expectations of current price "come into play only to the extent that they influence expectations about future prices" (p. 422).
While acknowledging the possible importance of expected future price in conceptualizing IRP, Mayhew and Winer (1992), had to use last price paid as a proxy for IRP since they used scanner data. While it is certainly reasonable to expect consumers to be utility maximizers and act in their best interest by considering future prices in their purchase behavior, the use of expected future price as an IRP poses some problems. For example, Jacobson and Obermiller (1990) use actual future price as a proxy for expected future price and demonstrate its effect on consumer responses to price promotions. Consumers often have little knowledge of future prices. While consumers can be assumed to use available price information to form expectations of future prices, it remains unclear exactly how these expectations are used in their evaluations of a deal through expected future prices.

The basis for Jacobson and Obermiller's (1990) argument about the importance of expected future prices is the fact that it is unreasonable to expect consumers to base their evaluation of a deal on the basis of past prices if they have knowledge about future prices. Take, for example, a situation where you know that an advertised price is lower than past prices for the product. If you simply used past prices as a reference price, you would evaluate the deal favorably. Now consider some new information you encounter -- the price is going to be even lower tomorrow. As a rational, utility maximizing consumer, the present deal would not be evaluated favorably and you would defer your purchase to the following day. However, when information on future prices is not readily available, consumers may have no choice but to evaluate a deal based on past price information. Therefore, there may be more than one price that is used as a
standard of comparison. The price that has the most influence on a deal evaluation would depend upon the consumer's certainty about the price standard.

As the literature review indicates, there have been several different operationalizations of the IRP construct that are related, but different. The main issue concerns what information is available to or used by consumers when they make a price judgment. Hence, some researchers have suggested that the IRP could be a multidimensional construct (Chandrashekaran and Jagpal 1995; Klein and Oglethorpe 1987; Winer 1988). Winer (1988) pointed out that the multidimensional nature of reference prices still needs to be established. Klein and Oglethorpe (1987) also suggested that consumers may use different reference price standards in different purchase situations.

Given the lack of consensus in the literature as to the IRP most frequently used by consumers, Biswas (1992) emphasized that it is important to examine the multiple constructs that might influence a consumer's judgment of an external reference price. Additionally, if indeed IRP is a multidimensional construct, the question to be answered is exactly what dimensions can be used to fully define the IRPs that consumers use in a variety of situations. It is in the context of these differences that Chandrashekaran and Jagpal (1995) proposed a Unitized Internal Reference Price (UIRP), which is a function of the fair price, lowest price seen, highest price willing to pay and normal price.

**Unitized Internal Reference Price**

In an attempt to examine the underlying process by which consumers form and use IRPs to determine the value of the product offerings, Chandrashekaran and Jagpal (1995) conceptualized IRP as a function of four different IRPs suggested in the literature. Though many researchers had suggested that the IRP was multidimensional
in nature (Klein and Oglethorpe 1987; Winer 1988) this was the first attempt to operationalize IRP as a multidimensional construct.

Chandrashekaran and Jagpal (1995), using the multiple definitions of IRP in the literature, incorporated multiple measures of IRP. They proposed a unitized model in which the different IRPs tapped the domain of a single construct. They tested this model against a non-unitized model where each of the IRPs individually influenced offer value. Contrary to what some researchers have proposed in the literature, it was observed that consumers did not combine the multiple reference points to form a single, well-defined IRP. Further, it was found that consumers' use of reference prices varies according to the product category.

Specifically, while fair price and highest price willing to pay significantly predicted the offer value for one product (stereos), fair price and lowest price seen were the significant predictors in the case of the other product used in the study (running shoes). Thus even when an attempt was made to take cognizance of the multi-dimensional aspect of IRP, the results were mixed in that different dimensions of IRP seem to be used for different products. While the resolution of which IRP to be used under different conditions may be an interesting question, a more important one is to find its impact on the perceived value of the deal.

To summarize, there is agreement that in evaluating an external reference price, consumers may use multiple IRPs such as adaptation level, lowest, and highest market prices (Monroe 1990); expected future price (Emory 1970; Jacobson and Obermiller 1990); fair price (Lichtenstein and Bearden 1989); aspiration, market, and historical prices (Klein and Oglethorpe 1987); normal price perceptions (Biswas and Blair 1991;
Lichtenstein and Bearden 1989); average market price (Emory 1970; Urbany et al. 1988); lowest market price (Biswas and Blair 1991; Blair and Landon 1981; Urbany et al. 1988). Moreover, it is possible that IRPs may not be the same for all consumers and may not necessarily be the same for an individual consumer over purchases and over time (Biswas, Wilson and Licata 1993). Additionally, the process by which consumers use multiple reference points (Kahneman 1992), and the manner in which these multiple reference points compete and combine, is as yet unresolved. Hence, understanding the manner in which consumers choose to combine more than one IRP for a particular situation or different situations is important. This assumes importance due to the fact that IRP affects consumers' evaluation of the deal.

**Expectancy Value Model**

It has been suggested by Thaler’s (1985) transaction utility theory that the reference price used in evaluating the merits of a deal would depend largely on what is perceived to be “reasonable” or “just.” The expected or "just" price that a consumer uses in evaluating a purchase, also known as the IRP, is critical to the purchase decision. This is also in agreement with the view propounded by Expectancy Value Model.

Most consumer decision-making models are based on the information-processing paradigm, and have largely ignored the motivational aspects of consumer decision-making (Bettman and Sujan 1987). In her research, Dabholkar (1994), introduced choice into an attitudinal framework. She compared four different choice models and found most support for the expectancy comparison model, based on expectancy-value components. In this dissertation, an attempt is being made to incorporate a motivational model (expectancy-value model) in a consumer decision-making scenario.
In a consumer decision-making scenario, the expectations that a consumer brings to the decision-making environment are either confirmed or disconfirmed based on the stimuli encountered. If the stimuli encountered confirm consumer expectations, then the decision making is a simple one as it is based on confirmation. However, if the expectations are disconfirmed, then the consumer may engage in cognitive processing to determine if the expectation needs to be revised, or whether the stimuli is unfavorable in comparison with the prior expectations. As Feather (1982, p. ix) notes, "the focus of expectancy-value models in psychology is on cognitive models that relate action to the perceived attractiveness or aversiveness of expected consequences. A person's behavior is seen to bear some relation to the expectations that the person holds and the subjective value of the consequences that might occur following the action (emphasis added)."

Based on the expectation-value model, it can be concluded that in a decision-making environment a consumer forms subjective evaluations of the consequences based on some prior expectations. In the context of pricing, a consumer has a prior expectation of the price (IRP) of a product/brand. This is either confirmed or disconfirmed based on the stimuli encountered (offer price). The stimuli (offer price) may be either confirmed, positively disconfirmed, or negatively disconfirmed depending on whether it is equal, lower or higher than the IRP, respectively. However, as suggested by the expectancy-value model, the initial reaction to the stimuli (offer price) is to judge if it is just or fair. In the context of price promotions, if the offer price is perceived to be fair (as in confirmation/positive disconfirmation) it is likely to lead to a positive evaluation of the deal. For example, if the consumer expects the price of a product to be $125 and finds

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2The expectation could arise due to some knowledge about past prices, future expectations, the average of previous purchases etc. Hence, the method of how the consumer arrives at this expectation is a moot point.
that the product is being sold at a price of $100, the offer would be perceived to be fair, leading to positive disconfirmation. Similar to the example above, if the consumer expects the price of the product to be $75 and finds the product being sold at $100, the offer would be perceived to be unfair leading to negative disconfirmation and hence a negative evaluation of the deal.

**Modified Model of "Value of the Deal"**

Based on the expectations-value model, Thaler's (1985) model (Figure 1.1) of evaluation of the deal, which includes transaction utility (TU) and acquisition utility (AU), is revised to include "perceived fairness of the offer price" in lieu of TU. The perceived fairness of the offer price may be defined as **the consumer’s overall perception of the offer price based on one or a combination of the IRPs that he/she may bring to the decision environment.** In contrast to Thaler's model, in the proposed model a subjective measure, "perceived fairness of the offer price" and acquisition utility combine to predict the value of the deal. The "perceived fairness of the offer price" is the consumer's evaluation of the fairness (or unfairness) of the offer. Hence, it does not matter if the consumer used a single IRP or combination of IRPs.

The major advantage of the model proposed in Figure 1.2 is that it is easy to assess "perceived fairness of the offer price" using a subjective measure. It also helps to overcome uncertainties regarding the IRP(s) that the consumer may choose to use to evaluate an offer, or the way in which these multiple reference points are combined. The ability of these two models to predict "perceived value of the deal" will be compared in Study One.
Perceived Value of the Deal versus Perceived Fairness of Offer Price

One of the potential concerns relating to the model depicted in Figure 1.2 could be that the perceived fairness of the offer price and consumers’ evaluation of the deal are likely to be parts of the same evaluation process and hence may not be distinct. In this section we present the definition of "value of the deal" and distinguish it from the proposed construct "perceived fairness of the offer price" defined above.

Value has multiple definitions in the marketing literature. Zeithaml (1988) identifies four different ways value has been defined. Prior industry studies indicate that for some "Value is low price." An economist's definition of value or utility would be "Value is whatever I want in a product." Some other researchers (Dodds and Monroe 1984; Doyle 1984) have approached value from the price-quality relationship and defined it as "Value is the quality I get for the price I pay." Finally, a set of researchers has defined value to be "Value is what I get for what I give." Synthesizing these definitions, Zeithaml (1988) defines it as “a overall assessment of the utility of a product based on perceptions of what is received and what is given” (p. 14). Thus value involves a tradeoff between the give and the get components. By contrast, the proposed construct "perceived fairness of the offer price" is a subjective evaluation of the offer price based on a direct comparison of the offer price with some internal reference point.

Additionally, based on Thaler (1985), it is argued that though correlated the two constructs are separate and distinct. Thaler (1985) notes in his introduction vignette (p. 205) to Transaction Utility theory:

“My sister just found out that for a $235 per month sublet she shares with another woman, she pays $185 per month. The other woman justifies her $50 per
month rent two ways: one, she is doing my sister a favor letting her live there given the housing situation in New York City, and, two, everyone with a room to sublet in NYC will cheat her at least as badly. Her reasons were undeniably true, and that makes them quadruply disgusting.”

Using this example Thaler (1985) makes an argument that though the sister in this case is getting a good value for her money, she is still unhappy. Thus, a consumer may feel that he/she is getting a good value for the deal but is being unfairly treated at the same time. Hence, the two constructs of value of the deal and fairness of the offer, though related are distinct constructs.

In summary, though the "perceived fairness of the offer price" and "perceived value of the deal" are related, they are distinct. As noted earlier, a consumer may be willing to pay a higher price for the same quantity and brand name of beer if it were bought at an expensive restaurant rather than a convenience store. Hence the “perceived fairness of the offer” could affect the consumer’s evaluation of the value of the deal. This would be the case irrespective of which IRP the consumer chooses to use. Thus using “perceived fairness of the offer,” a subjective measure, one could explain the effect of multiple IRPs on the value of the deal.

**Effect of Semantic Cues**

IRP is an important factor affecting consumers' evaluation of price promotions. Another equally important factor that influence consumers' evaluation is the wording of the advertisement or the semantics used by the advertiser. The research relating to semantic cues in price promotions is discussed in this section.
Advertisers use particular phrases that give additional meaning to prices provided in reference price advertisements. These phrases are called the “semantic cues” and are contextual variables that appear in all reference price ads (Lichtenstein et al. 1991). Semantic cues are classified as contextual variables because consumers perceive external reference prices and offering prices in the “context” of the particular semantic cue that the advertiser employs (Monroe 1990). Contextual variables provide the situation or setting in which the consumer receives pricing claims.

Adaptation level theory suggests that the effect of focal cues (price claims) may be influenced by contextual cues. As such contextual variables may be important factors in influencing consumers’ acceptance of retail price claims. For example, Biswas and Blair (1991) found that the brand used in the price promotion (familiar vs. unfamiliar) and the type of store (discount vs. non-discount) advertising the sale greatly influenced consumer perceptions and price expectations. Biswas and Burton (1994) found similar results using store type as the contextual variable. Lichtenstein and Bearden (1989) found that the contextual variables of consistency and distinctiveness influence internal price standards and purchase evaluations. These are merely a few examples that indicate how important it is to consider the influence of contextual variables when assessing pricing effects.

The effectiveness of these cues has led to the Federal Trade Commission examining some trade practices as well as semantic cues used by advertisers. Some of the famous cases involving semantic cues are the attorney general of Maryland vs. Hecht department stores and attorney general of the state of Colorado vs. May D&F department (Lichtenstein et al. 1991). In both these cases the (mis)use of the words “regular” and “originally” were the cause for the suit being filed. It was contended that not many (or
any units of the products were sold at the price termed as "regular" or "originally." Hence the government contended that though the price may have existed for a short period in the retailer's shop, it was not in effect as sufficient number of units of the particular product were not sold.

In the next section we focus on the literature related to semantic cues and their effects on consumers' evaluation of a price promotion or offer. We begin with a discussion of attribution theory that has been used to explain the effects of these cues. Following these discussions, a critical evaluation of the current literature on semantic cues is presented with particular focus on the concepts of consistency, distinctiveness, within-store cues and between-store cues. Finally, we examine the issue of cue concreteness and identify possible confounds in the manipulation of semantic cues in the existing literature.

Attribution Theory

Attribution theory provides a useful paradigm for investigating issues related to contextual cues. Attribution theory concerns the way in which individuals infer causes to actions or observed events. While there are many different theories about attribution, most agree that there are three antecedents to causal attributions. These three variables are motivations, information and prior beliefs (Folkes 1988), and are derived from Jones and Davis's (1965) theory of correspondent inference. Motivational reasons for causal attributions are rooted in concerns about the individual's personal level of self-esteem. Individuals tend to attribute positive outcomes to themselves (enhancing self-esteem) while attributing negative outcomes to the situation or some other external factor (also enhancing self-esteem). Attributions are also affected by information specific to some
event including beliefs about co-variation with other events. Prior beliefs influence
attributions by affecting the manner in which the event is categorized or classified by the
individual consumer. The last two antecedents seem to be relevant for possible attributions
concerning advertisements promoting a price discount (Burton, Lichtenstein, Biswas and
Fraccastoro 1994).

Information and prior beliefs may influence a consumer’s attributions in several
ways. For example, a consumer may have prior experience and/or information
concerning the pricing procedures of a particular retailer. If the consumer is aware that the
retailer normally advertises a sale at a particular time of the week or month, the consumer
may have less faith in actually benefiting from a discount. The benefit perceived from the
purchase may, however, be different for a consumer who does not know about the frequent
discounts offered by the said retailer. Prior beliefs influence a consumer’s attributions.
Prior beliefs correspond to the belief about the price of a product that a consumer brings
into the buying decision. This is reflected in the IRP for the consumer. If a consumer had
an IRP that was lower than the offer price, the consumer may not perceive any benefit and
may attribute the retailer’s claim as being untrue. If, however, the offer price is too low
compared to the consumers’ IRP, the attribution may well be that the ‘product is of low
quality.’

Consistency and Distinctiveness

Lichtenstein and Bearden (1989) were the first to study the effect of consistency
and distinctiveness as contextual variables in the case of reference price advertisements.
According to attribution theory, information which is “more of the same” (highly
consistent information) is less likely to be elaborated by consumers (Jones and McGillis
1976). Consistency of a sales promotion is defined as the frequency with which a product or a group of products are advertised on sale by a merchant or a retailer (Lichtenstein and Bearden 1989). In keeping with the definition Lichtenstein and Bearden (1989) operationalized consistency by informing the subjects about the number of times a product (a desk) was advertised as being on sale over an eight-week period. Subjects in the high consistency condition were told that the product had been on sale for six weeks of the eight weeks while those in the low consistency condition were told that the product was not advertised as being on sale for the entire period.

Distinctiveness of a sales promotion by a merchant or a retailer is defined as the manner in which the offer (sale) price compares with what the competitors normally charge. Thus, according to attribution theory the more a promotion is distinctive the more it will be elaborated on by the consumers as it stands out among the offers made by the competitors. The authors manipulated the distinctiveness condition by informing the respondents that the retailer’s advertising schedule was similar to that of one to three competitors for five of the eight weeks (low distinctiveness) or that the schedule did not have the competitors promoting a similar desk during the entire period (high distinctiveness).

Lichtenstein and Bearden (1989) found that the two contextual variables of consistency and distinctiveness did influence the internal price standards and purchase evaluations. Though they found that low consistency and high distinctiveness positively affected purchase evaluations, they did not test which of these two had a greater effect. This was important because it was not appropriate to test between low and high levels of consistency and distinctiveness, as there were no ecological
counterparts to high consistency advertising and low distinctiveness advertising. Hence, it was important to find which of the two types of cues – low consistency and high distinctiveness – were more effective (Lichtenstein, Burton and Karson 1991).

Lichtenstein et al. (1991) operationalized the consistency and distinctiveness of the advertisements by manipulating the wording in the advertisement rather than providing information about the advertising pattern of the retailer. This was probably a better approach because in a realistic scenario the consumer is seldom provided information about the advertising pattern of the retailer.

In operationalizing distinctiveness, Lichtenstein et al. (1991) used the cues of (A) “Compare at $______, Our Price $______” or (B) “Seen Elsewhere $______, Our Price $______.” Both these cues implicitly compare the advertiser’s prices to that of a competitor. Hence these cues are likely to be perceived as being high in distinctiveness.

However, in this study the problem seems to be in operationalizing the consistency construct. To operationalize consistency, Lichtenstein et al. (1991) used the four cues, (a) “Was $______, Now Only $______”, (b) “A $______ Value, Sale $______”, (c) “Regular $______, Sale $______”, and (d) “_______% Off, Now Only $______.” The authors argued that these four cues were indicators of infrequent promotions by the advertiser (i.e. low consistency). However, while these cues compare an offer price with a "previous" price, they do not necessarily imply anything about how often the product has been advertised. It is conceivable that an advertiser may use the same cues for a product that is promoted rather heavily.

In the pretest Lichtenstein et al. (1991) provided the respondents with all the six cues and asked them to rate these cues on a consistency scale. They used items such as
"the lower price is a temporary price" to measure the consistency of the cues. They found results that supported their a priori beliefs about the type of cues they provided the respondents.

However, because Lichtenstein et al. (1991) were determining low consistency of the four cues by comparing it with the consistency scores of two other cues, it is possible to view the two cues with high distinctiveness as being high on consistency too. Likewise, the four cues, which were low in consistency, were possibly perceived as low in distinctiveness. The result of this pretest, therefore, may be confounded as the comparison of these cue scores are made relative to each other through paired sample t-tests. Hence, a low consistency cue only implies that the product is not promoted as often as the cues that are high on distinctiveness. It does not imply that the consumer perceives the cue to be low in consistency, per se. Hence, the basis of categorizing the cue as low or high consistency is not clear in this case. The results of the first pretest provide support for this concern regarding cue classification.

**Within-Store versus Between-Store Cues**

Grewal, Marmorstein and Sharma (1996) studied semantic cues from a different perspective. They equated the consistency aspect of the cues to within-store promotions and the distinctiveness aspect of the cue to between-store promotion. Within-store promotions are defined as those where the sale price is compared to the price at which the product was sold prior to the price promotion coming into effect. A between-store price promotion is defined as one in which the sale price is compared explicitly or implicitly with that of a competitor’s current price. They further added a dimension to the consumers’ evaluation process by including the place at which the decision is made.
Using the Economics of Information (Stigler 1961), Grewal et al. (1996) argue that when the customer is at the point of purchase (i.e., the store), the within-store promotion (consistency) is likely to be more effective. The customer in this case may find the effort to compare prices with different stores too demanding. However, if the customer is at home, the between-store promotion (distinctiveness) is likely to be more effective, as the customer expends much less energy in comparing the prices across stores. They found evidence to support their assertions.

Grewal et al. (1996) used the cues "Compare at/Sale Price" and "Regularly Priced/ Sale Price" to operationalize the between-store and within-store comparisons respectively. The within-store comparison that they used ("regularly priced/sale price") seems to be providing clear and concrete information that the particular product was normally sold at a certain price but now was being sold at a lesser price. However, the cue "compare at/sale price" is quite vague and not very informative. Clearly, one question that is likely to arise when one is provided with such a cue is "compared with whom?" On the other hand, if the between-store cue that was provided named the retailer with whom the comparison was being made, it might have been a concrete cue and hence comparable to the “regularly priced/sale price” cue along the cue concreteness dimension. The results that Grewal et al. (1996) reported may be confounded because the within-store cue that they used provides more concrete information than their between-store cue. Hence, though Lichtenstien and Bearden (1989), Lichtenstein et al. (1991) and Grewal et al. (1996) provide us some vital information about how and why semantic cues are effective, there may be other aspects to the cues that may warrant investigation.
Cue Concreteness

Ford, Smith, and Swasy (1990) found that consumers were more skeptical of subjective or imprecise advertising claims. They found that consumer believability was higher in the case of concrete advertising claims than subjective claims. MacKenzie (1986), when examining the effect of concreteness of copy in print advertisements in general, found similar results. Similarly, in the area of pricing, tensile price claims, which are by definition more subjective and ambiguous compared to specific discounts (Mobley, Bearden, and Teel 1988), were found to be less believable and less effective.

Researchers in psychology (Nisbett and Ross 1980) have examined the properties or characteristics of information that make it vivid. They identified "concreteness" as one of the primary characteristics of information. They define concreteness as "the degree of detail and specificity about objects, actions, outcomes, and situational context (p.45)."

In the context of semantic cues in price promotions we define concreteness as "the degree of detail and specificity about the price comparison being made." For example, in the case of a cue such as "A ______ Value/Sale Price," it is not clear how the "value" was arrived at in the first place and who arrived at that value. In the case of a cue such as "Compare at/Sale Price," it is not clear with whose price the comparison is being made.

As these studies show, consumer believability is higher when consumers are exposed to concrete claims. If consumer believability were to affect the evaluation process, then one would expect concrete price claims such as "Last Week $______, Now $______" and "Named Retailer $______, Our Price $________" to be more effective than claims such as "A _____ Value, Now $______" or "Seen Elsewhere
$_______, Our Price $_______,” as these claims are more vague. In the latter set of cues it is not clear as to “when” the prices were higher or who is the retailer that is being compared with, while it is clear in the former set of cues. If cue concreteness were to play a role in affecting the consumers’ evaluation process, then it may be possible to additionally explain the reason for the effectiveness of these semantic cues.

**Hypotheses**

The purpose of this dissertation is to assess (1) whether the model proposed in this dissertation (Figure 1.2) possesses better predictive power than the model suggested by Thaler's utility theory (Figure 1.1) (2) the role played by cue concreteness on consumer evaluations (3) whether the role played by cue concreteness will differ based on where the consumer views the advertisement (4) whether the earlier mentioned effects hold at moderate as well as high discount conditions and (5) whether the nature of price comparison affects the evaluation of a price cue.

**Hypothesis – Study One**

Thaler's transaction utility theory suggests that total utility of a deal is a function of the transaction utility and the acquisition utility. He further states that the transaction utility depends on the outlay \( p \) as compared to some reference price \( p^* \). This reference price that a consumer brings to the purchase environment is called the Internal Reference Price (IRP). The model representing the transaction utility theory is provided in Figure 1.1.

As previously stated, there is a near consensus that the IRP affects consumers' evaluation of the deal. However, there have been several operationalizations of the IRP construct in the literature that tend to focus on a single IRP. Also, several authors now
suggest that IRP may be multidimensional in nature (Chandrashekaran and Jagpal 1995; Jacobson and Obermiller 1990; Winer 1988), and that it is important to examine multiple IRPs that might influence a consumer's value perceptions (Biswas 1992).

Since TU depends on the outlay (sale price) and the reference price (IRP), it follows that for a particular sale price, multiple TUs are likely since there are multiple IRPs. Chandrashekaran and Jagpal (1995) taking cognizance of the multi-dimensional nature of IRPs proposed a Unitized IRP model. However, they did not find evidence to support their Unitized model and concluded that different IRPs become salient under different levels of involvement. This supported the claim made by Biswas, Wilson and Licata (1993) that it is possible that internal reference prices may not be the same for all consumers and may not necessarily be the same for an individual consumer over purchases and over time. Hence, there are problems associated with measuring the different IRPs and thereby the different TUs.

In this dissertation, based on the expectancy-value model, a behavioral construct - perceived fairness of the offer price, is offered in lieu of TU. As Thaler (1985), points out \( p^* \) (the internal reference price) is determined by fairness, as perceived by the consumer. The Expectancy-Value model suggests that a consumer forms subjective evaluations of the consequences based on some prior expectations. In a pricing context the prior expectation is the IRP. On encountering a reference price in the marketplace, a consumer is likely to make a comparison of this price with the IRPs that are relevant to the purchase decision and judge the reference price to be fair or unfair. This judgment is likely to affect the consumers' evaluation of the deal. Since it is not clear which IRP(s) are salient to the consumers evaluation process, in this dissertation it is
suggested that measuring the subjective construct of "perceived fairness of the offer price" is likely to help better predict the "perceived value of the deal." Hence, the following hypothesis is offered:

**H1: The subjective measure, "perceived fairness of the offer price," will explain more variance in consumers evaluation of an offer, represented by "perceived value of the deal" than any combination of the measures of Transaction utility.**

**Hypotheses – Study Two**

The second study examines the effects of levels of discounts (moderate vs. high), nature of price comparison (within-store vs. between-store) and cue concreteness (concrete vs. abstract) on consumers’ perceptions of offer value, search intentions and shopping intentions.

**Main Effect of Reference Prices:** Assimilation contrast and adaptation level theories were initially used to explain the effect of discounts on consumers' price perceptions. According to these theories, an exaggerated or implausible external reference price should be contrasted and thereby rejected by the consumer. However, researchers (Biswas and Blair 1991; Lichtenstein and Bearden 1989; and Urbany, Bearden and Weibaker 1988) have consistently found positive effects of exaggerated prices on perceptions of offer value. Biswas and Burton (1993, 1994) first proposed anchoring and adjustment framework as another viable explanation for the effects of price discounts on consumer perceptions of value as well as the attitude towards the deal. According to the anchoring and adjustment framework, higher anchor points, even when extremely high and irrelevant, may lead to more favorable evaluations. Hence,
consumers are likely to be more positively influenced by exaggerated external reference prices than by moderate external reference prices. Based on the anchoring and adjustment framework, the following hypothesis is offered:

**H2: An exaggerated external reference price will result in (a) higher perceived value (b) lower search intention and (c) higher shopping intention than a moderate external reference price.**

**Main Effect of Nature of Price Comparison:** Lichtenstein et al. (1991) found that highly distinctive semantic cues lead to more favorable consumer evaluations rather than semantic cues that exhibited low consistency. This result is supported by correspondence-inference theory that suggests that deviations from category-based norms (i.e., high distinctiveness) hence may have a stronger effect than deviations from target-based norms (i.e., low consistency) as they are less common. Analyzing the same issue from a different perspective, Grewal et al. (1996) equate within-store price comparison to the issue of consistency of price promotions used by Lichtenstein et al. (1991) and between-store price comparisons to the issue of distinctiveness of price promotion. Hence, based on the findings of Lichtenstein et al. (1991) and Grewal et al.'s (1996) position, we can surmise that between-store price promotions are likely to be more effective than within-store price promotions. Hence, we offer the following hypothesis:

**H3: A between-store price comparison will elicit a (a) higher perceived value (b) lower search intention and (c) higher shopping intention than a within-store price comparison.**
**Main Effect of Cue Concreteness:** Based on the economics of information, Nelson (1974) argues that consumers attempt to maximize the utility of their purchase decisions by searching for information until the perceived marginal costs exceeds its marginal value. Further, Ford, Smith and Swasy (1990) as well as MacKenzie (1986) found that consumers were more skeptical of subjective or imprecise advertising claims. Thus, it can be expected that consumers will try to maximize the utility of their purchase decision by searching for more information when exposed to a subjective or imprecise advertising claim. Hence the following hypothesis is offered:

**H4:** A concrete price claim will result in (a) higher perceived value (b) lower search intention and (c) higher shopping intention than an abstract price claim.

**Interaction Effects:** It has been argued in earlier studies (Della Bitta et al. 1981, Lichtenstein and Bearden 1989, Lichtenstein et al. 1991) that the context provided by the advertiser does not have an impact when the external reference price provided is low. They contend that the effect of the semantic cue would be higher in the case of moderate (also termed as plausible high by some researchers) and exaggerated (also termed as implausible high) reference prices. They argue that in case of low reference prices the lack of elaboration on the part of the consumers could lead to these prices not having an impact on consumers’ evaluations. In other words if the discount provided is low, the contextual cues (semantic cues) do not have an impact on consumers evaluation of the deal.

Gotlieb and Swan (1990) found that the discount size has an effect on consumers’ level of processing of price promotions. They found that the inclusion of
price reduction in an advertisement would increase consumers’ involvement and thereby increase the extent to which they process the information contained in the promotion. Based on this finding Grewal et al. (1996) argue that when the discount size is low, consumers are unlikely to expend the cognitive effort needed to process additional information because the price promotion is of little value. When the discount size is judged to be acceptably high but plausible (moderate ERP), there may be some uncertainty about the perceived value of the offer. In such a case the consumer is likely to expend additional effort in processing the contextual cue. Hence semantic cues are likely to have the most effect in the case of moderate ERPs. Grewal et al. (1996) report results which confirm their contention.

Though Della Bitta et al. (1981), Lichtenstein and Bearden (1989), and Lichtenstein et al. (1991) propose a inverse U relationship between price levels and consumer evaluations, none of them explicitly test the effect of semantic cues at exaggerated ERPs. In this dissertation it is contended that in the case of exaggerated ERPs, consumers are likely to be influenced by the focal cue (i.e. the price advertised) as suggested by the anchoring and adjustment framework. Though consumers may discount the exaggerated ERP, they may not discount it enough (Northcroft and Neale 1987). Since the focal cue has a domineering effect in the case of exaggerated prices, consumers are more likely to be influenced by the focal cue in this case. When consumers are exposed to exaggerated ERPs the semantic cue will not play as important a role in influencing their perceptions as in the case of moderate ERPs. This is in agreement with Lichtentstein et al. (1991), who note that because of the economic salience of the focal price information in a reference price ad, it would not be surprising
that they have a larger effect in comparison to contextual information. In this
dissertation, the semantic cue is varied by varying the level of cue concreteness as well
as the within-store comparison/between-store comparison nature of the cue.

Based on the above discussion and Hypotheses H3 and H4, the following
interaction hypotheses are offered:

**H5:** A concrete price cue will result in (a) higher perceived value (b) lower
search intention and (c) higher shopping intention than an abstract price
cue and this difference will be higher in the case of a moderate ERP rather
than an exaggerated ERP.

**H6:** A between-store price comparison will result in (a) higher perceived
value (b) lower search intention and (c) higher shopping intention than a
within-store price comparison and this difference will be higher in the case
of a moderate ERP rather than an exaggerated ERP.

The next hypothesis is also derived from H3 and H4. In H3, it is hypothesized
that between-store cues are more effective than within-store cues (Lichtenstein et al.
1991; Grewal et al. 1996). According to H4, based on the economics of information
paradigm, concrete claims are more likely to provide more positive evaluations rather
than abstract claims. Hence, it is argued that since both the nature of price comparison
and level of concreteness of the price cue are semantic cues, there is likely to be an
additive effect. This would lead to a between-store concrete claim leading to more
favorable consumer evaluations than a within-store abstract claim.
H7: The between-store concrete cue will result in (a) higher perceived value, (b) lower search intention, and (c) higher shopping intention than a within-store abstract claim.

Considering the above argument it is clear that the between-store concrete cue will result in more positive evaluations than a within-store abstract cue. Also, it should result in more positive evaluations than any other combination of cues - namely, between-store abstract claims and within-store concrete claims. By the same logic a within-store abstract claim should have the least positive evaluations of any of the combination of cues. However, what is not clear is whether the between-store abstract claim would elicit more favorable consumer evaluations than within-store concrete claims, or vice-versa. For example, while the between-store nature of price comparison might have a positive effect on consumers' evaluation, the lack of concreteness may have an effect in the opposite direction. Likewise, in the case of a within-store concrete claim, while a concrete cue may result in positive evaluation of the claim, the within-store nature of comparison may attenuate such an effect. In the absence of prior research, it is difficult to assess the dominance of one factor over the other (i.e. within-between comparison and cue concreteness). Therefore, suggesting a directional relationship between within-store concrete and between-store abstract cues may be purely speculative. Hence, we propose to study the relative effectiveness of these two types of semantic cues through a post-hoc analysis.

Hypothesis - Study Three

The third study re-examines the effects of nature of price comparison (within-store vs. between-store), and cue concreteness (concrete vs. abstract). Additionally, the
third study examines the contextual effects of the place where the ad is viewed (at home vs. in store).

Grewal et al. (1996) found that the between-store cue was more effective in influencing consumer evaluations of the deal only when the advertisement was viewed at home. When the consumers were in the store, they found that the within-store cue is likely to be more effective than the between-store cue. Grewal et al.'s (1996) results for moderate discounts are presented in Figure 2.1.

However, the cues Grewal et al. (1996) used "Compare at/Sale Price" and "Regularly Priced/Sale Price" may have had differing levels of cue concreteness\(^3\). The cue "Compare at/Sale Price" does not provide concrete information as the question "compared to whom?," is not answered. By comparison, the cue "Regularly Priced/Sale Price" provides concrete information that the price of the product currently on sale is lower than its regular price. According to the economics of information, consumers attempt to maximize the utility of their purchase decisions by searching for information until the perceived marginal costs exceeds its marginal value. In the case of concrete price claims, the necessity to shop around to get a better deal may be obviated. In the case of abstract price claims because the claim is not clear, consumers are more apt to search for more information.

\(^3\) This was supported by the results of pretest 2.
Figure 2.2a depicts the proposed interaction effects for concrete cues. The within-store concrete cue, “Regularly Priced/Sale Price” is more effective in a within-store setting as suggested by Grewal et al. (1996) (See line 1, figure 2.1). However, in the case of a between-store concrete cue such as “Named Retailer” cue, there is sufficient unambiguous information in the cue such that the consumers’ perception of value is not likely to be different regardless of whether the consumer views the ad at home or in the store.
Perceived Value

At Home  In Store

Proposed Effect – Concrete Cues

Figure 2.2a

- - - - - “Regularly Priced” Cue  - - - - - “Named Retailer” Cue
(Grewal et al. 1996) (Proposed Cue)

Within-Store Cue  Between-Store Cue

Perceived Value

At Home  In Store

Proposed Effect – Abstract Cues

Figure 2.2b

- - - - - - "Compare at" Cue  - - - - - - “A ___ Value” Cue
(Grewal et al. 1996) (Proposed Cue)

Between-Store Cue  Within-store cue
Figure 2.2b depicts the proposed interaction effects for abstract cues. The between-store abstract cue, "Compare at/Sale Price" is more effective at home as suggested by Grewal et al. (1996) (See line 2, figure 2.1). They argue that when a consumer is at home he/she is able to compare prices between different stores with lesser effort than when they are in the store. However, in the case of a within-store abstract cue such as "A___ Value/Sale Price" cue, the consumer's marginal value for information search may exceed the perceived marginal costs regardless of whether the consumer is at home or in the store. This is likely because in the case of abstract cues, the information provided is not clear causing the consumer to expend far greater effort than in the earlier case.

The proposed figures 2.2a and 2.2b suggest that the effects described in hypothesis H7, i.e. the between-store concrete cue will evoke maximum value and a within-store abstract cue will be perceived to have minimum value, holds true only when the ad is viewed at home. When the ad is viewed in the store, it is likely that there may not be significant effects of semantic cues as consumers are more likely to "accept confirming evidence at face value." (Lord, Ross, and Lepper 1979, p.2098). Since consumers may have come into the store with preconceived needs and views, they may merely be confirming their information in a retail store (Inman, McAlister, and Hoyer 1990). Also, because the consumer has already incurred the time and search cost of visiting a particular store (Marmorstein, Grewal, and Fishe 1992), the consumer may not be paying attention to details such as semantics. On the contrary, when the consumer is at home, he or she may be willing to spend the extra time and effort.
required to maximize utility. From an economic perspective, he or she may choose to invest energies by focussing on all the information (provided by the semantic cues).

Hence the following hypothesis is offered:

H8: There will be a three-way interaction effect of cue concreteness, nature of price comparison and location where the ad is viewed on a) value of the deal, b) search intentions and c) shopping intention, i.e. the interaction effect between the nature of price comparison and cue concreteness will be stronger when the ad is viewed at home rather than in the store.
CHAPTER 3 : PRETESTS AND QUESTIONNAIRE DESIGN

Three studies were conducted in this dissertation. The first study was a survey conducted to test whether the model proposed in this dissertation better predicts 'perceived value of the deal' than Thaler's model. The second study was an experiment involving a $2 \times 2 \times 2$ between-group experimental design in which the levels of discounts (low vs. high), nature of price comparison (within-store vs. between-store) and cue concreteness (concrete vs. abstract) were manipulated. The third study was another $2 \times 2 \times 2$ between-group experimental design in which the nature of the price cue (within-store vs. between-store), cue concreteness (concrete vs. abstract), place where the ad is viewed (at home vs. in store) were manipulated.

Five pretests were conducted to determine the cues to be used in the second and third studies and appropriate reference prices to be used in study two. The first pretest was done to verify the position taken in this dissertation that consumers may not be able to determine the level of consistency of price promotions merely from the semantic cues as suggested by Lichtenstein and Bearden (1989).

The second pretest was conducted to select concrete and abstract cues for use in this dissertation. This pretest consisted of three phases. In the first phase the respondents were provided with a list of all the semantic cues that have been used in the relevant literature (Lichtenstein and Bearden 1989; Lichtenstein et al. 1991; and Grewal et al. 1996). The respondents evaluated the level of concreteness of each of these cues. The most concrete and abstract cues were selected from the "within-store" and "between-store" cue categories. In the second stage the four cues selected in the first stage were provided to a second group of respondents. They were assigned the task of
categorizing the cues in the correct cell of a four cell matrix which consisted of between-store abstract cue, between-store concrete cue, within-store abstract cue and within-store concrete cue. In the third phase of the second pretest another group of respondents were given the task of identifying the more abstract cue among both the between-store and within-store cues.

The third pretest was conducted to identify product(s) with which the respondents were familiar. A list of products frequently used in price promotion studies was provided to respondents and they were asked to indicate their level of familiarity with the product and its prices. Based on the responses to this pretest, a product was selected for the final study.

In the fourth pretest, respondents were provided with the cues selected from the second pretest and were asked to identify the store that is likely to be named in advertisements. Finally a fifth pretest was conducted to decide on the prices to be used in the cues. The sale price as well as the features of the product were decided on by viewing actual advertisements.

**Pretest One**

**Pretest Method**

A list of semantic cues used in the relevant literature was compiled (Appendix A). This list was presented to 145 respondents who were asked to rate these semantic cues on a seven-point scale to indicate the level of distinctiveness as well as the level of consistency of the cue. The respondents were provided with the definitions of
consistency as well as distinctiveness\(^1\) used by Lichtenstein et al. (1991). Further, an explanation was provided to indicate what type of advertising pattern would be construed as being high/low on consistency. Similar explanations were provided for distinctiveness of the semantic cue. The Questionnaire for Pretest One is in Appendix C.

**Pretest Analysis and Results**

The results of Pretest One are provided in Table 3.1. The results indicated that respondents were able to distinguish between semantic cues that are high/low on distinctiveness. The cues "20% off, Now only $39.99" and "Was $49.99, Now only $39.99" were found to be lowest on distinctiveness, while the cues "Major Retailer price $49.99, Our Price $39.99" and "Wal-Mart price $49.99, Our Price $39.99" were found to be highest on distinctiveness. T-tests indicated that the mean distinctiveness scores for the high distinctiveness cues were significantly higher than the mid-point (p<.01).

In addition, as argued in Chapter 2 and indicated in the top portion of Table 3.1, all cues identified by Lichtenstein et al. (1991) as low in consistency were rated significantly lower than the mid-point in distinctiveness (p<.01).

The respondents, however, could not identify any of the low consistency cues proposed by Lichtenstein et al. (1991) as indicators of infrequent promotion by the advertiser (see Table 3.2). On the contrary, all the "low consistency" cues were rated higher than the mid-point of the scale, with three out of the five being rated significantly

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\(^1\) **Consistency** of a sales promotion is defined as the frequency with which a product or a group of products are advertised on sale merchant or a retailer. Thus a sales promotion could be viewed as:

- **HIGH IN CONSISTENCY** if the product has **BEEN FREQUENTLY OFFERED** at a discount, or
- **LOW IN CONSISTENCY** if the product has **BEEN INFREQUENTLY OFFERED** at a discount.

**Distinctiveness** of a sales promotion by a merchant or a retailer is defined as how the offer (sale) price compares with what the competitors normally charge. Thus, a sales promotion would be:

- **HIGH IN DISTINCTIVENESS** if the retailer is **COMPARING PRICES** with that of the competition and
- **LOW IN DISTINCTIVENESS** if the retailer **DOES NOT COMPARE PRICES** with that of the competition.
higher than the mid-point. As indicated in table 3.2, only “Regularly priced, Sale Price” and “20% off, Now Only” cues were not rated significantly higher than the mid-point of the consistency scale. In addition three of the four “high distinctiveness” cues were also

Table 3.1
Distinctiveness Scores

<table>
<thead>
<tr>
<th>Semantic Cues</th>
<th>Mean</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW CONSISTENCY CUES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regularly priced at $49.99, Sale Price $39.99</td>
<td>2.80</td>
<td>-8.601</td>
<td>.000</td>
</tr>
<tr>
<td>Was $49.99, Now only $39.99</td>
<td>2.54</td>
<td>-11.387</td>
<td>.000</td>
</tr>
<tr>
<td>A $50 Value, Sale Price $39.99</td>
<td>2.92</td>
<td>-7.657</td>
<td>.000</td>
</tr>
<tr>
<td>Regular $49.99, Sale $39.99</td>
<td>2.72</td>
<td>-9.768</td>
<td>.000</td>
</tr>
<tr>
<td>20% Off, Now only $39.99</td>
<td>2.38</td>
<td>-13.859</td>
<td>.000</td>
</tr>
<tr>
<td><strong>HIGH DISTINCTIVENESS CUES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compare at $49.99, Sale Price $39.99</td>
<td>4.73</td>
<td>4.493</td>
<td>.000</td>
</tr>
<tr>
<td>Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>5.75</td>
<td>14.992</td>
<td>.000</td>
</tr>
<tr>
<td>Walmart price $49.99, Our Price $39.99</td>
<td>6.40</td>
<td>28.430</td>
<td>.000</td>
</tr>
<tr>
<td>Major Retailer price $49.99, Our Price $39.99</td>
<td>6.06</td>
<td>20.417</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 3.2
Consistency Scores

<table>
<thead>
<tr>
<th>Semantic Cues</th>
<th>Mean</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW CONSISTENCY CUES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was $49.99, Now only $39.99</td>
<td>4.26</td>
<td>1.961</td>
<td>.052</td>
</tr>
<tr>
<td>Regular $49.99, Sale $39.99</td>
<td>4.26</td>
<td>1.995</td>
<td>.053</td>
</tr>
<tr>
<td>20% Off, Now only $39.99</td>
<td>4.01</td>
<td>.054</td>
<td>.957</td>
</tr>
<tr>
<td><strong>HIGH DISTINCTIVENESS CUES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compare at $49.99, Sale Price $39.99</td>
<td>4.15</td>
<td>1.064</td>
<td>.289</td>
</tr>
<tr>
<td>Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>4.73</td>
<td>4.792</td>
<td>.000</td>
</tr>
<tr>
<td>Walmart price $49.99, Our Price $39.99</td>
<td>4.87</td>
<td>5.517</td>
<td>.000</td>
</tr>
<tr>
<td>Major Retailer price $49.99, Our Price $39.99</td>
<td>4.85</td>
<td>5.636</td>
<td>.000</td>
</tr>
</tbody>
</table>
rated significantly higher in consistency (p< .0001). These findings are contrary to the findings of a pretest reported by Lichtenstein et al. (1991) and underscore the possible confound(s) in their study.

The major difference between Lichtenstein et al.'s (1991) approach and the current approach is that while they classified consistency and distinctiveness of cues by making direct comparisons between the cues, in this dissertation the consistency score and the distinctiveness scores are compared to the mid-point of the seven-point scale. Thus, only the cues that were considered to be actually low in consistency, i.e. significantly less than four on a seven-point scale would be considered to be low in consistency. This being the criteria, from Table 3.2, it is clear that none of the cues were judged to be low in consistency on an absolute scale. Relative to one another it is clear that it is quite likely that some of the cues would be classified as being low and some others high on consistency. Another indication that consumers may not be able to judge the consistency associated with semantic cues is borne out by the number of respondents who chose the option "Don't Know" for evaluating the consistency of the cues. The number of respondents who expressed an inability to evaluate the consistency cues was extremely large compared to those who could not respond to the distinctiveness cues. These results are provided in Table 3.3.

\[2\] A similar comparison in our pretest indicated that there was no significant difference in the level of consistency of the "low consistency" cues. Among the "high distinctiveness" cues, "Compare at/Sale Price" was found to have a significantly lower consistency score. All the "low consistency" cues had significantly lower score on consistency vis-à-vis the other three "high distinctiveness" cues.
Table 3.3

Respondents who answered "Don't Know"

<table>
<thead>
<tr>
<th>Semantic Cues</th>
<th>Consistency</th>
<th>Distinctiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW CONSISTENCY CUES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regularly priced at $49.99, Sale Price $39.99</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Was $49.99, Now only $39.99</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>A $50 Value, Sale Price $39.99</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Regular $49.99, Sale $39.99</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>20% Off, Now only $39.99</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td><strong>HIGH DISTINCTIVENESS CUES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compare at $49.99, Sale Price $39.99</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Walmart price $49.99, Our Price $39.99</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Major Retailer price $49.99, Our Price $39.99</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

Pretest Two

**Pretest Method – Phase 1**

After reviewing the results of Pretest One it was decided that the distinction between semantic cues will be made as "between-store cues" and "within-store cues" as suggested by Grewal et al. (1996), rather than on the level of distinctiveness and consistency. Additionally it was necessary to identify cues which were perceived to be abstract as well as cues which were perceived to be concrete, for both within-store as well as between-store cues.

A list of 9 semantic cues used in the relevant literature was again compiled and presented to 145 respondents. The respondents were provided with a description\(^3\) that mentioned that some cues provide us with more information than others. They were then asked to rate the semantic cues on a seven-point scale, where a rating of 1

---

\(^3\) "Stores have a variety of ways in which they present information about sales in their advertisements. Sometimes the way in which they present sale information seems **subjective** (or **abstract**) while at other times it is more **objective** (or **concrete**)."

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indicated an extremely abstract cue and a rating of 7 indicated an extremely concrete cue. The relevant questionnaire is in Appendix D.

Pretest Analysis and Results – Phase 1

The results of phase 1 of Pretest Two are provided in Table 3.4. From the results in Table 3.4 it appears that among the within-store cues, "A $50 value, Sale Price $39.99" (A) is perceived to be most abstract (mean = 3.07) while the cue "Regular Price $49.99, Sale Price $39.99" (B) is perceived to be most concrete (mean = 4.88). Among the between-store cues, "Seen Elsewhere for $49.99, Our Price $39.99" (C) is perceived to be abstract (mean = 3.38) while "Wal-Mart price $49.99, Our Price $39.99" (D) is perceived to be most concrete (mean = 4.73).

Table 3.4

<table>
<thead>
<tr>
<th>Within-Store Cues</th>
<th>Concreteness Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regularly priced at $49.99, Sale Price $39.99</td>
<td>5.17</td>
</tr>
<tr>
<td>Was $49.99, Now only $39.99</td>
<td>5.09</td>
</tr>
<tr>
<td>A $50 Value, Sale Price $39.99</td>
<td>A 3.07</td>
</tr>
<tr>
<td>Regular $49.99, Sale $39.99</td>
<td>B 4.88</td>
</tr>
<tr>
<td>20% Off, Now only $39.99</td>
<td>3.75</td>
</tr>
<tr>
<td>Between-Store Cues</td>
<td></td>
</tr>
<tr>
<td>Compare at $49.99, Sale Price $39.99</td>
<td>3.76</td>
</tr>
<tr>
<td>Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>C 3.38</td>
</tr>
<tr>
<td>Walmart price $49.99, Our Price $39.99</td>
<td>D 4.73</td>
</tr>
<tr>
<td>Major Retailer price $49.99, Our Price $39.99</td>
<td>3.67</td>
</tr>
</tbody>
</table>

For the four cues identified above, paired t-tests were done. Paired t-test results are reported in Table 3.5. Consistent with expectations, the results indicate that while there was a statistically significant difference in the perception of concreteness of the cues for "A $50 value, Sale Price $39.99" (A) and "Regular Price $49.99, Sale Price
$39.99" (B) (p < .001) as well as between "Seen Elsewhere for $49.99, Our Price $39.99 and "Wal-Mart price $49.99, Our Price $39.99" (D) (p<.001), there is

Table 3.5

Paired T-Test of Selected Semantic Cues

<table>
<thead>
<tr>
<th>WITHIN STORE CUES</th>
<th>Mean Difference</th>
<th>Paired Test t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A $50 Value, Sale Price $39.99-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular $49.99, Sale $39.99</td>
<td>A</td>
<td>-1.81</td>
<td>-11.45</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BETWEEN STORE CUES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seen Elsewhere for $49.99, Our Price $39.99-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walmart price $49.99, Our Price $39.99</td>
<td>C</td>
<td>-1.36</td>
<td>-8.27</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABSTRACT CUES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A $50 Value, Sale Price $39.99-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONCRETE CUES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular $49.99, Sale $39.99-</td>
<td></td>
<td>.18</td>
<td>1.24</td>
</tr>
<tr>
<td>Walmart price $49.99, Our Price $39.99</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

no significant difference between the level of concreteness of cues B and D (p>.05).

However, contrary to expectations, there was a significant difference in the concreteness of cues A and C (p<.05).

Pretest Method – Phase 2

Since a difference was found in the level of concreteness between the selected within-store abstract cue (A) and between-store abstract cue (C), all four cues were re-evaluated by two different groups of respondents, in phase 2 and phase 3. In phase 2 of Pretest Two, the selected semantic cues were provided to 39 respondent who first evaluated the level of concreteness/abstractness of the cues (Appendix E). As a part of their second task they had to identify which of the cues would be a between-store concrete cue, between-store abstract cue, within-store concrete cue and within-store abstract cue.
Pretest Analysis and Results – Phase 2

Table 3.6 provides the results of phase 2 of Pretest Two. As noted in phase 1, the difference in the means of the abstract cues and the concrete cues are significant both in the case of the within-store cues as well as the between-store cues. Similarly the respondents seem to be able to match the correct cue with the cells in a 2x2 matrix of cue concreteness (abstract vs. concrete) and nature of price comparison (within-store vs. between-store). The number of respondents who classified each type of cue correctly is significantly greater than a chance occurrence or random assignment. Also, no single cue was determined to be more or less significant than others. The difference between the cue that was maximally identified correctly ("A $50 Value, Sale Price $39.99") and minimally identified correctly ("Regular Price $49.99, Sale Price $39.99") was not significant ($\chi^2 = 0.32, df=1; p>.05$).

Table 3.6

<table>
<thead>
<tr>
<th>Semantic Cues</th>
<th>Mean Score-Concreteness</th>
<th>% Correct Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within-Store Cues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A $50 Value, Sale Price $39.99</td>
<td>A</td>
<td>3.82</td>
</tr>
<tr>
<td>Regular $49.99, Sale $39.99</td>
<td>B</td>
<td>5.36</td>
</tr>
<tr>
<td><strong>Between-Store Cues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>C</td>
<td>4.08</td>
</tr>
<tr>
<td>Walmart price $49.99, Our Price $39.99</td>
<td>D</td>
<td>5.77</td>
</tr>
</tbody>
</table>

Similar to phase 1, a paired sample t-test was conducted to verify that the cues “A $50 Value, Sale Price $39.99” and “Regular Price $49.99, Sale Price $39.99”, as well as “Seen Elsewhere for $49.99, Our Price $39.99” and “Named Retailer Price $49.99, Our Price $39.99” have significantly different levels of concreteness. The results are reported in Table 3.7. Among the within-store cues, the cue “Regular Price
$49.99, Sale Price $39.99” was found to be significantly more concrete than cue “A $50 Value, Sale Price $39.99” (t=4.52, p<.01). Similarly, among the between-store cues, the cue “Named Retailer Price $49.99, Our Price $39.99” was found to be significantly more concrete than the cue “Seen Elsewhere for $49.99, Our Price $39.99” (t=5.94, p<.01). Moreover, there is no significant difference between the cues “Regular Price $49.99, Sale Price $39.99” and “Named Retailer Price $49.99, Our Price $39.99” (t=1.31, p>.1) in their level of concreteness. All these results confirm the results obtained in phase 1 of pretest 2. In phase 1, it was observed that the cues “A $50 Value, Sale Price $39.99” and “Seen Elsewhere for $49.99, Our Price $39.99” were different on the scale of concreteness. In phase 2 it is observed that these cues were not significantly different from one another (t=0.71, p>.1).

**Table 3.7**

<table>
<thead>
<tr>
<th></th>
<th>WITHIN STORE CUES</th>
<th>Mean Difference</th>
<th>Paired Test t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparisons</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A $50 Value,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale Price $39.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular $49.99,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale $39.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>-1.54</td>
<td>-4.52</td>
<td>.000</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Pretest Method – Phase 3**

In phase 3 of Pretest Two the respondents were provided with the two within-store cues and two between-store cues selected in phase 1 and phase 2. They were then
asked to identify the cue that they believed to be more abstract within each group (i.e. within-store and between-store cues). This test was carried out to confirm the results of phase 1 and phase 2 of Pretest Two. The phase 3 questionnaire is in Appendix F.

**Pretest Analysis and Results – Phase 3**

Table 3.8 provides the results of phase 3 of Pretest Two. This table indicates the number of respondents who correctly identified the abstract cue, both in the case of within-store cues as well as between-store cues. The results provide confirmation that the respondents identify one of the within-store cues, "A $50 Value, Sale Price $39.99," to be more abstract than "Regular Price $49.99, Sale Price $39.99". Similarly the respondents identified the between-store cue, "Seen Elsewhere for $49.99, Our Price $39.99" to be more abstract than "Circuit City price $49.99, Our Price $39.99."

<table>
<thead>
<tr>
<th>Semantic Cues</th>
<th>No. identifying as abstract cue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within-Store Cues</strong></td>
<td></td>
</tr>
<tr>
<td>A $50 Value, Sale Price $39.99</td>
<td>A 37</td>
</tr>
<tr>
<td>Regular $49.99, Sale $39.99</td>
<td>B 3</td>
</tr>
<tr>
<td><strong>Between-Store Cues</strong></td>
<td></td>
</tr>
<tr>
<td>Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>C 38</td>
</tr>
<tr>
<td>Circuit City price $49.99, Our Price $39.99</td>
<td>D 2</td>
</tr>
</tbody>
</table>

**Pretest Three**

**Pretest Method**

The objective of the third pretest was to identify the product whose prices the respondents are likely to be familiar with. Towards this end, thirty-nine respondents were provided with a list of eight products. These products are listed in Appendix B. The respondents were asked to indicate their knowledge about the prices of the products.
on a seven point scale ranging from "know nothing about the prices" to "know a lot about prices." The list of the products used in this pretest was compiled from a list of the products used in prior literature. The questionnaire is in Appendix G.

**Pretest Analysis and Results**

Table 3.9 presents the mean scores for the knowledge level of various products. From the mean scores it is clear that the respondents possess most knowledge about the prices of running shoes and jeans. However, a perusal of the advertisements in the local newspaper indicated that neither of these two products had a very wide price range. Hence, operationalizing the exaggerated reference price may not be ecologically valid. Therefore, VCR was chosen as the product to be used in the advertisements. VCRs had a wide price range and respondents had indicated a relatively high knowledge about VCR prices (Mean=4.46). Advertisements were found in the local newspapers which had a wide range of reference prices for this product. VCR was selected as the product to be used in the experiments.

**Table 3.9**

**Pretest 3 - Knowledge about Prices**

<table>
<thead>
<tr>
<th>Product</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running Shoes</td>
<td>5.05</td>
</tr>
<tr>
<td>Boom Box</td>
<td>3.72</td>
</tr>
<tr>
<td>CD Stereo Player</td>
<td>4.31</td>
</tr>
<tr>
<td>19&quot; Color Television</td>
<td>4.10</td>
</tr>
<tr>
<td>Calculator</td>
<td>4.38</td>
</tr>
<tr>
<td>Jeans</td>
<td>5.87</td>
</tr>
<tr>
<td>VCR</td>
<td>4.46</td>
</tr>
<tr>
<td>Microwave Ovens</td>
<td>3.21</td>
</tr>
</tbody>
</table>
Pretest Four

Pretest Method

The between-store semantic cue "Wal-Mart price $49.99, Our Price $39.99" was found to be the most concrete cue. Pretest four was conducted to select the name of the store that would be appropriate for the product selected from pretest three. Forty respondents participated in the fourth pretest. Respondents were told that retailers frequently compare their prices with those of their competitors. They were asked to imagine themselves as a customer who is planning to buy a VCR, and fill in the name of the retailer in the cue "________ Price $199, Our Price $159" such that the retailer name they suggest should maximize the value of the offer (Questionnaire is in Appendix H). The prices mentioned in the cue were selected by viewing advertisements in local newspapers. Next, the respondents were asked to imagine themselves as a retailer and then provide the name of the store they would compare their prices with in order to maximize the value of their offer. Respondents were asked to respond to the questions from the view point of a customer as well as a retailer because Grewal et al. (1996) suggest that differences could be found based on the context in which evaluation or choice is made.

Pretest Analysis and Results

The results of pretest four are provided in Table 3.10. The respondents mentioned eleven different retailers of VCRs. The Table 3.10 provides the names of those retailers that were mentioned by more than 5% of the respondents. As indicated in Table 3.10, the respondents mentioned five retailers most frequently. Based on the figures in Table 3.10 it was decided to use the retailer Circuit City for VCRs.
Therefore, the final experiments were done using VCRs as the product and Circuit City as the retailer.

### Table 3.10

#### Pretest 4 - Retailer Selection

<table>
<thead>
<tr>
<th>VCRs</th>
<th>% of Respondents mentioning the retailer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As customer</td>
</tr>
<tr>
<td>Circuit City</td>
<td>45.0</td>
</tr>
<tr>
<td>Campo</td>
<td>27.5</td>
</tr>
<tr>
<td>Walmart</td>
<td>15.0</td>
</tr>
<tr>
<td>Service Merchandise</td>
<td>5.0</td>
</tr>
<tr>
<td>Radio Shack</td>
<td>2.5</td>
</tr>
<tr>
<td>Others</td>
<td>5.0</td>
</tr>
</tbody>
</table>

### Pretest Five

#### Pretest Method

As described earlier, two external reference prices were to be used in Study 2 – one moderate and one exaggerated. The final pretest was conducted to determine the external reference prices. Fifty-seven respondents participated in this pretest. Similar to procedures employed by Petroshius and Monroe (1987), the respondents were shown a copy of the advertisement for the VCR which read "Regular Price _______, Sale Price $199" and were asked to indicate the highest amount "that they would be willing to accept as a valid list price." The VCR was stated as having Hi-Fi Stereo, Universal Remote, High Speed Rewind, Digital AV Tracking and On-Screen VCR Setup Menu. The features and the matching offer price of $199 were selected from an actual advertisement.
Pretest Analysis and Results

The mean and modal response for the highest acceptable list price across all subjects was $256.50 and $250, respectively. Given the popularity of "odd prices," the moderate ERP was chosen as $249. The exaggerated ERP was determined to be $399 to reflect a price well outside the perceived range of normal prices (Only one out of 57 respondents indicated $375 and over as an acceptable list price).

Hence, based on pretests the semantic cues that will be used for manipulating the price level, level of concreteness and the nature of the cue are:

For Moderate ERP

<table>
<thead>
<tr>
<th>Concrete Cue</th>
<th>Between Store Comparison</th>
<th>Within Store Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Circuit City Price $249, Our Price $199&quot;</td>
<td>&quot;Regular price $249, Sale Price $199&quot;</td>
<td></td>
</tr>
</tbody>
</table>

For Exaggerated ERP

<table>
<thead>
<tr>
<th>Concrete Cue</th>
<th>Between Store Comparison</th>
<th>Within Store Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Circuit City Price $399, Our Price $199&quot;</td>
<td>&quot;Regular price $399, Sale Price $199&quot;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Abstract Cue</th>
<th>Between Store Comparison</th>
<th>Within Store Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Seen Elsewhere for $249, Our Price $199&quot;</td>
<td>&quot;A $249 value, Sale Price $199&quot;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Abstract Cue</th>
<th>Between Store Comparison</th>
<th>Within Store Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Seen Elsewhere for $399, Our Price $199&quot;</td>
<td>&quot;A $399 value, Sale Price $199&quot;</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 4: MAIN STUDIES

Overview and Questionnaire Design

There are three studies in this dissertation. The first study uses a survey methodology, and the second and third studies are experiments. In each case respondents were provided with the instructions for completing study measures. Further, in Study Three a description of the scenario where the respondents were viewing the ad was also described in the first page. This was immediately followed by an advertisement for the VCR developed by the audio-visual department in the University. The ad stated the features of the VCR and the appropriate cue. The instruments used for all studies in this dissertation are self-report questionnaires.

Survey Questionnaire (Study 1)

The first study was a survey that was comprised of questions about the transaction utility, acquisition utility, fairness perceptions, and value of the deal relative to an advertised VCR (See Appendix J). The theoretical underpinnings of each of the constructs used in the questionnaire have been discussed in detail in Chapter 2.

Transaction Utility

Transaction utility depends on the outlay as compared to some reference price. Formally, it is defined as "the value of paying a price compared to the expected or reference price." Hence, mathematically, it is the difference between the internal reference price and the sale price/offer price. As discussed in Chapter 2, there are multiple internal reference prices that a consumer could use in the decision-making process. Therefore, it follows that there could be multiple relevant transaction utilities that consumers use.
In an effort to arrive at a unitized model of internal reference price, Chandrashekaran and Jagpal (1995) used the fair price, lowest price, highest price and normal price. Though there are other reference prices such as market price, average price, future expected price that have been used by prior researchers, the four IRPs used by Chandrashekaran and Jagpal (1995) are the most commonly used IRPs. Hence, it was decided to use the same four IRPs to arrive at the respective transaction utilities by subtracting the offer price of $199 from the IRP.

After viewing an advertisement, the respondents were asked to respond to the following questions: "I think a fair price for the VCR would be $______"; "The Lowest price for the VCR is likely to be $______"; "The Highest price for the VCR is likely to be $______"; "I think the Normal (most frequently encountered) price for the VCR is likely to be $______." These measures were adapted from Chandrashekaran and Jagpal (1995) and measure the internal reference price associated with the fair price, lowest price, highest price, and normal price, respectively. From these prices the transaction utilities associated with the respective IRPs can be derived by subtracting the offer price of $199 from the IRP.

**Acquisition Utility**

Acquisition utility depends simply on the value of the goods received compared to the price paid. It has been defined as the surplus of utility (in dollar terms) over price paid (Thaler 1985) or as the ratio of perceived benefits to perceived sacrifice (Monroe 1990). It is a function of the indifference price, which is the price at which the consumer is indifferent to choosing between cash and the product or the most one would be willing to pay (Bearden, Kaicker, de Borrero, and Urbany 1992).
To measure the indifference price, three items were used. They are: "The price I am willing to pay for the product is $______"; "If I have just purchased this product I may be willing to sell it for $______"; "Suppose you have won the VCR as a prize. If you were offered the choice between selecting the VCR and dollars, at what amount are you likely to select the money over the VCR $______." The last item has been mentioned by Thaler in his seminal article (1985). Following Bearden et al. (1992) we arrive at the acquisition utility associated with the three indifference prices by subtracting the offer price of $199 from each indifference price.

**Perceived Fairness of the Offer Price**

The perceived fairness of the offer price is defined as the consumers' overall perception of the offer price based on one or a combination of the IRPs that they may bring to the decision environment. This is a subjective measure and assessed with four items on a seven-point scale. The respondents are asked to evaluate the statement, "I think that the sale price of $199 for the VCR is:" on a seven-point scale ranging from extremely unfair-extremely fair, extremely unreasonable-extremely reasonable, very unacceptable-very acceptable, and extremely unjust-extremely just.

**Value of the Deal**

Value has multiple definitions in the marketing literature. Synthesizing the literature, Zeithaml (1988) views value as "what I get for what I give," and defines it as “an overall assessment of the utility of a product based on perceptions of what is received and what is given” (p. 14). Thus, value involves a tradeoff between the give and the get components. It is this definition of value that will be used in this dissertation.
Just as there are multiple definitions of value in the marketing literatures, there are three such operationalizations in price perception research. In this dissertation, keeping the definition of "Value is what I get for what I give up" the items were selected from two different scales of value of the deal. Six items were selected from Dodds, Monroe and Grewal (1991) and Berkowitz and Walton (1990). Five of these items were measured with seven-point, "strongly disagree - strongly agree" scales. These items are: "I would consider this VCR to be a good buy"; "This VCR appears to be a bargain"; "At the sale price, this VCR is probably worth the money"; "This VCR appears to be a great deal"; "This VCR is a good value for the money." The sixth item "The VCR offered by the advertising merchant will be" was also measured with a seven point scale anchored by "Not a good value for money - an extremely good value for money."

**Questionnaire for the Experiments (Study 2 and Study 3)**

Two separate experiments were conducted in this dissertation. The first experiment involved a 2 (levels of discounts - low and high) x 2 (nature of price cue - within-store and between-store) x 2 (cue concreteness - concrete and abstract) between-group experimental design. The second experiment involved a 2 (nature of price cue - within-store and between-store) x 2 (cue concreteness - concrete and abstract) x 2 (place where the ad is viewed - at home and in store) between-group experimental design. The questionnaire for these experiments is provided in Appendices K and L, respectively. The moderate and exaggerated ERPs used in the first study were $249 and $399, respectively. These ERPs were arrived at based on pretests and existing literature. Based on pretest five the moderate ERP was decided to be $249. Following the method
used by Lichtenstein and Bearden (1989) and Lichtenstein et al. (1991), the exaggerated ERP was chosen such that it was outside the range of acceptable list prices.

The nature of the price and cue concreteness were operationalized based on the pretest results. "A _____ Value, Sale Price" was used to operationalize a within-store abstract cue, while "Regularly Priced, Sale Price" was used to operationalize the within-store concrete cue. For the between-store cues, "Seen Elsewhere for, Sale Price" and "Circuit City Price, Sale Price" were used to operationalize the abstract and concrete cues, respectively. The place where the ad is viewed - at home and in store - was manipulated by exposing the respondents to a role-playing scenario (Grewal et al. 1996; Urbany et al. 1988). The subjects were provided with the following instructions:

Imagine that today is Saturday and you are leaving to attend college out of state on Tuesday. You are looking to buy a remote controlled VCR for your new residence. You only have three days to make the purchase.

The instructions were followed by the presentation of the situation. The at-home situation was operationalized by indicating that "while browsing through the newspaper at home on Saturday, you notice the following advertisement for a VCR at a major consumer electronic store." The in-store situation was operationalized by indicating that "while browsing through a major consumer electronic store on Saturday, you notice the following display for a VCR."

The questionnaire used in Study 2 and Study 3 consisted of measures of all relevant dependent variables, manipulation check questions, and demographic questions. All items used to measure the dependent variables of interest in this dissertation have been used in previous price perception research with a high degree of
Many of the variables that were used in these two studies have been discussed in the context of Study 1. Those which were not discussed in the context of Study 1 are discussed next.

**Search Intention**

A respondent's intent to search for a lower price was measured by three items: "How probable is it that you would shop around town looking for a lower price, if you had decided to buy a VCR?" (Very Probable-Not Probable at all); "If you were going to buy a VCR similar to the one advertised, would you check the prices at other stores in search of a lower price than that you could find at the store in the ad?" (Definitely would check prices at other stores-Definitely would not check prices at other stores); and "If you were going to purchase a VCR, how likely is it that you would search other stores for a lower price than what you would find at the store running this ad?" (Very Likely-Very Unlikely) (Burton, Lichtenstein, Biswas and Fraccastoro 1994). The items were measured using seven-point scales.

**Shopping Intention**

Three seven point measures were used to assess the intentions of respondents to shop at the store running the ad. These items are: "If you are considering the purchase of a VCR, how willing would you be to shop for a VCR at the store running this advertisement?" (Definitely willing to shop-Definitely not willing to shop); "If you were thinking about purchasing a VCR, would you go to the advertiser's store?" (Definitely would go-Definitely would not go); and, "What is the probability that you would shop for a VCR at the store running this advertisement?" (Not Probable at all-Very Probable) (Biswas and Burton 1993,1994). The first two questions were reverse coded.
Study 1

Study Design and Procedure

The first study is survey based where the respondents were provided with an advertisement of the VCR. To enhance the study's realism, the advertisements were professionally developed at the University's audio-visual department. The advertisements uniformly stated that the VCR had a regular price of $249 and it was on sale for $199.

The respondents were asked to carefully read the instructions and other materials and then answer all questions on the questionnaire. They were further instructed that there were no “right or wrong” answers; it was their individual beliefs and opinions that were of interest.

Sample Description

The sample consisted of 115 undergraduate students enrolled in business and psychology classes. Of the total respondents, 60 were male and 55 were female. The students' age ranged from 18 to 54. Approximately 80% (89) of the respondents were 18-22 years of age.

Data Checks

A VCR was selected as the product of choice because the pretest indicated that respondents were likely to be familiar with its prices. However, it was important to determine if respondents of this study possessed such familiarity. It was found that approximately 90% (103) of the respondents owned a VCR. Among those not owning a VCR, approximately 33% (4) were considering buying a VCR.
Reliability Analysis

The results of the reliability analysis for each scale used in this study are presented in Table 4.1. The dependent variable of value of the deal consisting of six items had a coefficient alpha of .93. The new variable proposed, perceived fairness of the offer, consisting of four items had a coefficient alpha of .94. The four-item measure of transaction utility had a coefficient alpha of .83, while the three-item measure of acquisition utility had a coefficient alpha of .61. The reliability measures of the two interval scales – value of the deal and perceived fairness of the offer price – are acceptable (Nunnally 1978). While, the reliability of transaction utility seems acceptable, the reliability of acquisition utility is lower. However, given scale length positively affects coefficient alpha, a 3-item scale with an alpha of .61 is not unacceptable (Cortina 1993).

Table 4.1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction Utility</td>
<td>.83</td>
</tr>
<tr>
<td>Acquisition Utility</td>
<td>.61</td>
</tr>
<tr>
<td>Perceived Fairness of offer price</td>
<td>.94</td>
</tr>
<tr>
<td>Value of the deal</td>
<td>.93</td>
</tr>
</tbody>
</table>

Hypothesis Test

The hypothesis test included assessing if the construct “perceived fairness of the offer price” predicts the dependent variable of value of the deal better than the construct of Transaction Utility as well as each of its components. It was proposed in hypothesis $H_1$ that:
H۱: The subjective measure, "perceived fairness of the offer price" will explain more variance in consumers' evaluation of an offer represented by "perceived value of the deal," than any combination of the measures of Transaction utility

To test this hypothesis a series of stepwise regression analyses were carried out. Each regression model compared “perceived fairness of the offer price” to transaction utility, as well as the four components of transaction utility, in terms of predicting the dependent variable - value of the deal. As per Figure 1.1, transaction utility (or its components) was introduced along with acquisition utility in a model predicting the value of the deal. As seen from the result of this regression analysis provided in Table 4.2 (i.e., step one) both transaction utility as well as acquisition utility significantly predict the value of the deal, supporting Thaler’s model.

In the next step, the proposed construct "perceived fairness of the offer price" was entered in the equation. From the results of these stepwise regressions presented in Table 4.3 it is evident that neither TU nor its components explain any incremental variance in the value of the deal beyond that explained by “perceived fairness of the offer price”.

From Table 4.3 it is evident that the “perceived fairness of the offer price” explains more variance in the value of the deal compared to transaction utility or any of its components. However, it was suggested in Chapter 2 that it is likely that there may be some concern that “perceived fairness of the offer price” and value of the deal may not be

---

1 Stepwise regressions were also conducted where “perceived fairness of the offer price” was entered first (step one) and then TU and AU were entered on the second step. As with the analyses presented above, only AU was significant on the second step, and TU did not explain any incremental variance in the equation.
distinct constructs. To examine this possibility, correlations among all were calculated.

As expected, the correlations reported in Table 4.4 indicate that “perceived fairness of the offer price” is the variable that is most strongly correlated with value of the deal (0.779).

Table 4.2
Regression Analysis to test Thaler's Model - Study 1

<table>
<thead>
<tr>
<th>Transaction Utility</th>
<th>Acquisition Utility</th>
<th>Explained Variance - R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-value</td>
<td>Sig.</td>
<td>t-value</td>
</tr>
<tr>
<td>4.884</td>
<td>.000</td>
<td>4.283</td>
</tr>
<tr>
<td>2.822</td>
<td>.006</td>
<td>5.266</td>
</tr>
<tr>
<td>3.318</td>
<td>.001</td>
<td>5.352</td>
</tr>
<tr>
<td>3.257</td>
<td>.001</td>
<td>4.661</td>
</tr>
<tr>
<td>4.757</td>
<td>.000</td>
<td>3.670</td>
</tr>
</tbody>
</table>

a - TUfair 
b - TUlow 
c - TUmhigh 
d - TUnormal 
e - TUtocal

Table 4.3
Regression Analysis including "Perceived Fairness of the Offer Price" - Study 1

<table>
<thead>
<tr>
<th>Transaction Utility</th>
<th>Acquisition Utility</th>
<th>Fairness</th>
<th>Explained Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-value</td>
<td>Sig.</td>
<td>t-value</td>
<td>Sig.</td>
</tr>
<tr>
<td>0.150</td>
<td>.881</td>
<td>2.853</td>
<td>.005</td>
</tr>
<tr>
<td>-0.572</td>
<td>.568</td>
<td>3.016</td>
<td>.003</td>
</tr>
<tr>
<td>-0.095</td>
<td>.925</td>
<td>2.927</td>
<td>.004</td>
</tr>
<tr>
<td>-0.624</td>
<td>.534</td>
<td>3.018</td>
<td>.003</td>
</tr>
<tr>
<td>-0.385</td>
<td>.701</td>
<td>2.930</td>
<td>.004</td>
</tr>
</tbody>
</table>

a - TUfair 
b - TUlow 
c - TUmhigh 
d - TUnormal 
e - TUtocal

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Table 4.4

Correlations between relevant variables – Study 1

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Fair</th>
<th>AU</th>
<th>TUfair</th>
<th>TUlow</th>
<th>TUhigh</th>
<th>TUnormal</th>
<th>TU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>0.779</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU</td>
<td>0.565</td>
<td>0.541</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUfair</td>
<td>0.587</td>
<td>0.713</td>
<td>0.517</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUlow</td>
<td>0.451</td>
<td>0.574</td>
<td>0.469</td>
<td>0.715</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUhigh</td>
<td>0.470</td>
<td>0.565</td>
<td>0.436</td>
<td>0.614</td>
<td>0.254</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUnormal</td>
<td>0.506</td>
<td>0.632</td>
<td>0.531</td>
<td>0.722</td>
<td>0.620</td>
<td>0.626</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>TU</td>
<td>0.605</td>
<td>0.743</td>
<td>0.582</td>
<td>0.902</td>
<td>0.718</td>
<td>0.810</td>
<td>0.886</td>
<td>1.00</td>
</tr>
</tbody>
</table>

To check if perceived fairness of the offer price and value of the deal were distinct, the Average Variance Extracted (AVE) estimates for both these constructs were calculated using LISREL VIII (Joreskog and Sorbom 1994). AVE assesses the amount of variance captured by a construct's measure relative to random measurement error. The AVE for perceived fairness of offer price and value of the deal were found to be .80 and .71, respectively. The most stringent test for discriminant validity in a structural equation framework is to compare the average AVE among two constructs to the square of the correlation between the two constructs. If the average AVE is greater than the square of the correlation, evidence of discriminant validity exists. In the case of the constructs, perceived fairness of the offer price and value of the deal, the average AVE was 0.76 while the square of the correlation between the constructs was 0.61. Thus, the most stringent condition for discriminant validity is met in this case.
Study 2

Study Design and Procedure

A 2 (levels of ERP - moderate and exaggerated) x 2 (nature of price comparison - within store and between store) x 2 (cue concreteness - abstract and concrete) between-group experimental design was used for this study. The levels of ERP used in the experiment were as follows: ERP=$249 for moderate price and ERP=$399 for exaggerated price. The nature of price comparison and cue concreteness were manipulated by providing the respondents with appropriate cues as determined by the pretests. They are as follows:

Within store Concrete cue – “Regular Price/Sale Price”;

Within store Abstract cue – “A ___ Value/Sale Price”:

Between store Concrete cue – “Circuit City price/Our Sale Price”; and

Between store Abstract cue – “Seen Elsewhere/Our Sale Price.”

To make the advertisements more realistic they were professionally developed by the University’s audio-visual department. The advertisements stated that the VCR had a regular price of $249 (moderate price level) or $399 (exaggerated price level), while it was on sale for $199. The respondents were asked to carefully read the instructions and other materials and then answer all questions on the questionnaire. They were further instructed that there were no “right or wrong” answers; it was their individual beliefs and opinions that were of interest.

Sample Description

The sample consisted of 286 undergraduate students enrolled in business or psychology classes. Of the total respondents, 125 were male and 159 were female. The
students' age ranged from 17 to 42. Approximately 90% (250) of the respondents were 18-22 years of age.

Table 4.5

Cell Sizes - Study 2

<table>
<thead>
<tr>
<th>Manipulation</th>
<th>Cell Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate price, within store concrete cue</td>
<td>36</td>
</tr>
<tr>
<td>Moderate price, within store abstract cue</td>
<td>36</td>
</tr>
<tr>
<td>Moderate price, between store concrete cue</td>
<td>35</td>
</tr>
<tr>
<td>Moderate price, between store abstract cue</td>
<td>35</td>
</tr>
<tr>
<td>Exaggerated price, within store concrete cue</td>
<td>35</td>
</tr>
<tr>
<td>Exaggerated price, within store abstract cue</td>
<td>37</td>
</tr>
<tr>
<td>Exaggerated price, between store concrete cue</td>
<td>35</td>
</tr>
<tr>
<td>Exaggerated price, between store abstract cue</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>286</strong></td>
</tr>
</tbody>
</table>

Distribution of the respondents across the experimental cells is presented in Table 4.5. As shown in Table 4.5, 36 respondents were given the moderate price, within store concrete cue; 36 respondents were given the moderate price, within store abstract cue; 35 respondents were given the moderate price, between store concrete cue; 35 respondents were given the moderate price, between store abstract cue. In all, 142 respondents were provided with the moderate price level cues. 35 respondents were provided with the exaggerated price, within store concrete cue; 37 respondents were provided with the exaggerated price, within store abstract cue; 35 respondents were provided with the exaggerated price, between store concrete cue; and 37 respondents were provided with the exaggerated price, between store abstract cue. In all, 144 respondents were provided with the exaggerated price levels. The cell sizes varied from a minimum of 35 respondents per cell to a maximum of 37 respondents per cell.
Manipulation checks

Cue Concreteness

To confirm that the cues were perceived by the sample as intended, the respondents were asked to rate the level of concreteness of the four cues provided in the experiment. As in the pretest, the respondents were provided with a description that read, "Stores have a variety of ways in which they present information about sales in their advertisements. Sometimes the way in which they present sale information seems abstract (or less informative and ambiguous) while at other times it is more concrete (or more informative and exact)." The respondents were then asked to read each statement carefully before rating each of them on a seven-point scale where a "1" indicated very abstract information while a "7" indicated very concrete information.

Based on the responses a paired t-test comparison was performed between the within store cues as well as the between store cues. It was observed that among the within store cues, the concrete cue "Regular Price/Sale Price" (Mean=4.93, SD = 1.63) was found to be significantly more concrete than the abstract cue, "A ___ Value/Sale Price" (Mean=3.29, SD = 1.73) (t=12.50, p < 0.0001). Similarly, among the between store cues, the concrete cue "Circuit City price/Our price" (Mean=5.33, SD = 1.68) was found to be significantly more concrete than the abstract cue, "Seen Elsewhere/ Our Price" (Mean=3.09, SD = 1.72) (t=17.76, p <0.0001). Thus, it can be concluded that the cue manipulations were perceived in the intended manner.

Nature of Price Comparison

The other manipulation that was critical in this experiment was the nature of price comparison (i.e., between store and within store). To check this, the respondents were
provided with a single-item measure that read, "The advertiser in this ad compares the sale (offer) price for the VCR with the price of a similar VCR at some other retail store." The responses were recorded on a seven-point scale where "1" was strongly disagree and a "7" was strongly agree. If the manipulation held, those who received the between store cue would show higher scores on this statement than those who received the within store cue.

In determining if the nature of price comparison manipulation was perceived by the sample as intended, a 2 (nature of price comparison) x 2 (cue concreteness) analysis of variance design was executed in accordance with Perdue and Summers (1986). In this analysis, the single-item measure described above was used as the dependent variable. If the nature of the cue manipulation was perceived as it was intended, then the ANOVA results should indicate a significant main effect for the nature of price comparison manipulation and no significant main effect for the cue concreteness manipulation. Likewise, there should be no significant interaction effect. The results of this analysis indicate that the nature of price comparison manipulation was perceived as intended. As Table 4.6 illustrates, there was a significant main effect for the nature of price comparison (F=89.871; p < 0.0001), but there was not a significant main effect for cue concreteness (F=0.32; p > 0.10) nor was there a significant interaction effect (F=0.78; p > 0.10). Therefore, the nature of price comparison manipulation was perceived by the respondents as intended.
Table 4.6
Nature of Price Comparison Manipulation Check - Study 2

<table>
<thead>
<tr>
<th>ANOVA Results</th>
<th>df</th>
<th>F-Value</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of price comparison (N)</td>
<td>1</td>
<td>89.87</td>
<td>.000</td>
</tr>
<tr>
<td>Cue Concreteness (C)</td>
<td>1</td>
<td>0.320</td>
<td>.572</td>
</tr>
<tr>
<td>2-way interactions</td>
<td>1</td>
<td>0.782</td>
<td>.377</td>
</tr>
</tbody>
</table>

Reliability Analysis

The results of the reliability analysis are presented for each scale used in this experiment. The results are summarized in Table 4.7. The dependent measure of "value of the deal" which consisted of six items also had a coefficient alpha of 0.93, and varied from 0.84 to 0.95 across the eight cells. The dependent variable of "intention to search" which consisted of three items had a coefficient alpha of 0.96, and varied from 0.85 - 0.97 across all the cells. The dependent measure of "shopping intention" which consisted of three items had a coefficient alpha of 0.93, and varied from 0.90 - 0.96 across the cells. Hence, the reliabilities are all considered acceptable (Nunnally 1978).

Table 4.7
Reliability of Dependent variables - Study 2

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Coefficient Alpha for pooled data</th>
<th>Range of alpha across cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of the Deal</td>
<td>0.93</td>
<td>0.84 - 0.95</td>
</tr>
<tr>
<td>Intention to search</td>
<td>0.96</td>
<td>0.85 - 0.97</td>
</tr>
<tr>
<td>Shopping Intention</td>
<td>0.93</td>
<td>0.90 - 0.96</td>
</tr>
</tbody>
</table>

Hypotheses Tests

Hypotheses relating to the dependent variables were examined by performing a MANOVA. Prior to performing the MANOVA on the dependent variables, it is important...
to confirm that they are all significantly correlated. Hence, the correlations among the variables of interest were examined. As seen in Table 4.8, the variables “intention to search” and “shopping intentions” are not significantly correlated. One of the assumptions of MANOVA is that the dependent variables are significantly correlated. Hence, it was decided to analyze the dependent variables of “intention to search” and “value of the deal” using a MANOVA and analyze the dependent variable of “shopping intentions” using an ANOVA as suggested by Huberty and Morris (1989).

Table 4.8

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Value of the Deal</th>
<th>Intention to Search</th>
<th>Shopping Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of the Deal</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention to Search</td>
<td>-.360</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Shopping Intention</td>
<td>.335</td>
<td>.044*</td>
<td>1</td>
</tr>
</tbody>
</table>

* not significant at .05 level

The first set of hypotheses (H2, H3 and H4) deal with the main effects of the three manipulated variables – namely price level, nature of cue and cue concreteness, respectively. To test the hypotheses, first a MANOVA was conducted with “value of the deal” and “intention to search” as the dependent variables and price level, nature of price comparison and cue concreteness as the manipulated factors. This was followed by an ANOVA with “shopping intention” as the dependent variable and the same manipulated factors used in the MANOVA. As shown in Table 4.9, the MANOVA revealed a significant three-way interaction (Wilks’ lambda = .971, F=4.14, p < .017). The Univariate ANOVAs indicate the three-way interaction was attributable to both
dependent variables of "value of the deal" (F=3.770, p < .053) and "intention to search" (F=6.692, p < .010).

Discussion of the main effects of manipulated variables is not useful in the presence of the three-way interaction in this case. Therefore, the results of the hypotheses relating to two-way interactions (H5, H6 and H7) are interpreted within each level of the relevant factors. Specifically, since H5 deals with the interaction effect of price level with cue concreteness, the results for this hypothesis are interpreted within each level of the nature of price comparison (i.e., between store comparison and within store comparison). Similarly, since H6 deals with the interaction effect of price level with nature of price comparison, the results for this hypothesis are interpreted within each level of cue concreteness (i.e., abstract and concrete cues). Hypothesis H7 compares the two means —namely between store concrete cues and within store abstract cues. These two means are compared at both moderate and exaggerated price levels.

An ANOVA was performed with shopping intention as the dependent variable and price level, nature of cue, and cue concreteness as the factors. The results are shown in Table 4.10. As can be noted from Table 4.10, there is no main effect of price level on the dependent variable "shopping intention" (F = 0.741, p > .10). Moreover, none of the manipulated variables significantly effected the "shopping intentions" of the consumer. Hence, the discussion of the reminder of the results is restricted to the other two dependent variables — value of the deal and intention to search.
Table 4.9

Effects of Price Level, Nature of Price Comparison and Cue Concreteness on Intention to Search and Value of the Deal – Study 2

<table>
<thead>
<tr>
<th>Source</th>
<th>Wilks’ Lambda</th>
<th>F-values (sig.)</th>
<th>df</th>
<th>Value of the Deal</th>
<th>Intention to search</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price Level (P)</td>
<td>.998</td>
<td>0.227 (.797)</td>
<td>2</td>
<td>.406 (.525)</td>
<td>0.001 (.971)</td>
</tr>
<tr>
<td>Nature of Price Comparison (N)</td>
<td>.896</td>
<td>15.947 (.000)</td>
<td>2</td>
<td>8.932 (.003)</td>
<td>29.660 (.000)</td>
</tr>
<tr>
<td>Cue Concreteness (C)</td>
<td>.921</td>
<td>11.742 (.000)</td>
<td>2</td>
<td>10.161 (.002)</td>
<td>19.339 (.000)</td>
</tr>
<tr>
<td><strong>2 way Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P x N</td>
<td>.989</td>
<td>1.498 (.225)</td>
<td>2</td>
<td>2.890 (.090)</td>
<td>0.021 (.884)</td>
</tr>
<tr>
<td>P x C</td>
<td>.960</td>
<td>5.773 (.003)</td>
<td>2</td>
<td>0.061 (.805)</td>
<td>11.088 (.001)</td>
</tr>
<tr>
<td>N x C</td>
<td>.970</td>
<td>4.303 (.014)</td>
<td>2</td>
<td>3.903 (.049)</td>
<td>6.967 (.009)</td>
</tr>
<tr>
<td><strong>3 way Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P x N x C</td>
<td>.971</td>
<td>4.140 (.017)</td>
<td>2</td>
<td>3.770 (.053)</td>
<td>6.692 (.010)</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>276</td>
</tr>
</tbody>
</table>

Table 4.10

Effects of Price Level, Nature of Price Comparison and Cue Concreteness on Shopping Intention – Study 2

<table>
<thead>
<tr>
<th>Source</th>
<th>F – Value</th>
<th>Sig.</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price Level (P)</td>
<td>0.741</td>
<td>0.390</td>
<td>1</td>
</tr>
<tr>
<td>Nature of Price Comparison (N)</td>
<td>0.777</td>
<td>0.379</td>
<td>1</td>
</tr>
<tr>
<td>Cue Concreteness (C)</td>
<td>0.071</td>
<td>0.790</td>
<td>1</td>
</tr>
<tr>
<td><strong>2 way interactions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P x N</td>
<td>0.267</td>
<td>0.606</td>
<td>1</td>
</tr>
<tr>
<td>P x C</td>
<td>0.342</td>
<td>0.559</td>
<td>1</td>
</tr>
<tr>
<td>N x C</td>
<td>0.029</td>
<td>0.865</td>
<td>1</td>
</tr>
<tr>
<td><strong>3 way Interaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P x N x C</td>
<td>1.828</td>
<td>0.177</td>
<td>1</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td></td>
<td>278</td>
</tr>
</tbody>
</table>

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Since the main effect hypotheses $H_2$, $H_3$ and $H_4$ are moot in the presence of a three-way interaction, the other hypotheses are discussed next. Hypothesis $H_5$ and $H_6$ deal with the interaction effect of the price level with nature of price comparison and cue concreteness, respectively. $H_5$ hypothesized that:

**$H_5$: The concrete price cue will result in (a) higher perceived value (b) lower search intention and (c) higher shopping intention than an abstract price cue and this difference will be higher in the case of a moderate ERP rather than an exaggerated ERP.**

Because there is a three-way interaction, results relevant to hypothesis $H_5$ are interpreted within each level of nature of price comparisons (i.e., between store and within store). The means were compared to determine the nature of the differences for “value of the deal.” As shown in Figure 4.1 and Table 4.1a, for a between store comparison there is a significant difference in consumers perception of value of the deal between concrete (Mean = 5.06, SD = 0.75) and abstract cues (Mean = 4.00, SD = 1.02) ($t=4.945$, df=62, $p < .0001$) at moderate price levels. However, at an exaggerated price level, there is no significant difference in perceptions of value of the deal between concrete (Mean = 4.59, SD = 1.42) and abstract cues (Mean = 4.16, SD = 1.37) ($t=1.302$, df=69, $p > .10$). These results provide evidence supporting hypothesis $H_{5a}$.

Similar mean comparisons were conducted for the within-store price comparisons (Table 4.1b). In this condition though, there is no significant difference between concrete and abstract cues at either the moderate price level ($t=0.258$, df=70, $p > .10$) or at the exaggerated price level ($t=1.305$, df=68, $p > .10$). Thus, from the means
presented in Table 4.11a and 4.11b, $H_5a$ is supported when the cues compare prices between stores, while it is not supported when the cues compare prices within stores.

Table 4.11a

<table>
<thead>
<tr>
<th>Concrete Cue</th>
<th>Abstract Cue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Price</td>
<td>5.06</td>
</tr>
<tr>
<td>Exaggerated Price</td>
<td>4.59</td>
</tr>
</tbody>
</table>

Table 4.11b

<table>
<thead>
<tr>
<th>Concrete Cue</th>
<th>Abstract Cue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Price</td>
<td>3.82</td>
</tr>
<tr>
<td>Exaggerated Price</td>
<td>4.40</td>
</tr>
</tbody>
</table>

Value of the Deal for Between Store Comparison - Study 2

Figure 4.1
Similar comparison of means were conducted for the consumers “intention to search” across the between store comparisons and within store comparisons to test hypothesis $H_{5b}$. The means for “intention to search” for between store comparisons are shown in Figure 4.2, and Table 4.12a. The results indicate for a between store comparison there is a significant difference in consumers intention to search between concrete (Mean = 3.54, SD = 2.16) and abstract cues (Mean = 6.10, SD = 1.38) at moderate price levels ($t=5.899$, $df=68$, $p < .0001$). However, at an exaggerated price level, there is no significant difference in perceptions of intention to search between concrete (Mean = 4.75, SD = 1.57) and abstract cues (Mean = 4.97, SD = 2.14) ($t=0.497$, $df=70$, $p > .10$). These results provide evidence supporting hypothesis $H_{5b}$.

Similar mean comparisons were conducted for the within-store price comparisons (Table 4.12b). In this condition though, there was no significant difference between concrete and abstract cues either at the moderate price level (Concrete cues: Mean = 5.68, SD = 1.57; Abstract cue: Mean = 6.17, SD = 1.09) ($t=1.544$, $df=70$, $p > .10$) or at the exaggerated price level (Concrete cues: Mean = 5.80, SD = 1.68; Abstract cue: Mean = 5.95, SD = 1.30) ($t=0.414$, $df=70$, $p > .10$). However, the difference in the means was in the hypothesized direction. The difference between the mean intention to search in the case of abstract cues and concrete cues was higher in the case of moderate price level (Mean difference = 0.49) than at exaggerated price level (Mean difference = 0.15). Thus, from the means presented in Table 4.12a and 4.12b, $H_{5b}$ is supported when the cues compare prices between stores, while it is not supported when the cues compare prices within stores.
Table 4.12a

Intention to Search for Between Store Comparison – Study 2

<table>
<thead>
<tr>
<th></th>
<th>Concrete Cue</th>
<th>Abstract Cue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Price</td>
<td>3.54</td>
<td>6.10</td>
</tr>
<tr>
<td>Exaggerated Price</td>
<td>4.75</td>
<td>4.97</td>
</tr>
</tbody>
</table>

Table 4.12b

Intention to Search for Within Store Comparison – Study 2

<table>
<thead>
<tr>
<th></th>
<th>Concrete Cue</th>
<th>Abstract Cue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Price</td>
<td>5.68</td>
<td>6.17</td>
</tr>
<tr>
<td>Exaggerated Price</td>
<td>5.80</td>
<td>5.95</td>
</tr>
</tbody>
</table>

Intention to Search for Between Store Comparison - Study 2

Figure 4.2
Hypothesis H₆ deals with the interaction effect of price levels and the nature of price comparison. H₆ hypothesized that:

\textbf{H₆: The between store price comparison will result in (a) higher perceived value (b) lower search intention and (c) higher shopping intention than a within store price comparison and this difference will be higher in the case of a moderate ERP rather than an exaggerated ERP.}

Again, due to the significant three-way interaction, results relevant to hypothesis H₆ are interpreted within each level of cue concreteness (i.e., abstract and concrete cues). The means were compared to determine the nature of the differences for “value of the deal.” The means for “value of the deal” for concrete cues are presented in Figure 4.3 and Table 4.13a. The results indicate that for \textbf{concrete cue} there is a significant difference in consumers perception of value of the deal between between store (Mean = 5.06, SD = 0.75) and within store comparisons (Mean = 3.82, SD = 1.28) at moderate price levels (t=4.985, df=57, p < .0001). However, at an exaggerated price level, there is no significant difference in perceptions of value of the deal for between store (Mean = 4.59, SD = 1.42) and within store comparisons (Mean = 4.40, SD = 1.40) (t=0.566, df=68, p > .10). These results provide evidence supporting hypothesis H₆a.

Similar mean comparisons were conducted for the \textbf{abstract cues} (See Table 4.13b). In this condition though, there is no significant difference between between store and within store comparisons at either at the moderate price level (Between store: Mean = 4.00, SD = 1.02; Within store: Mean = 3.89, SD = 0.98) (t=0.258, df=70, p > .10) or at the exaggerated price level (Between store: Mean = 4.16, SD = 1.37; Within store: Mean = 3.98, SD = 1.30) (t=1.305, df=68, p > .10). Thus, from the means presented in Table 4.13a
and Table 4.13b, H₆ₐ is supported for between store price comparison but not for within store price comparison.

Table 4.13a

Value of the Deal for Concrete Cues – Study 2

<table>
<thead>
<tr>
<th></th>
<th>Between Store Comparison</th>
<th>Within Store Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Price</td>
<td>5.06</td>
<td>3.82</td>
</tr>
<tr>
<td>Exaggerated Price</td>
<td>4.59</td>
<td>4.40</td>
</tr>
</tbody>
</table>

Table 4.13b

Value of the Deal for Abstract Cues – Study 2

<table>
<thead>
<tr>
<th></th>
<th>Between Store Comparison</th>
<th>Within Store Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Price</td>
<td>4.00</td>
<td>3.89</td>
</tr>
<tr>
<td>Exaggerated Price</td>
<td>4.16</td>
<td>3.98</td>
</tr>
</tbody>
</table>

Value of the Deal for Concrete Cues - Study 2

Figure 4.3

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Similar comparison of means were conducted for the consumers “intention to search” separately across the between store comparisons and within store comparisons to test hypothesis $H_{6b}$. The results indicate that for a concrete cue (Figure 4.4 and Table 4.14a) there is a significant difference in consumers “intention to search” between within store (Mean = 5.68, SD = 1.57) and between store price cues (Mean = 3.54, SD = 2.16) at moderate price levels ($t=4.775$, $df=69$, $p < .0001$). At an exaggerated price level, there is also a significant difference in intention to search at different types of price comparisons ($t=2.701$, $df=68$, $p < .009$). However, as per hypothesis $H_{6b}$, the difference between the mean scores for intention to search is higher at the moderate price level (Mean difference = 2.13) than it is at the exaggerated price level (Mean difference = 1.05). These results provide evidence supporting hypothesis $H_{6b}$.

**Table 4.14a**

**Intention to Search for Concrete Cues – Study 2**

<table>
<thead>
<tr>
<th></th>
<th>Between Store Comparison</th>
<th>Within Store Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Price</td>
<td>3.54</td>
<td>5.68</td>
</tr>
<tr>
<td>Exaggerated Price</td>
<td>4.75</td>
<td>5.80</td>
</tr>
</tbody>
</table>
Similar mean comparisons were conducted for the abstract cues (Figure 4.5 and Table 4.14b). Contrary to hypothesis $H_{6b}$, there was a significant difference between the within store comparison and between store comparisons at the exaggerated price level, as shown in fig. 4.5 ($t=2.367$, $df=72$, $p < .021$). The difference between the mean intention to search in the case of within store comparisons (Mean = 6.17 at moderate price level and Mean = 5.95 at exaggerated price level) was higher than that of between store comparisons (Mean = 6.10 at moderate price level and Mean = 4.97 at exaggerated price level). Hence, from the means in Table 4.14a and 4.14b, support is evident for hypothesis $H_{6a}$ and $H_{6b}$ in the case of concrete cues only.
Hypothesis $H_7$ relates to concrete between store comparison cues and abstract within store comparison cues. Specifically, it states that:

$H_7$: The between-store concrete cue will result in (a) higher perceived value (b) lower search intention and (c) higher shopping intention than a within-store abstract claim.
As there is a three-way interaction, results relevant to hypothesis H\textsubscript{7} are interpreted within each price level (i.e., moderate and exaggerated). The means were compared to determine the nature of the differences for “value of the deal.” As shown in Figure 4.6a and 4.6b, the results of the means for “value of the deal” lend support to hypothesis H\textsubscript{7a}. The results indicate that for both moderate price level (Concrete between store cue: Mean = 5.06, SD = 0.75; Abstract within store cue: Mean = 3.89, SD = 0.98; \(t=5.595, df=68, p < .0001\)) and for exaggerated price level (Concrete between store cue: Mean = 4.59, SD = 1.42; Abstract within store cue: Mean = 3.98, SD = 1.20; \(t=1.890, df=69, p < .063\)) the concrete between store cue is valued significantly higher than the abstract within store cue, providing support to hypothesis H\textsubscript{7a}.

Similarly, as shown in fig. 4.7a and 4.7b, the means for "intention to search" provide support to hypothesis H\textsubscript{7b}. The results indicate that for both moderate price level as well as exaggerated price level, consumers "intention to search" was significantly lower when exposed to a concrete between store cue compared to an abstract within store cue. In the case of the moderate price level the concrete between store cue (Mean = 3.54, SD = 1.16) resulted in lower intentions to search than the abstract within store cue (Mean = 6.17, SD = 1.09) (\(t=6.494, df=69, p < .0001\)). Similar results were found at the exaggerated price level (Concrete between store cue: Mean = 4.75, SD = 1.57; Abstract within store cue: Mean = 5.95, SD = 1.90) (\(t=3.530, df=70, p < .001\)), though, the difference between concrete between store claim and abstract within store claim was smaller. Overall, these results provide evidence supporting hypothesis H\textsubscript{7}.

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Value of the Deal at Moderate ERP

Figure 4.6a

Value of the Deal at Exaggerated ERP

Table 4.6b
Intention to Search at Moderate ERP

Figure 4.7a

Intention to Search at Exaggerated ERP

Figure 4.7b
Post-Hoc tests indicated that there was no significant difference in consumer value perceptions between concrete within store cues (Mean = 4.11, SD = 1.36) and abstract between store cues (Mean = 4.08, SD = 1.21). This result was true at both the moderate (t = -0.657, p > .10) and exaggerated ERPs (t = 0.727, p > .10). Similarly, there was no significant difference in consumers intention to search when exposed to concrete within store cues (Mean = 5.74, SD = 1.61) and abstract between store cues (Mean = 5.52, SD = 1.88). This result was true at moderate (t = -1.19, p > .10) and exaggerated ERPs (t = 1.18, p > .10).

To summarize, the results of Study 2 indicate that:

1. A concrete cue results in higher value perception and lower search intention than an abstract cue and this difference is greater in the case of moderate ERP rather than exaggerated ERP. This finding is true for between store cues but not for within store cues.

2. A between store cue results in higher value perceptions and lower search intention than a within store cue and this difference is greater in the case of moderate ERP rather than exaggerated ERP. This result holds true for concrete cues only and not for abstract cues.

3. A concrete between store cue results in higher value perceptions and lower search intention than an abstract within store cue for moderate as well as exaggerated ERPs. Post-Hoc tests indicated that there was no significant difference in consumer value perceptions and intention to search between concrete within store cues and abstract between store cues. This result was true at both the moderate and exaggerated ERPs.

The hypotheses and the results are summarized in Table 4.14c.
### Table 4.14c

**Summary of Results – Study 2**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_2$, $H_3$ and $H_4$ are main effects of price level, nature of price comparison and level of cue concreteness, respectively.</td>
<td>Not tested due to the presence of a 3-way interaction.</td>
</tr>
<tr>
<td>$H_5$: The concrete price cue will result in (a) higher perceived value, (b) lower search intention, and (c) higher shopping intention, than an abstract price cue and this difference will be higher in the case of a moderate ERP rather than an exaggerated ERP.</td>
<td>$H_{5a}$ and $H_{5b}$ were supported in the case of between store comparison. They were not supported in the within store comparison condition.</td>
</tr>
<tr>
<td>$H_6$: The between store price comparison will result in (a) higher perceived value, (b) lower search intention, and (c) higher shopping intention, than a within store price comparison and this difference will be higher in the case of a moderate ERP rather than an exaggerated ERP.</td>
<td>$H_{6a}$ and $H_{6b}$ were supported in the case of concrete cues and not in the case of abstract cues.</td>
</tr>
<tr>
<td>$H_7$: The between-store concrete cue will result in (a) higher perceived value, (b) lower search intention, and (c) higher shopping intention, than a within-store abstract claim.</td>
<td>$H_{7a}$ and $H_{7b}$ were supported both in the case of moderate ERPs as well as exaggerated ERPs. Post-Hoc tests indicated that there was no significant difference in the effect of between-store abstract cues and within-store concrete cues on consumer perceptions of value and intention to search.</td>
</tr>
</tbody>
</table>

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Study 3

Study Design and Procedure

A 2 (location where the ad is viewed – at home and at store) x 2 (nature of price comparison – within store and between store) x 2 (cue concreteness – abstract and concrete) between group experimental design was used for this study. A moderate level of ERP was used in this experiment. The nature of price comparison and cue concreteness were manipulated by providing the respondents with appropriate cues as determined in the pretests. As in Study 2, they were:

Within store Concrete cue – “Regular Price/Sale Price”;
Within store Abstract cue – “A ___ Value/Sale Price”:
Between store Concrete cue – “Circuit City price/Our Sale Price”; and
Between store Abstract cue – “Seen Elsewhere/Our Sale Price.”

The advertisements were developed by the audio-visual department at the University and stated that the VCR had a regular price of $249 while it was on sale for $199. The respondents were asked to carefully read the instructions and other materials and then answer all questions on the questionnaire. They were further instructed that there were no “right or wrong” answers, it was their individual beliefs and opinions that were of interest.

The at-home situation in this experiment was operationalized by indicating that "while browsing through the newspaper at home on Saturday, you notice the following advertisement for a VCR at a major department store." The in-store situation was operationalized by indicating that "while browsing through a major department store on Saturday, you notice the following display for a VCR."
Sample Description

The sample consisted of 293 undergraduate students enrolled in business or psychology classes. Of the total respondents, 142 were male and 149 were female. The students' age ranged from 18 to 54 years. Approximately 85% (246) of the respondents were 18-22 years of age.

Table 4.15

Cell Sizes - Study 3

<table>
<thead>
<tr>
<th>Manipulation</th>
<th>Cell Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Home, within store concrete cue</td>
<td>38</td>
</tr>
<tr>
<td>At Home, within store abstract cue</td>
<td>39</td>
</tr>
<tr>
<td>At Home, between store concrete cue</td>
<td>34</td>
</tr>
<tr>
<td>At Home, between store abstract cue</td>
<td>32</td>
</tr>
<tr>
<td>At Store, within store concrete cue</td>
<td>40</td>
</tr>
<tr>
<td>At Store, within store abstract cue</td>
<td>36</td>
</tr>
<tr>
<td>At Store, between store concrete cue</td>
<td>37</td>
</tr>
<tr>
<td>At Store, between store abstract cue</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>293</td>
</tr>
</tbody>
</table>

Distribution of the respondents across the experimental cells is presented in Table 4.15. As shown in Table 4.15, 38 respondents were given the at home, within store concrete cue; 39 respondents were given the at home, within store abstract cue; 34 respondents were given the at home, between store concrete cue; 32 respondents were given the at home, between store abstract cue. In all, 143 respondents were provided with the at home level cues. 40 respondents were provided with the at store, within store concrete cue; 36 respondents were provided with the at store, within store abstract cue; 37 respondents were provided with the at store, between store concrete cue; and 37 respondents were provided with the at store, between store abstract cue. In all, 150
respondents were provided with the at store levels. The cell sizes varied from a minimum of 32 to a maximum of 40 respondents per cell.

**Manipulation checks**

**Situation**

To verify that subjects attended to the information about the situation (location) where they were viewing the ad, they were asked to recall the situation. It was observed that 227 of 293 recalled the situation correctly. This is more than by chance ($\chi^2 = 94.91$, $p < .0001$) and indicates that the respondents did pay attention to the scenario provided to them.

**Cue Concreteness**

To confirm that the cues were perceived by the sample as intended, the respondents were asked to rate the cue concreteness of the four cues provided in the experiment. As in the pretest and Study 2, the respondents were provided with a description that read, "Stores have a variety of ways in which they present information about sales in their advertisements. Sometimes the way in which they present sale information seems **abstract (or less informative and ambiguous)** while at other times it is **more concrete (or more informative and exact).**" The respondents were then asked to read each statement carefully before rating each of them on a seven-point scale where a "1" indicated “very abstract information” while a "7" indicated “very concrete information.”

Based on the responses a paired t-test comparison was performed between the within store cues as well as the between store cues. It was observed that among the within store cues, the concrete cue "Regular Price/Sale Price" (Mean=5.02, SD = 1.64) was found
to be significantly more concrete than the abstract cue, "A ____ Value/Sale Price"
(Mean=3.16, SD = 1.59) (t=15.99, p < 0.0001). Similarly, among the between store cues, the concrete cue "Circuit city price/Our price" (Mean=5.43, SD = 1.64) was found to be significantly more concrete than the abstract cue, "Seen Elsewhere/ Our Price"
(Mean=3.12, SD = 1.61) (t=17.53, p <0.0001). Thus, it can be concluded that the cues that were manipulated were perceived as intended.

Nature of Price Comparison

The other manipulation that was critical in this experiment was the nature of price comparison. To check this, the respondents were provided with a single-item measure that read, "The advertiser in this ad compares the sale (offer) price for the VCR with the price of a similar VCR at some other retail store." The responses were noted on a seven-point scale where "1" was “strongly disagree” and a "7" was “strongly agree.” If the manipulation held, those who received the between store cue would score higher on this statement than those who received the within store cue.

In determining if the nature of price comparison manipulation was perceived by the sample as intended, a 2 (nature of price comparison) x 2 (cue concreteness) analysis of variance design was executed in accordance with Perdue and Summers (1986). In this analysis, the single-item measure described above was used as the dependent variable. If the nature of the cue manipulation was perceived as it was intended, then the ANOVA results should indicate a significant main effect for the nature of price comparison manipulation and no significant main effect for the cue concreteness manipulation. Likewise, there should be no significant interaction effect. The results of this analysis indicate that the nature of price comparison manipulation was perceived as intended. As
Table 4.16 illustrates, there was a significant main effect for the nature of price comparison (F=111.08; p<0.0001), but there was not a significant main effect for cue concreteness (F=1.94; p > .10) nor was there a significant interaction effect (F=1.90; p > .10). Therefore, the nature of price comparison manipulation was perceived by the respondents as intended.

Table 4.16

<table>
<thead>
<tr>
<th>Nature of Price Comparison Manipulation Check - Study 3</th>
<th>ANOVA Results</th>
<th>df</th>
<th>F-Value</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of Price Comparison (P)</td>
<td>1</td>
<td></td>
<td>111.080</td>
<td>.000</td>
</tr>
<tr>
<td>Cue Concreteness (C)</td>
<td>1</td>
<td></td>
<td>1.940</td>
<td>.165</td>
</tr>
<tr>
<td>2-way interactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P x C</td>
<td>1</td>
<td></td>
<td>1.899</td>
<td>.177</td>
</tr>
</tbody>
</table>

Reliability Analysis

The results of the reliability analysis are presented for each scale used in this experiment. The results are summarized in Table 4.17. The dependent measure of "value of the deal" which consisted of six items had a coefficient alpha of 0.94, and varied from 0.82 to 0.96 across the eight cells. The dependent variable of "intention to search" which consisted of three items had a coefficient alpha of 0.90, and varied from 0.83 to 0.95 across the cells. The dependent measure of "shopping intention" which consisted of three items had a coefficient alpha of 0.88, varied from 0.70 to 0.94 across the cells. Hence, the reliabilities are all considered acceptable (Nunnally 1978).
Table 4.17

Reliability of Dependent variables - Study 3

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Coefficient Alpha for pooled data</th>
<th>Range of alpha across cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of the Deal</td>
<td>0.94</td>
<td>0.82 - 0.96</td>
</tr>
<tr>
<td>Intention to search</td>
<td>0.90</td>
<td>0.83 - 0.95</td>
</tr>
<tr>
<td>Shopping Intention</td>
<td>0.88</td>
<td>0.70 - 0.94</td>
</tr>
</tbody>
</table>

**Hypothesis Test**

Hypothesis relating to the dependent variables was examined by performing a MANOVA. Prior to performing the MANOVA correlations among the dependent variables were examined and are reported in Table 4.18. As can be observed, the variables “intention to search” and “shopping intentions” are not significantly correlated. Hence, based on the results in Table 4.18, it was decided to analyze the dependent variables of “intention to search” and “value of the deal” using a MANOVA and analyze the dependent variable of “shopping intentions” using a ANOVA as suggested by (Huberty and Morris 1989).

Table 4.18

Correlations among the Dependent Variables - Study 3

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Value of the Deal</th>
<th>Intention to Search</th>
<th>Shopping Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of the Deal</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention to Search</td>
<td>-.195</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Shopping Intention</td>
<td>.555</td>
<td>-.077*</td>
<td>1</td>
</tr>
</tbody>
</table>

* not significant at .05 level

Hypothesis 8 deals with the three-way interaction effects of the manipulated variables – namely location where ad is viewed, nature of price comparison and cue concreteness. Hypothesis H8 proposed that:
**H5:** There will be a three-way interaction effect of cue concreteness, nature of price comparison and location where the ad is viewed on a) value of the deal, b) search intentions and c) shopping intention, i.e., the interaction effect between the nature of price comparison and cue concreteness will be stronger when the ad is viewed at home rather than in the store.

### Table 4.19

**Effects of Location where Ad is Viewed, Nature of Price Comparison Cue Concreteness on Intention to Search and Value of the Deal – Study 3**

<table>
<thead>
<tr>
<th>Source</th>
<th>Wilks' Lambda</th>
<th>F-values (sig.)</th>
<th>df</th>
<th>Value of the Deal (sig.)</th>
<th>Intention to search (sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location (L)</td>
<td>.956</td>
<td>6.478 (.002)</td>
<td>2</td>
<td>7.940 (.005)</td>
<td>2.857 (.092)</td>
</tr>
<tr>
<td>Nature of Price</td>
<td>.977</td>
<td>3.378 (.036)</td>
<td>2</td>
<td>5.812 (.017)</td>
<td>1.994 (.159)</td>
</tr>
<tr>
<td>Comparison (N)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cue Concreteness (C)</td>
<td>.982</td>
<td>2.611 (.075)</td>
<td>2</td>
<td>0.621 (.431)</td>
<td>5.099 (.025)</td>
</tr>
<tr>
<td><strong>2 way Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L x N</td>
<td>.997</td>
<td>.434 (.649)</td>
<td>2</td>
<td>0.733 (.393)</td>
<td>0.274 (.601)</td>
</tr>
<tr>
<td>L x C</td>
<td>.999</td>
<td>.162 (.850)</td>
<td>2</td>
<td>0.091 (.763)</td>
<td>0.177 (.675)</td>
</tr>
<tr>
<td>N x C</td>
<td>.996</td>
<td>.586 (.557)</td>
<td>2</td>
<td>1.160 (.282)</td>
<td>0.102 (.749)</td>
</tr>
<tr>
<td><strong>3 way Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P x N x C</td>
<td>.966</td>
<td>4.949 (.008)</td>
<td>2</td>
<td>5.809 (.017)</td>
<td>5.959 (.015)</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td>276</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To test the hypotheses, first a MANOVA was conducted with “value of the deal” and “intention to search” as the dependent variables and location where the ad is viewed, nature of cue and cue concreteness as the manipulated factors. This was followed by an ANOVA with “shopping intention” as the dependent variable and the same manipulated
factors as in the MANOVA. As shown in Table 4.19, there is a significant three-way interaction among the manipulated factors (Wilks’ lambda = .966, F = 4.949, p < .008) on “value of the deal” and “intention to search.” On examining the univariate analysis it is observed that a significant three-way interaction exists among the factors for both “value of the deal” (F=5.809, p < .017) and “intention to search” (F=5.959, p < .015).

Based on hypothesis H₈, interaction between nature of price comparison and cue concreteness was tested for both in the “at home” and “in store” conditions. Towards this, a 2 (nature of price comparison) x 2 (cue concreteness) MANOVA was conducted with "value of the deal" and "intention to search" as the dependent variable under the two conditions of viewing the ad at home and in the store. As seen in Table 4.20, there was a significant two-way interaction (Wilks' Lambda = 0.935, F =4.782, p < .01) between the nature of price comparison and the cue concreteness for those respondents who were provided the scenario of viewing the ad at home. The univariate analysis revealed that the two-way interaction was significant for "value of the deal" (F = 6.871, p < .010) and marginally significant for "intention to search" (F = 3.675, p < .057). Thus, this provides partial support for hypothesis H₈. The interaction effects for "value of the deal" and "intention to search" are pictorially represented in Figures 4.8a and 4.8b, respectively.
Table 4.20

Value of the Deal and Intention to Search for those viewing the ad at home - Study 3

<table>
<thead>
<tr>
<th>Source</th>
<th>Multivariate</th>
<th>Univariate F-values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wilks’ Lambda</td>
<td>F-values (sig.)</td>
</tr>
<tr>
<td>Value of the Deal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of Price Comparison (N)</td>
<td>.950</td>
<td>3.956 (.030)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6.029 (.015)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.994 (.159)</td>
</tr>
<tr>
<td>Cue Concreteness (C)</td>
<td>.975</td>
<td>1.732 (.181)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0.133 (.715)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.099 (.025)</td>
</tr>
<tr>
<td>2 way Interactions</td>
<td>.935</td>
<td>4.782 (.010)</td>
</tr>
<tr>
<td>N x C</td>
<td>1</td>
<td>6.871 (.010)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.675 (.057)</td>
</tr>
<tr>
<td>Residual</td>
<td>138</td>
<td></td>
</tr>
</tbody>
</table>

Value of the Deal when the ad is viewed at home - Study 3

Figure 4.8a
Intention to Search when the ad is viewed at home—Study 3

Figure 4.8b

A similar 2 (nature of price comparison) x 2 (cue concreteness) MANOVA was conducted for the respondents who were presented with the scenario of having viewed the ad in the store. The results of this MANOVA are reported in Table 4.21.

Table 4.21

<table>
<thead>
<tr>
<th>Source</th>
<th>Multivariate F-values</th>
<th>Univariate F-values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wilks’ Lambda</td>
<td>F-values (sig.)</td>
</tr>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nature of Price Comparison (N)</strong></td>
<td>.992</td>
<td>.620 (.540)</td>
</tr>
<tr>
<td><strong>Cue Concreteness (C)</strong></td>
<td>.987</td>
<td>.954 (.388)</td>
</tr>
<tr>
<td><strong>2 way Interactions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N x C</td>
<td>.982</td>
<td>1.296 (.277)</td>
</tr>
<tr>
<td><strong>Residual</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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The results in Table 4.21 indicate that when the consumers view the ad in the store, there is no significant effect of nature of price comparison or cue concreteness. Hence, the effect of semantic cues is rather weak when the consumer views the ad in the store. Since significant effects were observed in the case of the consumer viewing the ad at home, there is support for hypotheses H_{8a} and H_{8b}.

To test hypothesis H_{8c}, an ANOVA was conducted with location where the ad is viewed, nature of price comparison and cue concreteness as the factors and shopping intention as the dependent variable. The result is reported in Table 4.22. As seen from Table 4.22, there are no significant effects of any of the independent factors on shopping intention. This does not support hypothesis H_{8c}.

**Table 4.22**

**Effects of Location where Ad is Viewed, Nature of Price Comparison and Cue Concreteness on Shopping Intention – Study 3**

<table>
<thead>
<tr>
<th>Source</th>
<th>F - Value</th>
<th>Sig.</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location (L)</td>
<td>3.067</td>
<td>.081</td>
<td>1</td>
</tr>
<tr>
<td>Nature of Price Comparison (N)</td>
<td>0.164</td>
<td>.686</td>
<td>1</td>
</tr>
<tr>
<td>Cue Concreteness (C)</td>
<td>0.183</td>
<td>.669</td>
<td>1</td>
</tr>
<tr>
<td><strong>2 way Interactions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L x N</td>
<td>0.596</td>
<td>.441</td>
<td>1</td>
</tr>
<tr>
<td>L x C</td>
<td>1.289</td>
<td>.257</td>
<td>1</td>
</tr>
<tr>
<td>N x C</td>
<td>0.001</td>
<td>.997</td>
<td>1</td>
</tr>
<tr>
<td><strong>3 way Interaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P x N x C</td>
<td>0.681</td>
<td>.410</td>
<td>1</td>
</tr>
<tr>
<td><strong>Residual</strong></td>
<td></td>
<td></td>
<td>284</td>
</tr>
</tbody>
</table>
CHAPTER 5: DISCUSSION AND IMPLICATIONS

As stated in Chapter 1, this dissertation attempted to address two research questions. The first objective was to assess the effect of Internal Reference Price (IRP) on consumers’ evaluation of the value of the deal independent of the specific IRP used by consumers. Hence, a subjective measure called “perceived fairness of the offer price” is introduced in Thaler’s model. The effectiveness of the proposed construct was assessed in its ability to predict and explain perceived value of the deal. Results indicate that the proposed construct better predicts the value of the deal than Transaction Utility.

The second objective of this dissertation was to enhance our understanding about the effect of semantic cues on consumers’ perceptions about the value of the deal, search intention and shopping intention. Specifically, in this dissertation an attempt was made to explore the role of concreteness of a semantic cue, as well as revisit the effect of nature of the cue, on consumer perceptions. Further, the effect of semantic cues was studied under two levels of external reference prices (moderate and exaggerated) as well as two locations (at home and in store). Results indicate that semantic cues affect consumer perceptions of value and search intentions at moderate price levels while they do not affect consumer perceptions at exaggerated price levels. Also, it was found that the location where the ad is viewed affects the interaction between nature of price comparison and the level of concreteness of the cue.

In this Chapter, discussion and implications of the research questions examined in the dissertation are provided. First, the utility of the proposed construct “perceived fairness of the offer price” in predicting the value of the deal is examined. Next, the effect of semantic cues on consumer perceptions is studied in the context of abstract and
concrete cues. Also, studied are the effects of semantic cues under moderate price
discounts and exaggerated price discounts, as well as under two different contexts – when
the consumers view the ad at home and in the store.

**Perceived Fairness of the Offer Price**

One of the problems associated with the Thaler’s model is that the value of the
deal is a function of Transaction Utility. Transaction utility by its definition is, “the
outlay as compared to some reference price.” Further, this reference price has been
identified as the Internal Reference Price. It has been suggested that IRP may be an
adaptation level, lowest, highest market prices, expected future price, fair price,
aspiration, market, normal price, or average market price. Further, it has been suggested
that IRP could be multi-dimensional in nature (Chandrashekaran and Jagpal 1995; Klein
and Oglethorpe 1987; Winer 1988). Thus, one of the issues is which of these IRPs or
combination or IRPs should be used to determine TU. Moreover, it is possible that IRPs
may not be the same for all consumers and may not necessarily be the same for an
individual consumer over purchases and over time (Biswas, Wilson and Licata 1993).

Based on the expectancy-value model, “perceived fairness of the offer price” (a
subjective measure) may be able to better predict the value of the deal. The proposed
construct better predicted the value of the deal compared to each component of TU as
well as the overall construct. Further confirmation was obtained by testing the models
(Figure 1.1 and Figure 1.2) with each component of acquisition utility. In each
comparison it was observed that the proposed construct performed better at predicting the
value of the deal. From an empirical stand point, the perceived fairness of the offer price
would help future researchers in avoiding the dilemma of which IRP to measure and
associate with the value of the deal. From a theoretical point of view, it simplifies the way we consider consumers’ evaluation process. Instead of focussing on which consumer is likely to use which IRP, the focus is squarely moved to how the consumer views the offer, irrespective of the IRP(s) that are used.

**Semantic Cues**

The adaptation level theory posits that an individual’s behavior represents an adaptation to three classes of cues: organic, focal, and contextual (Helson 1964). In the case of price promotions, the focal cue is the price or product related information while contextual cues could refer to the semantics used in presenting the focal cue - the price. For example, in an advertisement which states "Regular Price $150, Sale Price $99," the prices $150 and $99 are the external reference price and offer price, respectively, and constitute the focal cue. The wording "Regular Price, Sale Price," is the semantic cue.

Barnes (1974) was one of the first researchers to test the effectiveness of semantic cues in price promotion. Since then this aspect of price promotion has been of interest to many researchers (Berkowitz and Walton 1980; Della Bitta et al. 1981; Oglesby 1984; Lichtenstein and Bearden 1989; Lichtenstein et al. 1991; Grewal et al. 1996). All these researchers found that semantic cues had an effect on consumer price perceptions. This dissertation extends the knowledge on semantic cues by viewing the issue from a perspective of cue concreteness.

In this dissertation it was found that concrete cues vis-à-vis abstract cues, enhanced consumer price perceptions, in the presence of certain conditions. Concrete cues increased consumer perceptions of value and reduced their intention to search for alternatives when the discount was moderate rather than exaggerated. In the case of
exaggerated discounts the consumer did not seem to process the semantic cue and this result supports the findings of Grewal et al. (1996). This could be because the focal cue has a dominating effect on the consumers perceptions, and hence, the effect of the semantic cue seems to be negligible, if any. However, at moderate price levels, the focal cue does not dominate the perceptions of the consumer and hence we find the typical results observed in case of semantic cues. It is also important to note that the differences between the concrete and the abstract cues in the case of moderate price levels is in the expected direction. The intention to search at moderate price levels is significantly higher in the case of abstract cues than in the case of concrete cues.

Similarly, the consumer price perceptions (value of the deal and intention to search) are significantly different for those exposed to between store cues vis-à-vis within store cues when the ERP is at the moderate price range. However, when the ERP is at the exaggerated price range, there is not a significant difference in consumer perceptions between between store cues and within store cues. This result may be due to the same reason stated above. At moderate price levels, confirming the findings of Lichtenstein et al. (1991) and Grewal et al. (1996), it was found that between store cues were more effective in positively affecting consumer perceptions than within store cues. The implication of these findings is that semantic cues are likely to play an important role and retailers must pay attention to this aspect of price promotion as long as their claims are in the plausible range. If their claims are implausible, then the semantic cue is not as effective.

In Study 3 it was found that when the consumers are at home they are more likely to be affected by semantic cues (both the nature of the cue as well as the level of
concreteness of the cue), than when they are in the store. This seems to follow from the economics of information. A rational consumer may reason that, since s/he has already expended the time and energy and are in the store, they may focus more on the price of the cue rather than on the semantics, which in any case they may not be able to verify. Moreover, they could feel that most of the information processing has already taken place before the decision to visit the store was made. Hence, they may limit the amount of information they would process. This finding is interesting and is contrary to those found by Grewal et al. (1996), who found that within store cues were more effective in the store rather than at home. In this dissertation it was found that in the in store condition there was no significant effect of nature of the cue or the level of concreteness of the cue. Though some of the findings do not confirm those of prior studies, the consistency in the results would lead one to conclude that these results are not “by chance.”

Limitations

While the results are interesting, the experiments were conducted only with one product. Replicating the results with other products is important before the results can be termed generalizable. Pretests were conducted to make sure that the product was one of interest and familiar to the respondents. However, students were used as respondents in this dissertation and replicating the results with diverse population groups to generalize the effects found in these studies is important. Though the advertisements were prepared professionally, data was collected in a laboratory setting. To enhance the external validity of the results similar studies may be carried out in a more ecologically valid environment.
Future Research

First, future researchers may want to replicate the findings of this research in a natural setting thus increasing the external validity of the results. Providing the respondents with multiple advertisements or providing a magazine with the target advertisement may increase the external validity of the findings. Similar studies can be carried out with other products in different price ranges to verify if the results are price sensitive.

Perceived fairness of the offer price was found to be a better predictor of value of the deal than transaction utility. It has been suggested that the relative importance of transaction utility varies for brand loyal customers vis-à-vis brand switchers (Krishnamurthi et al., 1992). It would be interesting to study the relative importance perceived fairness of the offer price on value of the deal for brand loyal customers and brand switchers. Involvement has been found to influence the IRP used by consumers (Chandrashekar and Jagpal 1995). Hence studying the relationship between perceived fairness of the offer price and value of the deal under different levels of involvement may enhance our knowledge about the proposed construct.

The effect of semantic cues in the presence of a "low price guarantee" in an advertisement is a topic that might provide insights into consumers motivation for processing information in semantic cues. Similarly, the effect of sale rationale on semantic cues in price promotion is another unexplored area of research.

The effect of brand image and store image has been studied in the context of reference prices. It may be interesting to study the effect of brand image and store
image in the context of semantic cues, particularly the level of concreteness of the cue. Equally interesting may be the effect promotional cues used by certain retailers could have on their image. If a particular store uses abstract cues in its advertising on a consistent basis, it is likely that its image may be affected, which may affect the rate of repeat shoppers.
REFERENCES


APPENDIX A : LIST OF SEMANTIC CUES PROVIDED IN PRETEST 1 AND PRETEST 2

Regularly priced at $49.99, Sale Price $39.99

Was $49.99, Now only $39.99

A $50 Value, Sale Price $39.99

Regular $49.99, Sale $39.99

20% Off, Now only $39.99

Compare at $49.99, Sale Price $39.99

Seen Elsewhere for $49.99, Our Price $39.99

Walmart price $49.99, Our Price $39.99

Major Retailer price $49.99, Our Price $39.99
APPENDIX B: LIST OF PRODUCTS PROVIDED TO RESPONDENTS IN PRETEST 3

1. Running Shoes
2. Boom Box
4. Compact Disk Stereo Player
5. 19” Color Television
6. Calculator
7. Jeans
8. VCR
9. Microwave Owens
APPENDIX C : QUESTIONNAIRE FOR PRETEST 1

NAME: __________________________________
Student Number: ______________________________
Section: ____________________________________

The survey in which you are about to participate is being conducted by the Marketing Department, at Louisiana State University. The questionnaire has questions about your opinions/beliefs about the statements provided therein.

Please respond to all questions in a manner which most accurately reflects your opinions.

Please read all the instructions carefully before filling out your responses. While many questions may appear similar, PLEASE ANSWER ALL QUESTIONS.

Thank you very much for your assistance.
**Consistency** of a sales promotion is defined as the frequency with which a product or a group of products are advertised on sale by a merchant or a retailer. Thus a sales promotion could be viewed as:

*High in Consistency* if the product has been frequently offered at a discount, or. *(Low in Consistency)* if the product has been infrequently offered at a discount.

Now, using your judgement indicate the level of consistency implied by the following types of discount claims.

<table>
<thead>
<tr>
<th></th>
<th>Low Consistency</th>
<th>High Consistency</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compare at $49.99, Sale Price $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>2. Regularly priced at $49.99, Sale Price $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>3. Was $49.99, Now only $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>4. A $50 Value, Sale Price $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>5. Regular $49.99, Sale $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>6. 20% Off, Now only $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>7. Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>8. Walmart price $49.99, Our Price $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>9. Major Retailer price $49.99, Our Price $39.99</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
<td>8</td>
</tr>
</tbody>
</table>
**DISTINCTIVENESS** of a sales promotion by a merchant or a retailer is defined as how the offer (sale) price compares with what the competitors normally charge. Thus, a sales promotion would be:

**HIGH IN DISTINCTIVENESS** if the retailer is **COMPARING PRICES** with that of the competition and

**LOW IN DISTINCTIVENESS** if the retailer **DOES NOT COMPARE PRICES** with that of the competition.

Now, using your judgment indicate the level of Distinctiveness implied by the following types of discount claims.

<table>
<thead>
<tr>
<th>Low Distinctiveness</th>
<th>High Distinctiveness</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compare at $49.99, Sale Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>2. Regularly priced at $49.99, Sale Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>3. Was $49.99, Now only $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>4. A $50 Value, Sale Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>5. Regular $49.99, Sale $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>6. 20% Off, Now only $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>7. Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>8. Walmart price $49.99, Our Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
<tr>
<td>9. Major Retailer price $49.99, Our Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
<td>8</td>
</tr>
</tbody>
</table>
APPENDIX D : QUESTIONNAIRE FOR PRETEST 2- PHASE 1

NAME:__________________________________
Student Number:__________________________
Section:________________________________

The survey in which you are about to participate is being conducted by the Marketing Department, at Louisiana State University. The questionnaire has questions about your opinions/beliefs about the statements provided therein.

Please respond to all questions in a manner which most accurately reflects your opinions.

Please read all the instructions carefully before filling out your responses. While many questions may appear similar, PLEASE ANSWER ALL QUESTIONS.

Thank you very much for your assistance.
Stores have a variety of ways in which they present information about sales in their advertisements. Sometimes the way in which they present sale information seems subjective (or abstract) while at other times it is more objective (or concrete). For each of the statements below, we would like you to indicate how subjective (abstract) or objective (concrete) you view each statement to be. The prices that are given are purely arbitrary, it is the wording of the statement that is of interest. Please circle the appropriate number for each statement.

<table>
<thead>
<tr>
<th>Very Abstract</th>
<th>Very Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compare at $49.99, Sale Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>2. Regularly priced at $49.99, Sale Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>3. Was $49.99, Now only $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>4. A $50 Value, Sale Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>5. Regular $49.99, Sale $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>6. 20% Off, Now only $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>7. Seen Elsewhere for $49.99, Our Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>8. Walmart price $49.99, Our Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>9. Major Retailer price $49.99, Our Price $39.99</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
APPENDIX E : QUESTIONNAIRE FOR PRETEST 2 - PHASE 2

Stores have a variety of ways in which they present information about sales in their advertisements. Sometimes the way in which they present sale information seems ABSTRACT (OR LESS INFORMATIVE) while at other times it is more CONCRETE (OR MORE INFORMATIVE). For each of the statements below, we would like you to indicate how ABSTRACT or CONCRETE you view each statement to be. The prices that are given are purely arbitrary, it is the wording of the statement that is of interest. Please circle the appropriate number for each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A $50 Value, Sale Price $39.99</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. Regular Price $49.99, Sale $39.99</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. Seen Elsewhere for $49.99,</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Our Price $39.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Circuit City price $49.99,</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Our Price $39.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
You are provided four statements below. Using the definitions in the next paragraph, classify the statements in the appropriate cells in the following table. Please use the numbers (1 through 4) assigned to each statement for classification. As the previous task, the prices are purely arbitrary, it is the wording of the statement that is of interest.

**Definitions:**

Information that is precise in nature, that provides clear meaning to the consumer is termed as **Concrete Information**.

Information that is imprecise in nature, that does not provide clear meaning to the consumer is termed as **Abstract Information**.


<table>
<thead>
<tr>
<th>Concrete Information</th>
<th>Within Store Price Comparison</th>
<th>Abstract Information</th>
<th>Between Store Price Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Retailer compares current sale price with own previous sale price)</td>
<td></td>
<td>(Retailer compares sale price with other retailers)</td>
</tr>
</tbody>
</table>
APPENDIX F : QUESTIONNAIRE FOR PRETEST 2 - PHASE 3

Stores have a variety of ways in which they present information about sales in their advertisements. Sometimes the way in which they present sale information seems ABSTRACT (OR LESS INFORMATIVE) while at other times it is more CONCRETE (OR MORE INFORMATIVE). For each of the set of statements below, we would like you to indicate which of the two statements you find more abstract compared to the other.

The prices that are given are purely arbitrary, it is the wording of the statement that is of interest. The prices provided on this page are not connected to the prices provided earlier for specific products.

For the statements below, please check the ONE STATEMENT THAT YOU BELIEVE IS THE MORE ABSTRACT OF THE TWO.


For the statements below, please check the ONE STATEMENT THAT YOU BELIEVE IS THE MORE ABSTRACT OF THE TWO.

APPENDIX G : QUESTIONNAIRE FOR PRETEST 3

Name of the Student: ____________________________________________

Course Number: ___________________ Section: ____________________

ID # ________________________________

Below, we have listed several products. We would like you to indicate how much you think you know about the prices of these products by circling the appropriate number.

<table>
<thead>
<tr>
<th>Product</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running Shoes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boom Box</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compact Disk Stereo Player</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19&quot; Color Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jeans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microwave Owens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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APPENDIX H : QUESTIONNAIRE FOR PRETEST 4

PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE ANSWERING THE QUESTIONS BELOW.

Often we come across retailers comparing their prices with their competitors. Sometimes they are meaningful comparisons and at other times they are not. For example, in an effort to enhance the value of the offer for a microwave oven a retailer may compare its sale/offer price with that of a low priced retailer (e.g., a large discount store) rather than with a high price retailer (e.g., a specialty store). Considering this, please answer the questions for the following scenarios.

SCENARIO 1: YOU ARE A CUSTOMER WHO IS PLANNING TO BUY A PAIR OF ATHLETIC SHOES.

Which local competitor would a retailer have to compare itself to in order for you to believe the offer is a good value?
 ____________________ Price $89.99, Our Price $69.99

SCENARIO 2: YOU ARE A CUSTOMER WHO IS PLANNING TO BUY A VCR

Which local competitor would a retailer have to compare itself to in order for you to believe the offer is a good value?
 ____________________ Price $199, Our Price $159

SCENARIO 3: YOU ARE A RETAILER SELLING ATHLETIC SHOES

Which Local Competitor would you compare your prices with in order to maximize the value of the offer?
 ____________________ Price $89.99, Our Price $69.99

SCENARIO 4: YOU ARE A RETAILER SELLING VCRs.

Which Local Competitor would you compare your prices with in order to maximize the value of the offer?
 ____________________ Price $199, Our Price $159
APPENDIX I : QUESTIONNAIRE FOR PRETEST 5

PLEASE ANSWER THE FOLLOWING QUESTIONS. THERE ARE NO RIGHT OR WRONG ANSWERS. TAKE AS MUCH TIME AS YOU NEED TO COMPLETE THE QUESTIONNAIRE.

1. Suppose you are thinking of buying a VCR and you are considering a VCR with the following features:
   - Hi-Fi Stereo
   - Universal Remote
   - High Speed Rewind
   - Digital AV Tracking
   - On-Screen VCR Setup Menu

   a. What is the highest amount you are willing to accept as a valid regular price for the VCR advertised above if it is on sale for $199? Please indicate the regular price in the space provided below.

      **Regular Price $____________, Sale Price $199**

   b. How attractive is a sale price of $199 for a VCR?

      Extremely unattractive 1 2 3 4 5 6 7 Extremely attractive

2. How knowledgeable are you about the price of VCRs?

   No Knowledge 1 2 3 4 5 6 7 Extremely Knowledgeable

3. How knowledgeable are you about the price of Electronic Equipment?

   No Knowledge 1 2 3 4 5 6 7 Extremely Knowledgeable

4. Compared to most other people, I know a lot about electronic items

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
5. Do you own a VCR? ______ Yes ______ No

6. Age (in yrs.) ________________

7. Gender _______Male _______ Female
APPENDIX J : QUESTIONNAIRE FOR STUDY 1

ADVERTISING SURVEY

NAME: ___________________________ STUDENT NUMBER __________

The survey in which you are about to participate is being conducted by the Marketing Department at Louisiana State University. Attached is a mock print advertisement. Please respond to the questions on the following pages concerning your beliefs, opinions, and reactions to the advertisement while viewing the ad. Please respond to all questions in a manner that most accurately reflects your opinions. While many questions appear very similar, PLEASE ANSWER ALL QUESTIONS.

Thank you very much for your assistance.
A. For the advertised VCR, what is your best estimate of the following prices?
   a. I think a FAIR PRICE for the VCR would be $____________
   b. The LOWEST PRICE for the VCR is likely to be $____________
   c. The HIGHEST PRICE for the VCR is likely to be $____________
   d. I think the NORMAL (MOST FREQUENTLY ENCOUNTERED)
      PRICE for the VCR is likely to be $____________

B. Please answer the following questions about what you think about the price of the VCR.
   Answer the questions by circling one of the seven numbers to reflect your opinion.

   I think that the SALE PRICE of $199 for the VCR is:
   | Extremely Unfair | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Extremely Fair |
   | Extremely Unreasonable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Extremely Reasonable |
   | Very Unacceptable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Acceptable |
   | Extremely Unjust | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Extremely Just |

C. Please answer the following questions ABOUT THE DEAL OFFERED IN THE ADVERTISEMENT.
   Answer the questions by circling one of the seven numbers to reflect your opinion.

   Strongly Disagree Agree

1. The advertised VCR is an excellent offer for the money...... 1 2 3 4 5 6 7
2. I would consider this VCR to be a good buy.................. 1 2 3 4 5 6 7
3. This VCR appears to be a bargain............................... 1 2 3 4 5 6 7
4. At the sale price, this VCR is probably worth the money..... 1 2 3 4 5 6 7
5. This VCR appears to be a great deal............................ 1 2 3 4 5 6 7
6. This VCR is a good value for the money....................... 1 2 3 4 5 6 7
7. The offer represents an extremely fair price.................... 1 2 3 4 5 6 7
8. The VCR offered by the advertising merchant will be:
   Not a good value for money 1 2 3 4 5 6 7 An extremely good value for money

D. Now, for the advertised VCR, what is your best estimate of the following prices?
   a. The price I am WILLING TO PAY for the VCR is $____________
   b. If I have just purchased the VCR,
      I may be WILLING TO SELL it for $____________
   c. Suppose you have won a prize. If you were offered the choice between selecting the VCR shown in the ad as a prize or money as the prize, at a minimum how much would the money prize have to be for you to select it over the VCR SHOWN IN THE AD. $____________
APPENDIX K: QUESTIONNAIRE FOR STUDY 2

ADVERTISING SURVEY

NAME: _______________________ STUDENT NUMBER ________________

The survey in which you are about to participate is being conducted by the Marketing Department at Louisiana State University. Attached is a mock print advertisement. Please respond to the questions on the following pages concerning your beliefs, opinions, and reactions to the advertisement while viewing the ad. Please respond to all questions in a manner that most accurately reflects your opinions. While many questions appear very similar, PLEASE ANSWER ALL QUESTIONS.

Thank you very much for your assistance.
A. Please answer the following questions about the deal offered in the advertisement. Answer the questions by circling one of the seven numbers to reflect your opinion.

1. If you were to purchase a VCR, how likely is it that you would search at other stores for a lower price than that offered in the ad?
   **Very unlikely** 1 2 3 4 5 6 7 **Very likely**

2. How probable is it that you would shop around town looking for a lower price than that offered by the advertiser, if you had decided to buy a VCR?
   **Not probable at all** 1 2 3 4 5 6 7 **Very probable**

3. If you were going to buy the advertised VCR, would you check the prices at other stores in search of a lower price?
   **Definitely would not check prices at other stores** 1 2 3 4 5 6 7 **Definitely would check prices at other stores**

4. If you were considering the purchase of a VCR, how willing would you be to shop at the store running this advertisement?
   **Definitely Unwilling to Shop** 1 2 3 4 5 6 7 **Definitely Willing to Shop**

5. If you were thinking about purchasing a VCR, would you consider shopping from the store that advertised the VCR?
   **Definitely Would Not Consider** 1 2 3 4 5 6 7 **Definitely Would Consider**

6. What is the probability that you would shop from the store running the ad, if you were considering the purchase of a VCR?
   **Not Probable At All** 1 2 3 4 5 6 7 **Very Probable**

B. Please answer the following questions ABOUT THE DEAL OFFERED IN THE ADVERTISEMENT. Answer the questions by circling one of the seven numbers to reflect your opinion.

   **Strongly**

<table>
<thead>
<tr>
<th><strong>Disagree</strong></th>
<th><strong>Agree</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

1. The advertised VCR is an excellent offer for the money.....
2. I would consider this VCR to be a good buy.............
3. This VCR appears to be a bargain..........................
4. At the sale price, this VCR is probably worth the money....
5. This VCR appears to be a great deal....................... 
6. This VCR is a good value for the money....................
7. The offer represents an extremely fair price............... 

8. The VCR offered by the advertising merchant will be:
   **Not a good value for money** 1 2 3 4 5 6 7 **An extremely good value for money**
C. Please check the Slogan in the Advertisement (Check Only One Box).

1. The advertisement stated:
   - Regular Price $249, Sale Price $199
   - A $249 Value, Sale Price $199
   - Circuit City Price $249, Sale Price $199
   - Seen Elsewhere for $249, Sale Price $199
   - Regular Price $399, Sale Price $199
   - A $399 Value, Sale Price $199
   - Circuit City Price $399, Sale Price $199
   - Seen Elsewhere for $399, Sale Price $199

D. Please read the following passage carefully and evaluate the four statements provided.

Stores have a variety of ways in which they present information about sales in their advertisements. Sometimes the way in which they present sale information seems ABSTRACT (OR LESS INFORMATIVE AND "AMBIGUOUS") while at other times it is more CONCRETE (OR MORE INFORMATIVE AND "EXACT"). For each of the statements below, we would like you to indicate how ABSTRACT or CONCRETE you view each statement to be. The prices that are given are purely arbitrary, it is the wording of the statement that is of interest. Please circle the appropriate number for each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very Abstract Information</th>
<th>Very Concrete Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A $249 Value, Sale Price $199</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2. Regular Price $249, Sale Price $199</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3. Seen Elsewhere for $249, Our Price $199</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4. Circuit City price $249, Our Price $199</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

2. The sale (offer) price in this ad is being compared to a SPECIFIC HIGHER PRICE previously charged by the SAME STORE.

   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

The advertiser in this ad compares the sale (offer) price for the VCR with the price of a similar VCR at some other retail store

   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

These last questions are designed for classification purposes only. Please check the appropriate space below associated with the most appropriate response.

1) Do you own a VCR?
   - Yes ______ No ______ (If Yes, go to Q. 2)
1.a) Are you considering buying a VCR?
   - Yes ______ No ______
2) Was the VCR you own bought by yourself (as opposed to being gifted)? _____ Yes ___ No
3) What is your gender? Male _____ Female _____ 4) How old are you (in years)? _____ years

THANK YOU VERY MUCH FOR YOUR HELP WITH THIS PROJECT.
WE GREATLY APPRECIATE YOUR TIME AND EFFORT.

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APPENDIX L: QUESTIONNAIRE FOR STUDY 3

ADVERTISING SURVEY

NAME:_________________________ STUDENT NUMBER____________

The survey in which you are about to participate is being conducted by the Marketing Department at Louisiana State University. Attached is a mock print advertisement. Please respond to the questions on the following pages concerning your beliefs, opinions, and reactions to the advertisement while viewing the ad. Please respond to all questions in a manner that most accurately reflects your opinions. While many questions appear very similar, PLEASE ANSWER ALL QUESTIONS.

Thank you very much for your assistance.

SCENARIO

PLEASE READ CAREFULLY

Imagine it is Saturday and you are leaving to attend college out of state on Tuesday. You are looking to buy a remote controlled VCR for your new residence. You only have three days to make the purchase. WHILE BROWSING THROUGH THE NEWSPAPER AT HOME ON SATURDAY, you notice the following advertisement for a VCR at a major retail store.
A. Please answer the following questions about the deal offered in the advertisement. Answer the questions by circling one of the seven numbers to reflect your opinion.

1. If you were to purchase a VCR, how likely is it that you would search at other stores for a lower price than that offered in the ad?
   Very unlikely 1 2 3 4 5 6 7 Very likely

2. How probable is it that you would shop around town looking for a lower price than that offered by the advertiser, if you had decided to buy a VCR?
   Not probable at all 1 2 3 4 5 6 7 Very probable

3. If you were going to buy the advertised VCR, would you check the prices at other stores in search of a lower price?
   Definitely would not check prices at other stores 1 2 3 4 5 6 7 Definitely would check prices at other stores

4. If you were considering the purchase of a VCR, how willing would you be to buy it at the store running this advertisement?
   Definitely Unwilling to Shop 1 2 3 4 5 6 7 Definitely Willing to Shop

5. If you were thinking about purchasing a VCR, would you consider buying from the store that advertised the VCR?
   Definitely Would Not Consider 1 2 3 4 5 6 7 Definitely Would Consider

6. What is the probability that you would buy from the store running the ad, if you were considering the purchase of a VCR?
   Not Probable At All 1 2 3 4 5 6 7 Very Probable

B. Please answer the following questions ABOUT THE DEAL OFFERED IN THE ADVERTISEMENT. Answer the questions by circling one of the seven numbers to reflect your opinion.

   Strongly Disagree Agree

   1. The advertised VCR is an excellent offer for the money...... 1 2 3 4 5 6 7
   2. I would consider this VCR to be a good buy.................. 1 2 3 4 5 6 7
   3. This VCR appears to be a bargain............................. 1 2 3 4 5 6 7
   4. At the sale price, this VCR is probably worth the money..... 1 2 3 4 5 6 7
   5. This VCR appears to be a great deal........................... 1 2 3 4 5 6 7
   6. This VCR is a good value for the money...................... 1 2 3 4 5 6 7
   7. The offer represents an extremely fair price................ 1 2 3 4 5 6 7

   8. The VCR offered by the advertising merchant will be:
      Not a good value for money 1 2 3 4 5 6 7 An extremely good value for money
C. Below are listed two questions about the advertisement and the scenario described at the beginning of the questionnaire. Please check the right answer (Check only one box).

1. The scenario tells me to visualize myself browsing through the advertisement:
   \[\text{At Home } \square \text{ At Store } \square\]

2. The advertisement stated:
   \[
   \begin{align*}
   &\text{Regular Price $249, Sale Price $199} \quad \square \\
   &\text{A $249 Value, Sale Price $199} \quad \square \\
   &\text{Circuit City Price $249, Sale Price $199} \quad \square \\
   &\text{Seen Elsewhere for $249, Sale Price $199} \quad \square \\
   \end{align*}
   \]

D. Please read the following passage carefully and evaluate the four statements provided.

Stores have a variety of ways in which they present information about sales in their advertisements. Sometimes the way in which they present sale information seems **abstract (or less informative and "ambiguous")** while at other times it is more **concrete (or more informative and "exact")**. For each of the statements below, we would like you to indicate how abstract or concrete you view each statement to be. The prices that are given are purely arbitrary, it is the wording of the statement that is of interest. Please circle the appropriate number for each statement.

<table>
<thead>
<tr>
<th>Very Abstract Information</th>
<th>Very Concrete Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A $249 Value, Sale Price $199</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>2. Regular Price $249, Sale Price $199</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>3. Seen Elsewhere for $249, Our Price $199</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>4. Circuit City price $249, Our Price $199</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

2. The sale (offer) price in this ad is being compared to a **specific higher price** previously charged by the **same store**.
   \[\text{Strongly Disagree } 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad \text{Strongly Agree}\]

E. These last questions are designed for classification purposes only. Please check the appropriate space below associated with the most appropriate response.

1) Do you own a VCR?
   \[\begin{align*}
   &\text{Yes } \square \quad \text{No } \square \\
   \end{align*}\]

1.a) Are you considering buying a VCR?
   \[\begin{align*}
   &\text{Yes } \square \quad \text{No } \square \\
   \end{align*}\]

2) Was the VCR you own bought by yourself (as opposed to being gifted)?
   \[\begin{align*}
   &\text{Yes } \square \quad \text{No } \square \\
   \end{align*}\]

3) What is your gender? **Male** \[\square\] **Female** \[\square\]

4) How old are you (in years)? \[\square\] years

**Thank you very much for your help with this project.**
**We greatly appreciate your time and effort.**
VITA

Balaji C. Krishnan was born in Madras (now Chennai), a southern coastal town in India. After completing his schooling in Madras he moved to Aurangabad in Maharashtra to seek a Bachelor of Engineering at the Marathwada University. In 1989 he was awarded his bachelor's degree with Electronics and Telecommunication as his major field of study. Further he pursued his dream of management education by enrolling in Narsee Monjee Institute of Management Studies for a Masters degree in Management Studies. Bombay University awarded him the Masters degree in Management Studies with marketing concentration in 1991. After working as a Management Trainee in Godrej and Boyce Manufacturing Company for a year, he joined the Business Consulting Group in Bombay. As a consultant he was involved in various projects in the iron and steel industry, petrochemicals industry, dyes and chemical industry and electronics industry. He then decided to pursue a career in academics. He came to the United States in 1994 and enrolled in the doctoral program in marketing at Louisiana State University in 1994. He was awarded an Excellence in Teaching award in 1997 for developing and teaching a course called Marketing on the Internet. He has published an article in the Journal of Consumer Affairs and has submitted publications or is in the process of submitting publications to prestigious journals such as Journal of Marketing, Journal of Marketing Research and Journal of Public Policy and Marketing. His research interests include brands and brand extensions, services marketing, pricing and price promotion, and cross cultural research.
DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate:  Balaji C. Krishnan

Major Field:  Business Administration (Marketing)

Title of Dissertation:  Reference Price Effects: The Role of Multiple Internal Reference Prices and Semantic Cues

Approved:

[Signatures]

Major Professor and Chairman
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:  

[Signature]