

An Investigation Into The Effects Of Advertised Reference Prices On The Price Consumers Are Willing To Pay For The Product

Dr. Jerry B. Gotlieb, Marketing, University of Miami
Dr. Cyndy Thomas Fitzgerald, Marketing, University of Miami

Abstract

Despite previous research, the effects of reference prices remain a controversial issue with significant public policy and managerial implications. The paper reports the results of a pilot study which was conducted in a shopping mall. With high involvement, research results suggest that reference prices, perceived quality, and product experience affect the price consumers are willing to pay for the product. With low involvement, the reference price was the only message content variable which had an affect on the price consumers were willing to pay for the product.

Introduction

Although widely used in advertising, the effects of reference prices are a controversial issue which has important managerial and public policy implications (Monroe, Della Bitta and McGinnis 1981; Liefeld and Heslop 1985). Researchers have reported on the effects of a variety of reference and actual prices. In addition, they have examined the effects of semantic cues that are commonly used with these prices (Barnes 1974; Keiser and Krum 1976; Sewell and Goldstein 1979; Berkowitz and Walton 1980; Della Bitta, Monroe, and McGinnis 1981; Bearden, Lichtenstein, Teel 1984; Petroschius and Monroe 1987). The affect of these independent variables have been measured on a number of dependent variables which include perceived quality, value for the money, willingness to buy, market price, amount of savings and believability.

Central to this controversy is whether advertised reference prices provide useful consumer information and/or can be deceptive devices by encouraging consumers to pay a higher price for a product because the product has a higher reference price. Research results concerning this issue have been inconsistent. For example, the

research of Ahmed and Gulas (1982) suggests that one reference price, Manufacturers Suggested List Price, is potentially deceptive. Their research suggests that more than fifty percent of consumers believed that the Manufacturers Suggested List Price shown in a catalog showroom's catalog was the actual selling price of the product at the majority of stores. Conversely, Liefeld and Heslop (1985) found that Manufacturers Suggested List Price had no affect on consumers perception of the actual market price of the product. In fact, they suggested that reference prices such as Manufacturers Suggested List Price could benefit consumers by providing an anchor point from which to compare among retailers and/or products. Proponents also suggest that consumers through experience learn to discount reference price claims and reference prices provide useful information to consumers (Blair and Landon 1981). However, the critics of reference price advertising suggest that exaggerated reference prices are deceptive devices which reduce consumer trust (Berry 1986).

There is little empirical evidence that identifies why consumers want reference price infor-

mation. Sewell and Goldstein (1979) found that consumers want reference price information, but offered little explanation why consumers wanted that information. Therefore, managers need additional empirical evidence concerning the effects of reference prices to help them communicate useful reference price information in manner which is not deceptive. Public policy makers need additional empirical evidence to help determine the nature of the laws, if any, which should be applied to reference price advertising.

One purpose of this paper is help identify the impact of advertised reference prices on the price consumers are willing to pay for a product. A pilot study was conducted as the framework for identifying the effect of reference prices. A second purpose is to suggest that the Elaboration Likelihood Model (Petty and Cacioppo 1979) might be applied to help explain the impact of reference prices. To provide a more rigorous test of the Elaboration Likelihood Model -- ELM -- the influence of reference prices and other variables on the price consumers would pay for a product was examined in this research. However, the primary focus of this paper is upon the impact of reference prices on the price consumers are willing to pay for the product, the effects of other variables is of secondary concern.

This research extends previous research in two ways. First, this research applied the ELM to help examine the impact of reference prices. The ELM suggests that it is essential to identify the level of involvement when predicting the effects of variables presented in a message. However, an examination of the reference price literature did not find any reported reference price research which had examined the effects of reference prices when there were different levels of involvement.

Most previous reference price research has focused upon the effects of reference price advertising by retailers. Generally, retailers communicate a reference price and a retail price. However, much reference price information is communicated by manufacturers whose advertisements include a only a reference price. Consequently, there is insufficient empirical evidence concerning the effects of reference price advertising when a retail price is not included in the advertisement. Therefore, this research extends previous research in a second way by providing

additional empirical evidence concerning the impact of reference price advertising when a retail price is not included in the advertisement.

The next section of this paper provides a more comprehensive discussion of relevant literature. Then, hypotheses consistent with the discussion are proposed. In the following section a pilot study is described and the results are presented. The last section of the paper discusses the implications of the pilot study for managers, researchers, and public policy decision makers.

Background

Deception in Reference Price Advertising

Past research has provided some evidence concerning the effects of reference prices which appear in an advertisement along with retail prices. However, the full range of the possible effects of reference prices has not been adequately examined. Research has not examined fully whether reference prices affect the price consumers are willing to pay for the product. This effect would be important because the majority statement of the Federal Trade Commission has summarized its interpretation of deception as *...the Commission will find deception if there is a misrepresentation, omission or practice that is likely to mislead the consumer acting reasonably in the circumstances, to the consumer's detriment (FTC 1983).*

For example, if a higher reference price encourages consumers to pay a higher price for a product than the consumer was willing to pay for the identical product with a lower reference price, then the practice of using high reference prices would be deceptive. Currently, there is insufficient empirical evidence concerning the effects of reference prices alone. However, there is a need to gather additional empirical evidence concerning whether reference prices in advertisements may be potentially misleading or deceptive even when no retail price is included in the advertisement. The majority of the Federal Trade Commission has indicated a willingness to rely more on empirical evidence concerning deception in advertising.

Russo, Metcalf, and Stevens (1981) have labeled advertising as "misleadingly false if it can

harm consumers to the benefit of advertisers." To some extent the Federal Trade Commission has used the two terms of deceptive or misleading interchangeably (Preson 1976). For example, if higher reference prices make consumers willing to pay higher prices for products than consumers are willing to pay for the same products with lower reference prices, then higher reference prices could potentially injure consumers to the benefit of advertisers.

One question is how to measure deception in reference price advertising. While deception in advertising has been measured by asking consumers if they were deceived by the advertisement (Roa 1974; Ford, Kuehl and Reksten 1975), Armstrong, Gurol, and Russ (1981) suggest that method is inappropriate. One acceptable method is the development of advertising experiments which demonstrate whether reference prices in an advertisement actually deceive ordinary consumers (Jacoby and Small 1975). The Federal Trade Commission in their pricing guidelines has also recommended the gathering of empirical evidence concerning the response of consumers to reference price advertising (Della Bitta, Monroe and McGinnis 1981). This approach was followed in the research presented in this paper. The ELM may provide a theoretical framework for investigations concerning whether reference prices are likely to be deceptive or misleading.

The Elaboration Likelihood Model

The Elaboration Likelihood Model -- ELM -- identifies involvement as a variable effecting the motivation to process information (Petty, Cacioppo and Schumann 1983). Many consumer researchers have defined involvement as personal relevance (Petty and Cacioppo 1984; Salma and Tashchian 1985; Celsi and Olson 1988). Researchers have also suggested that involvement affects the processing of information (Sherif and Hovland 1961; Krugman 1965; Houston and Rothschild 1977). The variable of involvement also been identified as an important determinant of the search for information (Zaichkowsky 1985; Beatty and Smith 1987).

The position expressed in this paper concerning involvement is similar to the views expressed by Celsi and Olson (1988). They have suggested that marketing communication could in-

fluence felt (situational) involvement. They have also suggested that an increase in felt involvement would increase the motivation to process the message. Some marketing information concerning a product may increase the motivation to process the message because it could activate "important personally relevant goals and values such as be a shrewd consumer" (Celsi and Olson 1988). This would occur even though there might be little change in intrinsic (enduring) involvement.

Somewhat similar views were expressed by Houston and Rothschild (1977) who proposed that involvement is a function of "situational" involvement and "enduring" involvement. Enduring involvement is more difficult to influence because it is composed of relatively stable personally relevant knowledge stored in long term memory. However, situational involvement could be influenced by elements in the situation such as information in the advertisement. Consequently, variables which increase situational involvement would increase the overall level of involvement and the motivation to process the message.

With high involvement, ELM suggests that consumers will scrutinize the contents of an advertisement and then form their opinions from a careful evaluation of those contents. The ELM further suggest that there is a tradeoff between a focus on the full contents of the message and peripheral cues in the message. As the level of involvement increases peripheral cues become relatively less important (Petty and Cacioppo 1986), but peripheral cues may still influence consumers. For example, the model could be applied to suggest that with high involvement, the consumer would evaluate the full contents of the advertisement. Consequently, this could suggest that consumers might use the reference price as one of the variables when deciding on the price they would be will to pay for the product. However, with high involvement, the reference price would not be the only variable that consumers would use to make that decision. The perceived-quality of the product and consumer product experience might also be used when making the decision. Consequently, with high involvement the ELM could be applied to suggest that the effects of a reference price could be diluted by the effects of other variables when consumers decide how much

they are willing to pay for the product.

Conversely, with low the ELM could be applied to suggest that consumers lack sufficient motivation to fully evaluate the contents of the advertisement. Consequently, the ELM could be applied to suggest that the reference price in an advertisement would be relatively more important. Consumers may focus on the reference price when deciding on the price they are willing to pay for the product. One rationale explaining the effects of a reference price with low involvement suggests that a reference price is relatively easy to observe. Therefore, it takes less effort to use the reference price as a cue when deciding how much the consumer would be willing to pay for a product. It has also been suggested that with low involvement price could be a more important cue in forming consumer evaluations (Engel and Blackwell, 1982). Some research also suggests that with low involvement, price becomes more important (Gensch and Javalgi 1987).

It has been observed that different groups of people place differing importance on the price cue in forming their product evaluations (Etgar and Malhotra 1981). Why some groups use price as an important cue while other groups make less use of the price cue in making product evaluations has received limited empirical investigation. However, the ELM could be applied to suggest that the level of involvement may help explain why some groups use price as a more important cue than other groups.

Single Cue Vs. Multi Cue Price Studies

Research has suggested that when subjects are presented with the price of the product as the single cue for making product evaluations, the price of the product almost always will be used by consumers for making judgement concerning the product (Olson 1977). However, when the consumer is presented with multi-cues for making judgements concerning the product, some researchers suggest that price loses some of its importance for making those judgments (Ericson and Johansson 1985). Consequently, if low involvement consumers focus on the reference price cue, then, it could be expected that the reference price would affect the price consumers would be willing to pay for the product.

Product Experience

Within the context of the ELM consumers must have sufficient motivation to process the message if they are to use their ability to process the message (Petty and Cacioppo 1986). Previous research supports the position that prior knowledge affects consumer ability to process and comprehend new information (Srull 1983). For example, Bettman and Park (1980) found that consumers who had never used a microwave oven had less ability to process information concerning a microwave oven than consumers who had actually used one. Johnson and Russo (1984) suggest that consumers with little experience could have lessened ability to evaluate information and more difficulty in identifying relevant information.

Prior experience could aid development of cognitive schemes which foster the efficient processing of information (Fisk and Kinder 1981). Schemes are defined as "internal structures developed through experience which organize incoming information relative to previous experience" (Mandler and Parker 1976). Although consumers may never use the "ideal" product, sufficient experience with a product could create a vivid picture of the characteristics of the ideal product in their long-term memory. Without adequate product experience, such a vivid conceptualization with which to evaluate incoming information concerning a product may not exist in long-term memory. Consequently, experienced consumers might be better able to evaluate the value of features presented in an advertisement. Therefore, experienced consumers may be less willing to pay for some product features than inexperienced consumers.

The following hypotheses are consistent with the previous discussion when consumers are exposed to a reference price advertisement:

Hypothesis 1: With high involvement:

(a) The perceived quality of the product will affect the price consumers are willing to pay for the product. The higher the perception of quality, the higher the price consumers will be willing to pay for the product.

(b) The consumer's product experience will affect the price consumers are willing to pay for

the product. Inexperienced consumers will be willing to pay more for the product than experienced consumers.

(c) Consumers will be willing to pay a higher price for a product with a higher reference price than they will be willing to pay for the identical product with a lower reference price.

Hypothesis 2: With low involvement:

(a) The perceived quality of the product will have no affect on the price consumers are willing to pay for the product.

(b) The consumer's product experience will have no affect on the price consumers are willing to pay for the product.

(c) Consumers will be willing to pay a higher price for an product with a higher reference price than they will be willing to pay for the identical product with a lower reference price.

Method

Procedures

A booth was set up in the center of a regional, enclosed shopping mall. Above the booth was a sign which said "consumer survey." Adult consumers shopping in the mall were approached by research assistants or the researchers. Subjects were asked to participate in a "consumer survey". Subjects were also offered a coupon which was good for a hot dog and drink at restaurant in the mall if they agreed to participate in the "survey". Once a consumer agreed to participate the consumer was taken to the booth and randomly assigned to treatments. Then, they were given two booklets. After completing the second booklet subjects were given the coupon. The experiment was conducted in the mall to help create an environment for the experiment that is similar to an actual purchase situation. This experiment included the responses from ninety-seven subjects who completed the research instrument.

Stimulus Materials

The first booklet was labeled "Consumer Survey." The instructions described the survey as a survey of consumers reading habits. Consumers

were also asked to assume that they were planning to purchase a television, video cassette recorder, video cassettes, and some radio equipment. The instructions indicated that there was no right or wrong way to read the material on the following pages. The instructions also asked consumers to please close the first booklet and go to the second booklet when they had finished reading the first booklet. This control was put into effect to prevent consumers from re-reading the test advertisement when results were being measured with the second booklet.

The consumer then read four real advertisements which had been taken from national magazines. This control was put into effect to make consumers believe they were viewing real advertisements. Five advertisements were used to prevent the unnatural focusing upon a single advertisement. The fifth advertisement was the test advertisement for a fictitious brand: Chaing brand video cassette recorder.

The prices used in the advertisements were selected from various electronics stores in the area. The prices of seventy-two recorders were obtained. This sample was divided at the median into two groups. The mean of the high price group was calculated. The mean of the low price group was calculated. Since the last number in many advertised prices is a nine, the last number for each of the means was rounded to the nearest nine. The experiment had two levels of manufacturers suggested list price, either \$289 or \$429. An actual retail price of the product was not shown in the advertisement.

It has been suggested that because experience is so difficult to manipulate realistically, that experience be a measured rather than a manipulated variable in experiments (Sujan 1985). This suggestion was followed in this experiment. This procedure is also typical of studies involving prior knowledge (Johnson and Russo 1984; Brucks 1985). A written question asked subjects how many times they had used a video cassette recorder in the past year. Subjects who indicated they had used a video cassette recorder ten or less times in the past year were categorized into the low experience group. Subjects who indicated they had used a video cassette recorder from eleven to over fifty times in the past year were categorized into the experienced group. Therefore, subjects were categorized

into two categories according to the subjects product experience.

Recently it has been suggested that communicating marketing information concerning a product may increase the level of felt (situational) involvement because it could activate "important personally relevant goals and values such as be a shrewd consumer" (Celsi and Olson 1988). Therefore, one way to increase the motivation to process the message would be to increase the personal relevance of a product. This could be accomplished by providing relevant information concerning product features which suggests that purchasers of the product would be shrewd consumers. Conversely, providing irrelevant information concerning the features of the product could suggest to consumers that purchasers of the product would not be shrewd consumers thereby decreasing the level of felt (situational) involvement and the motivation to process the message.

It has also been suggested that products which a subject knows nothing about are low involvement products. Therefore, providing more relevant information could also have a positive influence the level of felt (situational) involvement by increasing the consumers knowledge of the product.

All of the test advertisements contained a headline which said "Compare the Chaing Brand Video Cassette Recorder with any VCR sold in America." Then beneath a photograph of a VCR were common pieces of information which were selected from Consumer Reports. Those pieces of information were: easily programmed, easy to use fast forward and rewind, VHS machine, sharp, clear picture quality with new HQ that provides better picture quality, New S/N highly sensitive tuner that gives you a better sound. Following the common information the advertisement contained information which could influence the personal relevance of the fictitious product. The information which could increase the personal relevance of the product was as follows: wireless remote control, picture sharpness control, high fidelity sound, and all 139 channels preset. The less relevant information was as follows: black case, round knobs, square design, and comes in reusable cardboard carton. Therefore, there were two levels of involvement in the experiment. The experimental design

was a 2 x 2 x 2 with two level or reference prices, product experience, and involvement.

Measures

The instrument used to measure involvement was a twenty item bi-polar adjective scale which has been used in previous research (Zaichkowsky 1985). Research suggests the instrument has content and construct validity. Scores on the twenty-item instrument used to measure involvement could range from 20 to 140. The scale uses bi-polar objectives, which are:

Important/Unimportant; Of No Concern/Of Concern to Me; Irrelevant/Relevant; Means a Lot to Me/Means Nothing to Me; Useless/Useful; Valuable/Worthless; Trivial/Fundamental; Beneficial/Not Beneficial; Matters to Me/Doesn't Matter; Uninterested/Interested; Significant/Insignificant; Vital/Superfluous; Boring/Interesting; Unexciting/Exciting; Appealing/Unappealing; Mundane/Fascinating; Undesirable/Desirable; Wanted/Unwanted; Not Needed/Needed; Essential/Non-essential.

Reliability of the measure was measured through Cronbach's Alpha. The reliability of the measure was .94 which is consistent with previous research.

The instrument used to measure perceived quality was a four item bi-polar adjective scale which included: clear picture--fuzzy picture, easily programmed--not easily programmed, sensitive tuner--not sensitive tuner, little sound distortion--much sound distortion. Responses were measured on a seven point scale. The items on the scale were taken from the measures of quality for a video cassette recorder used by Consumers Reports. The reliability of the scale was measured through Cronbach's Alpha and was calculated at .85. Since this exceeds the .60 (Nunnally, 1978) which is the minimum required to sum items to form a scale, the was deemed a reliable measure of quality.

The fictitious advertisement shown to consumers was advertising that was similar to manufacturers advertising in that no retailers of the "Chaing" brand VCR were listed. Consumers of home electronics typically receive a discount from the manufacturers suggested list price when they actually purchase a video cassette recorder

from a retailer. Consequently, to measure the price consumers were actually willing to pay for the product, a written question asked "How large of a price reduction would be necessary for you to agree to buy the Chaing video cassette recorder. I would buy the Chaing Video cassette recorder if the price was _____." Then, the consumers were asked to check one of nine categories of prices which were in thirty dollar increments. The first response that consumers could check was "thirty dollars less." The ninth response was "two hundred and seventy dollars less." Subjects were asked to select the most appropriate response. Consequently, responses were recorded on a nine point scale.

Manipulation checks

Within the research instrument was a question which asked consumers to identify the price they read in the advertisement for the Video cassette recorder. There were seven categories of prices which were in fifty dollar increments. The prices ranged from \$200 to \$549. Responses were recorded on a seven point scale. Results indicate the reference price manipulation was effective (Means 2.17 vs. 4.68 $F = 128.10$ $P = .0001$). Subjects exposed to the \$289 reference price recognized the price as less than those subjects exposed to the higher reference price.

A manipulation check indicated that subjects in the high involvement condition experienced a higher level of product involvement than subjects in the low involvement condition (Means 97.64 vs 85.09 $F = 4.17$ $P = .043$). Although the features designed to manipulate the level of involvement had their intended effect, they did not affect perceived quality (Means 21.89 vs. 20.17 $F = 2.60$ $P = N.S.$)

Results

Analysis of variance was used to determine if there were any interactions among reference price, product experience and involvement on the price consumers were willing to pay for the product. There was no interaction between reference price and involvement ($F [1,89] = .210$ $P = N. S.$). There was no interaction between price and product experience ($F [1,89] = 2.60$ $P = N. S.$) There was no three way interaction between price, experience, involvement ($F [1,89] = .361$ $P = N. S.$). As expected there was an

interaction between involvement and product experience ($F [1,89] = 4.63$ $P = .034$). Results found a main effect for reference price (Means 3.68 vs 5.94 $F [1,89] = 26.07$ $P = .001$). There was no main effect for product experience (Means 4.94 vs 4.47 $F [1,89] = .376$ $P = N. S.$) or involvement (Means 4.60 vs 4.94 $F [1,89] = .991$ $P = N.S.$). See Table 1 for the effects of the three independent variables.

Since perceived quality is a continuous variable, regression analysis was used to determine whether the hypotheses would be supported. Reference price and product experience were coded as dummy variables. With high involvement, results indicate that the reference price effects the price consumers are willing to pay for the product ($b = 2.05$ $T = 3.313$ $P = .0019$). Perceived quality effects the price consumers are willing to pay ($b = -.172$ $T = -2.72$ $P = .0092$). Experience also had an effect on the price consumers will willing to pay for the product ($b = 1.42$ $T = -2.30$ $P = .0261$). Therefore, hypotheses 1a, 1b and 1c were supported. The three variables were able to explain .376 percent of the variance in the price consumers were willing to pay. The reference price alone explained .24 percent of the variance. With low involvement, the reference price had a significant effect on the price consumers were willing to pay for the product ($b = 2.28$ $t = 3.56$ $P = .001$). However, perceived quality did not have an effect ($t = -.059$ $P = N. S.$). Product Experience did not have an effect ($t = -.717$ $P = N. S.$). The results provide support for hypotheses 2a, 2b, and 2c. See Table 2 for the effects of these variables with two levels of product involvement. Consequently, the experimental results support the predictions of the Elaboration Likelihood Model. With low involvement, the reference price was able to explain .215 percent of the variance in the price consumers are willing to pay for the product. These results suggest that the reference price is a relatively more important message content cue with low involvement because consumers use fewer message content variables in making their decision.

Implications

The results of the pilot study have implications for public policy. The results of this research provide support for the position that reference prices are important cues consumers use

TABLE 1
Summary ANOVA Table for Reference Price,
Product Experience and Involvement

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
A. Reference Price	122.993	1	122.993	26.078	.001
B. Product Experience	1.772	1	1.772	.376	.542
C. Involvement	4.674	1	4.674	.991	.322
<u>Interactions</u>					
C X B	21.835	1	21.835	4.630	.034
C X A	.989	1	.989	.210	.648
B X A	12.295	1	12.295	2.607	.110
<u>3-Way Interactions</u>					
A X B X C	1.705	1	1.705	.361	.549
Residual	419.758	89	4.716		
TOTAL	587.010	96	6.115		

when making the decision concerning how much they are willing to pay for the product. The results further suggest that consumers are likely to be misled into a willingness to pay a higher price for a product simply because the product has a higher reference price. Therefore, the use of high reference prices appears to meet the Federal Trade Commission's criteria of a deceptive practice. Consequently, the results of this research suggest that government policies should recognize the potentially misleading affects that reference prices can have on consumers even when a retail price does not appear in the advertisement.

Previous research has suggested that consumers want reference price information, but has not identified why consumers want that information. The results of this research suggest that consumers want this information because at least one use of that information is to assist them in deciding on the price they are willing to pay for the product. Therefore, public policy should recog-

nize the potential for deception from reference prices and ensure that reference prices are not used to mislead consumers.

The results provide more support for the critics of reference price advertising than for the proponents. The proponents of reference price advertising would suggest that reference prices are peripheral information that consumers discount in making their decisions. The results of this research suggest a different conclusion. In this study, on average, consumers were willing to pay \$178.60 for the product with a \$289 reference price. However, on average, they were willing to pay \$250.80 for the identical product with a \$429.00 reference price. These results suggest that consumers discount higher reference prices more than lower reference prices, but not enough to prevent high reference prices from misleading the consumer.

The research results provided some support for the Elaboration Likelihood Model as an in-

TABLE 2

The Effects of Reference Prices, Experience, and Involvement
on the Price Consumers are Willing to Pay (Cell Means)

HIGH INVOLVEMENT

	Experience		Little Experience	
	High Reference Price	Low Reference Price	High Reference Price	Low Reference Price
Price People Are Willing to Pay	\$245.10	\$169.00	\$267.60	\$220.00

LOW INVOLVEMENT

	Experience		Little Experience	
	High Reference Price	Low Reference Price	High Reference Price	Low Reference Price
Price People Are Willing to Pay	\$255.80	\$165.70	\$210.30	\$172.30

formation processing model which can help guide research in the area of reference prices. Identifying the level of product involvement assists in predicting the effects of variables in a reference price advertisement. With higher involvement, results suggest that consumers are likely to scrutinize the content of the advertisement and use the reference price, product experience, and perceived-quality when deciding on the price they are willing to pay for the product. However, with lower involvement, the reference price could be a primary message content variable consumers use in making that decision. Results suggest that the reference price is relatively more important with low involvement because consumers use fewer message content variables when deciding on the price they will pay for the product.

There are limitations to this research which suggests directions for future research. First, while a higher level of felt (situational) involvement was activated by some of experimental treatments, the effects of reference prices might be different when even higher or lower levels of involvement are activated. For example, at very high levels of involvement, the reference price might have less influence on the price consumers would be willing to pay for the product than was found in the experiment reported in this paper. Conversely, with very low levels of involvement, the reference price might have an greater impact. Consequently, future research should examine the influence of reference prices on a variety of products which activate different levels of involvement.

The experimental results also have some important managerial implications. These results suggest that the selection of the advertised reference price is likely to be an important managerial decision because the reference price might have an important effect regardless of the level of involvement. Consequently, the advertised reference price may be more important than many managers have recognized previously. With high involvement, the consumers perception of quality and product experience also affect the consumer's decision. When advertising to low involvement consumers, managers should select the reference price with particular care. Low involvement consumers may focus on the reference price in an advertisement as the primary message content variable they will use to decide the price they are willing to pay for the product.

Previously reported reference price research has not provided empirical evidence concerning the effects of reference prices when there were different levels of involvement or product experience. Consequently, the experimental results reported in this paper provide public policy makers, managers, and researchers some new insight into the process through which reference prices could affect an important consumer decision.

References

1. Ahmed, Sadrudin A. and Gary M. Gulas, "Consumers' Perception of Manufacturers Suggested List Price," *Psychological Reports*, Vol. 50, pp. 507-518, 1982.
2. Alba, Joseph W., "The Effects of Product Knowledge on the Comprehension, Retention, and Evaluation of Product Information," in *Advances in Consumer Research*, editors Richard P. Bagozzi and Alice Tybout, Ann Arbor, MI: Association for Consumer Research, Vol. 10, pp. 577-580, 1983.
3. Armstrong, Gary M., Metin N. Gurool, and Frederick A. Russ, "Detecting and Correcting Deceptive Advertising," *Journal of Consumer Research*, Vol. 6, 237-246, 1981.
4. Barnes, James G., "Factors Influencing Consumer Reaction to Retail Newspaper 'Sale' Advertising," proceedings in *American Marketing Association*, pp. 471-477, 1974.
5. Bearden, William O., Donald R. Lichtenstein, and Joseph E. Teel, "Comparison price, coupon, and brand effects on consumer reactions to retail newspaper advertisements," *Journal of Retailing*, Vol. 60, pp. 11-34, 1984.
6. Beatty, Sharon and Scott M. Smith, "External Search Effort: An Investigation Across Several Product Categories," *Journal of Consumer Research*, Vol. 14, pp. 83-95, 1987.
7. Berkowitz, Eric N. and John R. Walton, "Contextual Influences on Consumer Price Responses: An Experimental Analysis," *Journal of Marketing Research*, Vol. 17, pp. 349-58, 1980.
8. Berry, Leonard L., "Multidimensional Strategies Can Combat Price Wars," *Marketing News*, Vol. 20, p. 10, 1986.
9. Bettman, James R. and C. Whan Park, "Effects of Prior Knowledge and Experience and Phase of the Choice Process on Consumer Decision Process: A Protocol Analysis," *Journal of Consumer Research*, Vol. 7, pp. 234-248, 1980.
10. Blair, Edward A. and Laird E. Landon, "The Effects of Reference Prices in Retail Advertisements," *Journal of Marketing*, Vol. 45, pp. 61-69, 1981.
11. Borgida, Eugene and Beth Howard-Pitney, "Personal Involvement and the Robustness of Perceptual Salience Effects," *Journal of Personality and Social Psychology*, Vol. 45, pp. 560-570, 1983.
12. Brucks, Merrie, "The Effects of Product Class Knowledge on Information Search Behavior," *Journal of Consumer Research*, Vol. 12, pp. 1-11, 1985.
13. Celsi, Richard and Jerry C. Olson, "The Role of Involvement in Attention and Comprehension Processes," *Journal of Consumer Research*, Vol. 15, pp. 210-224, 1988.
14. Chaiken, Shelly, "Heuristic Versus Systematic Information Processing and the Use of Source Versus Message Cues in Persuasion," *Journal of Personality and Social Psychology*, Vol. 39, pp. 752-766, 1980.
15. Cohen, Dorothy, "Surrogate Indicators and Deception in Advertising," *Journal of Marketing*, Vol. 36, pp. 10-15, 1972.
16. Della Biitta, Albert, Kent B. Monroe and John McGinnis, "Consumer Perceptions of Comparative Price Advertisements," *Journal of Marketing Research*, Vol. 13, pp. 416-427, 1981.
17. Engel, James and Roger D. Blackwell *Consumer Behavior*, 4th Edition, The Dryden Press, New York, 1982.
18. Erickson, Gary M. and Johnny K. Johansson, "The Role of Price in Multi-Attribute Product Evaluations," *Journal of Consumer Research*, Vol. 12, pp. 195-199, 1985.
19. Etgar, Michael and Naresh Malhotra, "Determinants of Price Dependency: Personal and Perceptual Factors," *Journal of Consumer Research*, Vol. 8, pp. 217-222, 1981.
20. Fisk, Susan T. and Donald Kinder, "Involvement, Expertise, and Schema Use: Evidence from Political Cognition," in *Personality, Cognition, and Social Interaction*, eds. Nancy Cantor and John F. Kihlstrom, Laurence Carlbbaum Associates, Hillsdale, N.J., 1981.
21. Ford, Gary P., Philip G. Kuehl, and Oscar Reksten, "Classifying and measuring deceptive advertising: An experimental approach," in *Combined Proceedings 1975* (editor Edward M. Mazzee), American Marketing Assn., Chicago, pp. 493-497, 1975.
22. Federal Trade Commission, "Policy Statement on Deception" followed by dissenting statement of Commissioners Bailey and Pertschuk and concurring statement of Commissioner Douglas, 45 ATRR 689 (October 27), 1983.
23. Gensch, Dennis H. and Rajshekar G. Javalgi, "The Influence of Involvement on Disaggregate Attitude Choice Models," *Journal of Consumer Research*, Vol. 14, pp. 71-82, 1987.
24. Houston, Michael J. and M. L. Rothschild, "A Paradigm for Research on Consumer Involvement," Working Paper 11-11-46. Graduate School of Business, University of Wisconsin - Madison, 1977.
25. Jacoby, Jacob and Constance Small, "The FDA Approach to Defining Misleading Advertising" *Journal of Marketing*, Vol. 39, pp. 65-73, 1975.
26. Johnson, Eric and Edward Russo, "Product Familiarity and Learning Information," *Journal of Consumer Research*, Vol. 11, pp.

- 542-550, 1984.
27. Keiser, Stephen and James Krum, "Consumer Perceptions of Retail Advertising With Overstated Price Savings," *Journal of Retailing*, Vol. 52, pp. 27-36, 1976.
 28. Krugman, H. E., "The Impact of Television Advertising: Learning Without Involvement," *Public Opinion Quarterly*, Vol. 29, pp. 349-356, 1965.
 29. Liefeld, John and Louise A. Heslop, "Reference Prices and Deception in Newspaper Advertising," *Journal of Consumer Research*, Vol. 11, pp. 868-876, 1985.
 30. Mandler, Jean M. and Richard E. Parker, "Memory for Description and Spatial Information in Complex Pictures," *Journal of Experimental Psychology: Human Learning and Memory*, Vol. 2, pp. 38-48, 1976.
 31. Monroe, Kent B., "The Influence of Price Differences and Brand Familiarity on Brand Preferences," *Journal of Consumer Research*, Vol. 3, pp. 42-49, 1976.
 32. Monroe, Kent B. and Christine P. Powell, "Recall Versus Recognition as a Measure of Price Awareness" in *Advances in Consumer Research*, Richard Lutz, editor, Vol. 13, pp. 594-599, 1986.
 33. Moore, David J. and Richard Reardon, "Source Magnification: The Role of Multiple Sources in the Processing of Advertising Appeals," *Journal of Marketing Research*, Vol. 24, pp. 412-418, 1987.
 34. Nunnally, John, *Psychometric Theory*, McGraw Hill Book Company, New York, 1978.
 35. Olson, Jerry C., "Price as an Information Cue: Effects on Product Evaluations," in A. G. Woodside, J. N. Seth and P. D. Bennet (eds.), *Consumer and Industrial Buying Behavior*, Elsevier North-Holland Inc., New York, 1977.
 36. Park, C. Whan, and V. Parker Lessig, "Familiarity and its Impact on Consumer Decision Biases and Heuristics," *Journal of Consumer Research*, Vol. 8, pp. 223-230, 1981.
 37. Petroschus, Susan M. and Kent B. Monroe, "The Effect of Product-Line Pricing Characteristics on Product Evaluations" *Journal of Consumer Research*, Vol. 13, pp. 511-519, 1987.
 38. Petty, Richard E. and John Cacioppo, "Issue-Involvement Can Increase or Decrease Persuasion by Enhancing Message Relevant Cognitive Responses," *Journal of Personality and Social Psychology*, Vol. 37, pp. 1915-1926, 1979.
 39. Petty, Richard E. and John Cacioppo, "The Effects of Involvement on Response to Argument Quantity and Quality: Central and Peripheral Routes to Persuasion," *Journal of Personality and Social Psychology*, Vol. 46, No.1, pp. 69-81, 1984.
 40. Petty, Richard E., John T. Cacioppo, *Communication and Persuasion*, Springer-Verlag Inc., New York, 1986.
 41. Petty, Richard E., John Cacioppo and David Schumann, "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, Vol. 10, pp. 135-145, 1983.
 42. Preson, Ivna L., "A Comment on Defining Misleading Advertising and Deception in Advertising," *Journal of Marketing*, Vol. 40, pp. 54-57, 1976.
 43. Roa, Charathi P., "Deceptive Advertising: Consumer Concern and Evaluative Beliefs," paper presented at the Southern Marketing Association Conference, Atlanta GA., 1974.
 44. Russo, J. Edward, Barbara L. Metcalf, and Deborah Stevens, Identifying Misleading Advertising *Journal of Consumer Research*, Vol. 8, pp. 119-131, 1981.
 45. Salma, Mark E. and Tashchian, "Selected Socio-economic and Demographic Characteristics Associated With Purchasing Involvement," *Journal of Marketing*, Vol. 49, pp. 72-82, 1985.
 46. Sewell, Murphy A. and Michael H. Goldstein, "The Comparative Price Advertising Controversy: Consumer Perceptions of Catalog Showroom Reference Prices," *Journal of Marketing*, Vol. 43, pp. 85-92, 1979.
 47. Sherif, M. and C.I. Hovland, *Social Judgement: Assimilation and Contrast Effects in Communication and Attitude Change*, Yale University Press, New Haven, 1961.
 48. Srull, Thomas K., "The Role of Prior Knowledge in the Acquisition, Retention, and Use of New Information," in *Advances in Consumer Research*, eds. Richard P. Bagozzi and Alice M. Tybout, Association for Consumer Research, Ann Arbor, MI, 10, pp. 572-576, 1983.
 49. Sujan, Mita, "Consumer Knowledge: Effects on Evaluation Strategies Mediating Consumer Judgments," *Journal of Consumer Research*, Vol. 12, pp. 31-46, 1985.
 50. Zaichkowsky, Judith Lynne, "Measuring the Involvement Construct," *Journal of Consumer Research*, Vol. 12, pp. 341-352, 1985.