EFFECT OF DISCONFIRMED EXPECTANCY ON CONSUMER ATTRIBUTIONS: A STUDY OF DURABLE PRODUCTS

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ABSTRACT

The objective was to study the pattern of attributions under various conditions of expectancy disconfirmation in order to test the Zaltman & Wallendorf (1979) suggestions. Forty students of the Indian Institute of Management, Ahmedabad, were selected as respondents. Two consumer durables, Color Television and Two-in-One (radio/tape player) were used as product stimuli to check on the generality of the attributional pattern.

The main findings of the present experiment are as follows.

1. Attribution processes in marketing and interpersonal situations are different. The differences are evident in the dominance of attributional factors and variations in information usage across products and in different disconfirmation conditions.
2. Raising consumer expectations in durable products seems to be a desirable marketing strategy. This is inferred from the pattern of attributions to product, company, and unrealistic consumers under high expectation conditions.
3. Product and company attributions, in general, dominate under different disconfirmation situations.
4. Building excessive attributes in a product does not lead to higher product attributions.
5. People did not distinguish between luck and chance factors. Also, both positive and negative disconfirmation situations were partly attributed to chance factors.

INTRODUCTION

Disconfirmed Expectancy and Consumer Satisfaction

It is commonly believed by advertisers that a little positive exaggeration in product promotion favorably influences a consumer's judgement of product quality. It is accepted by many researchers (Day, 1977; LaTour & Peat, 1979; Olander, 1977; Oliver, 1977) that the two constructs, performance-specific expectation and expectancy disconfirmation, play a major role in satisfaction decisions. Engel, Kollat and Blackwell (1968) and Howard & Sheth (1969) proposed that disconfirmed expectations affect subsequent consumer satisfaction and an increase in the performance-expectation ratio leads to an increase in satisfaction.

The process that determines satisfaction and dissatisfaction starts with the expectations that customers have when making a buying choice (Swan & Trawick, 1981). Expectations involve an anticipation of how well the product will perform on some attributes of performance. The interaction between expectation and actual product performance produces either satisfaction or dissatisfaction. The satisfaction, in a marketing context, refers to the buyer's state of being adequately rewarded in a buying situation for the sacrifice he has made. Adequacy of satisfaction is a result of matching actual past purchase and consumption experience with the expected reward from the product in terms of its anticipated potential to satisfy the consumer's motives (Howard & Sheth, 1969).

Product performance and prior expectation are not directly related. Instead, a modifying variable known as "disconfirmation of expectation" is a significant mediator in the situation. When the product is used and the consumer experiences how well it performs, his or her expectation will be exceeded (positive disconfirmation) in which case satisfaction will be high; matched (confirmation), with resulting satisfaction; or, if performance is short of expectation (negative disconfirmation), dissatisfaction will result. Thus any situation in which the consumer judgement is proved wrong is

disconfirmation. Consumer expectations as well as whether these expectations are met or not, are strong determinants of satisfaction.

Satisfaction with a product results in more favorable post-purchase attitudes, higher purchase intentions and brand loyalty. On the other hand, negative disconfirmation of initial expectations led to consumer dissatisfaction which was reflected in negative post-purchase attitudes, brand switching and complaining behavior.

Attribution Theory and Disconfirmation Paradigm

Attribution theory is concerned with understanding naive perceptions of the causes of an event (Frieze, Bar-Tal, and Caroll 1979). The concern is not on the "real" cause of something, but on the perceived cause. More specifically, it concerns the processes through which an individual assigns causes to various responses he makes or observes and the consequences of his resulting beliefs about causality (McArthur, 1972).

Kelley (1967, 1973) conceptualized the cognitive processes that might be engaged in by the individual during his "causal inferences." According to him, people base attributions of causality on the covariance of cause and effect and they use a process similar to that used by a scientist to determine the cause of events.

Zaltman and Wallendorf (1979) hypothesized attributions under different conditions of expectation and performance. Their model is based on various research studies (Feather, 1969; Feather and Simon (1971); McMahan, 1973; Valle & Frieze, 1976) which have consistently shown that the more similar actual performance is to prior expectations, the higher is the probability that a stable attribution will be made. Following the same analogy, Zaltman and Wallendorf proposed that the closer a product's performance is to consumer expectations, the greater the probability that consumers will make stable attributions. Similarly, the farther the product performance is from expectations, the more likely an attribution will be made to an unstable cause. The predicted attributions following a satisfactory or unsatisfactory performance of a product are summarized in the matrix of Figure 1.

Figure 1
Attributions Concerning Product Performance As a Function of Expectation

PERFORMANCE	EXPECTATION: High	EXPECTATION: Low
Good	Stable (excellent product)	Unstable (luck, Unusually good performance)
Bad	Unstable (unlucky, a "lemon")	Stable (poor product)

From the marketing point of view, the optimal attribution is that the consumer be satisfied with a product and attribute that satisfaction to stable characteristics of the product. From Figure 1 it can be seen that this is the attribution made when high expectation is confirmed. The attribution made about a product that was expected to perform well but the performance is not as expected is also reasonably favorable to the product because it assumes that this is a rare case. However, the attributions made about a product with low expectation are both rather negative. If the product performs well, it is attributed unstably, implying that this is a rare chance of a good performance by the product. If the product performs poorly, it is seen as due to the nature of the product.

Thus the model suggests that a marketer who wants satisfied consumers should develop a product for which high expectations match performance. It also proposes that raising expectations about a product is a desirable marketing strategy because in the high expectation condition, positive performance is attributed to the product, while negative performance is attributed to unstable factors.

Present Work

A small experiment has been carried out to examine the various attributions consumers make

when initial expectations are disconfirmed. This experiment provides a test for the Zaltman & Wallendorf (1979) propositions.

The experiment had observers as respondents. Since the purpose of this experiment was to see as how observers explain the satisfaction and dissatisfaction of other consumers, this group of respondents had been used. This is consistent with previous marketing and attribution research (Calder & Burnkrant, 1977; Burnkrant, 1982; McArthur, 1972, 1976).

METHODOLOGY

The major objective of the present experiment was to study the pattern of attributions under various conditions of disconfirmation of initial expectations for a product. In this experiment, expectation was systematically manipulated from low to high to analyze the pattern of attributions under various conditions of expectancy disconfirmation. Such analysis provides a test of the Zaltman & Wallendorf (1979) hypothesis.

Subjects

Forty students of the Indian Institute of Management, Ahmedabad, participated in the study. The choice of sample was dictated by convenience, ability to comprehend and integrate informational cues, and homogeneity in order to reduce random error.

Stimuli & Design

The basic experimental design was taken from Winer (1971). The stimuli were arranged in 3 x 3 factorial design. The first factor was consumer's initial expectation before buying a product with three levels: low, moderate, and high. The second factor was product performance indicated by the consumer after using the product for a reasonable period of time. This factor also had three levels: worse than expected, as expected, and better than expected. Figure 2 shows the layout of present experiment.

Two consumer durables, Color TV and Two-in-One, were used as products because they require considerable consumer involvement with regard to information search, involvement, expectations, and some other stable reactions. Two products were deliberately selected to check on the generality (or lack thereof) of the attribution process. The nine test stimuli were described on separate sheets. Each sheet contained information about the product, initial expectation about it, and its actual performance.

Figure 2
Experimental Design For Attribution Under Disconfirmation Conditions

EXPECTATION \ PERFORMANCE	Worse than Expected	As Expected	Better than Expected
Low			
Moderate			
High			

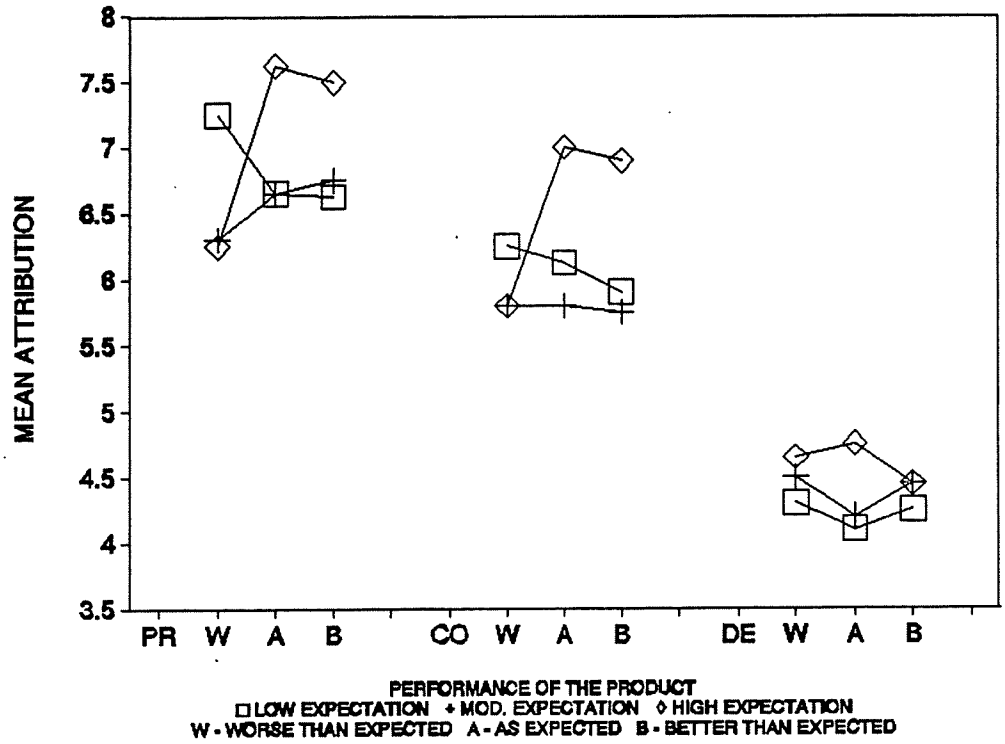
Procedure

The experimental stimuli were presented to the subjects in a questionnaire. The first page was in the form of an instruction sheet which introduced the task as one dealing with the performance of consumer goods. The subjects were asked to read the information given on each sheet and answer the questions listed on the response sheet. The questions on the response sheet asked the likelihood that the situation described on the sheet was because of:

1. Unrealistic consumer
2. Product handling by the consumer
3. The luck of the consumer
4. The product itself
5. The company
6. The dealer
7. Chance factors

The subjects were asked to indicate the

Figure 3
Mean Attributions to Product, Company, and Dealer
Curve Parameter: Initial Expectation



likelihood of each of the seven possible causes on a 10-point scale anchored by 0 (very unlikely) and 9 (very likely) for each of the nine stimulus sheets separately. Half of the subjects got the descriptions related to Color Television and other half got the descriptions related to Two-in-One.

McArthur (1972, 1976) used circumstance as an attribution factor. In the present experiment, two separate questions were asked to see whether in the Indian context, subjects make any difference between the attribution to the luck of the consumer and to chance factors. The questions were framed in such a way that luck referred to something about the consumer and chance factors referred to some causal happenings in the outside world.

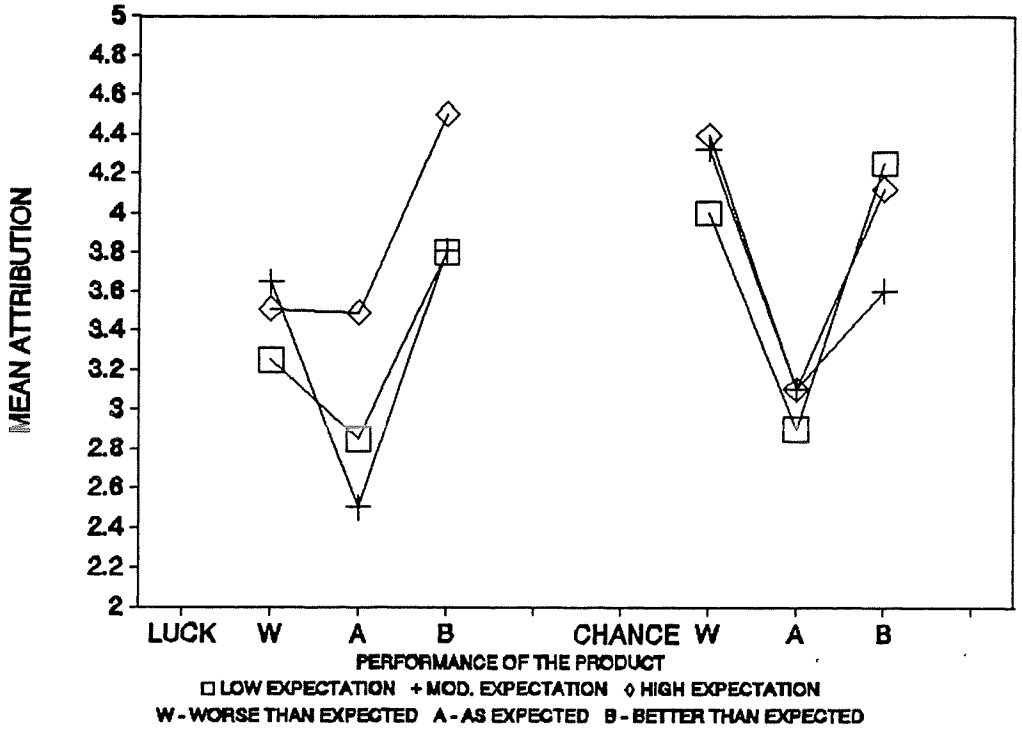
RESULTS

Subjects made seven types of attributions under the nine conditions of expectancy disconfirmation. The analysis of variance (ANOVA) was used to discern the pattern of attributions made by respondents. The results from these attributions are presented below from the point of view of similarity in patterns.

Product, Company and Dealer Attributions

Figure 3 shows attributions to product, company and dealer as a function of initial expectation about the product (curve parameter) and performance of the product (horizontal axis). Both the left and center graphs display a remarkable similarity. It seems that performance of the product does not matter at all in the attributions to the product or company [$F(2,76) = 0.08$ and $F(2,76) = 0.09$ $p < .05$ respectively]. On the contrary, attributions to product and

Figure 4
Mean Attributions to Luck and Chance Factors
Curve Parameter: Initial Expectation



company are a positive function of product performance when the initial expectation is high.

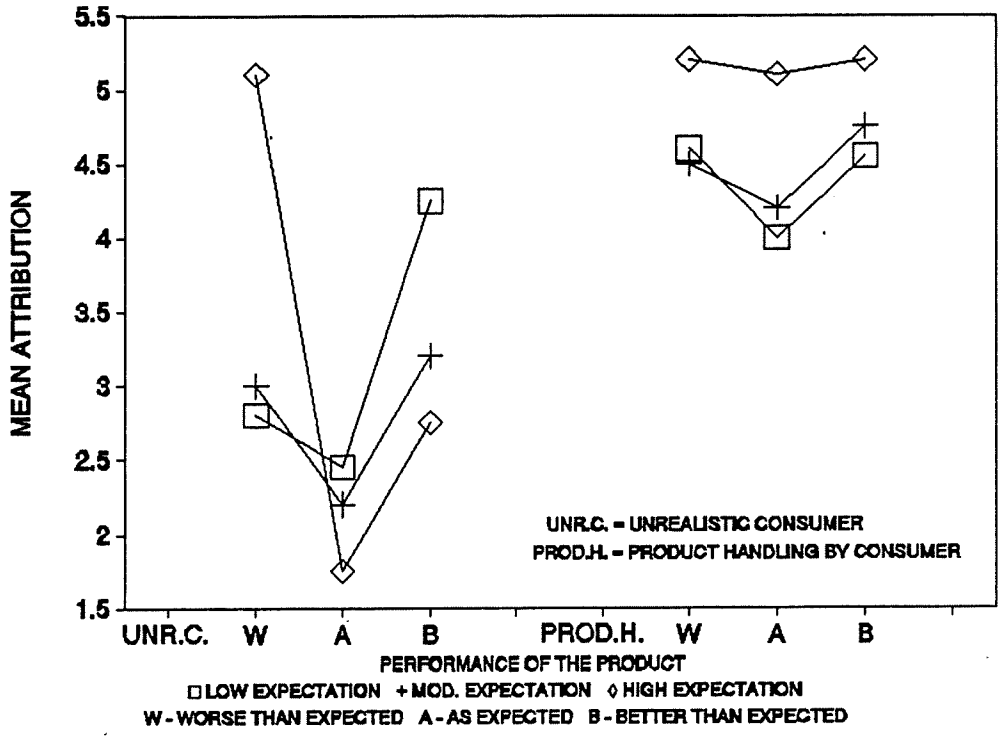
The finding just mentioned confirms the utility of raising expectations in consumers in order to make them more sensitive to product performance. It can also be seen that product and company attributions are minimum when expectation is high and performance is low. This means that the high expectation and poor performance combination leads to stronger attributions other than product. Thus the proper marketing strategy should be to raise expectations for the product.

It should also be noted that there is no difference between the as-expected and better-than-expected levels of performance under high expectation conditions in the left and center graphs. The attributions to product and company are a little less when high expectation is positively disconfirmed. These trends clearly show that performance of a product beyond the expected high level does not further add to the image of the product or company. This finding suggests that attributes in a product should be built to the extent they meet normal expectations.

The right graph of Figure 3 depicts attribution to the dealer under various conditions of expectancy disconfirmation. In this case, the main effect of expectation is not very high [$F(2,76,) = 1.93$, $p < .05$]. This effect shows that little significance is attached to the dealer in various disconfirmation conditions. However, the dealer's role looks to be somewhat important when high expectation is just confirmed. High performance of the product is not attributed to the dealer.

Considered together, the results shown in Figure 3 present a very clear picture. High expectations from a product invoke external attribution to the product, company, and, to some

Figure 5
Mean Attributions To Consumer
Curve Parameter: Initial Expectation



extent, to the dealer. Since all these are stable causes, these results lend support to the suggestions made by Zaltman & Wallendorf (1979) and the research findings of Jha (1984).

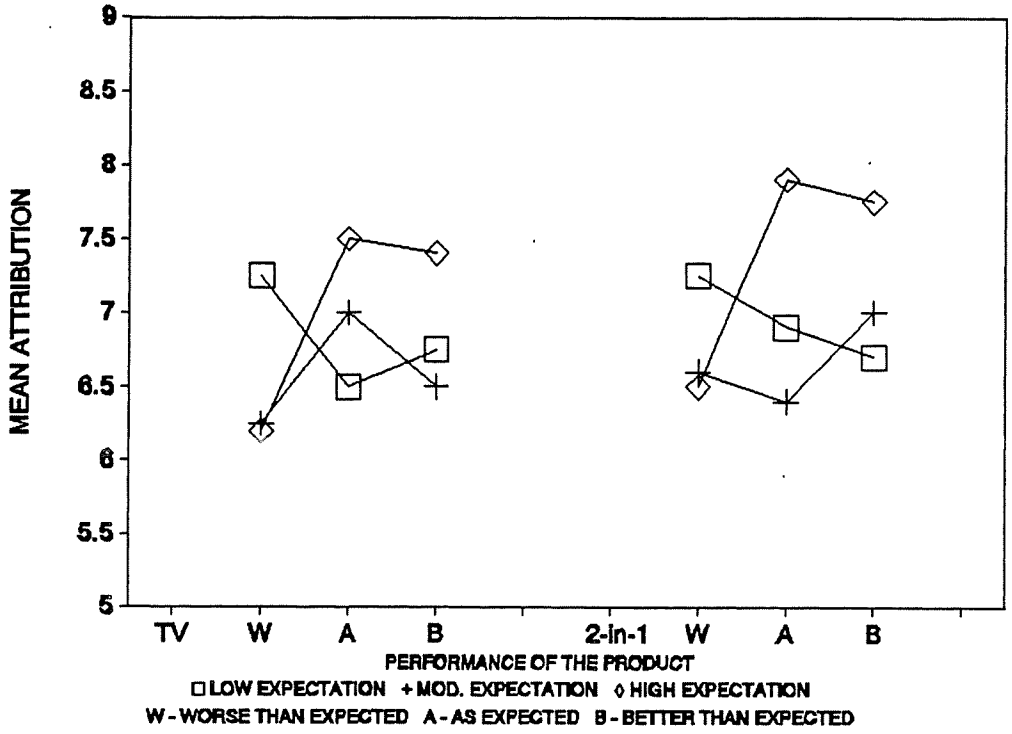
Luck and Chance Factors

Figure 4 presents the mean attributions to luck and chance factors in the left and right graphs respectively. Attributions to luck and chance seem to be mainly a function of product performance [$F(2,76) = 6.34$ and 6.91 $p < .01$]. The 'V' shape of the curves further reflect that luck and chance factors are invoked when initial expectations are disconfirmed. The similarity between the two graphs suggests that luck of the consumer is not seen as something unique within the consumer. However, in the high expectation condition, luck and chance factors exhibited different attributional patterns. When high expectation is positively disconfirmed, dominant attribution is made to the consumer's luck rather than to chance factors. But the general pattern of both graphs suggests that observers do not consider luck as something internal to the consumer and chance as an external factor. Instead, both are perceived to be external factors--some causal happenings in the environment. The same findings had been reported by Jha (1984), but this result is at variance with Bhargava's interpretation (1983) that luck is an internal factor.

Consumer Attributions

Figure 5 presents results related to consumer attributions. In the present work, two aspects of consumer attributions were considered; attributions to the unrealistic consumer and to product handling

Figure 6
Mean Attribution to Product
Curve Parameter: Initial Expectation

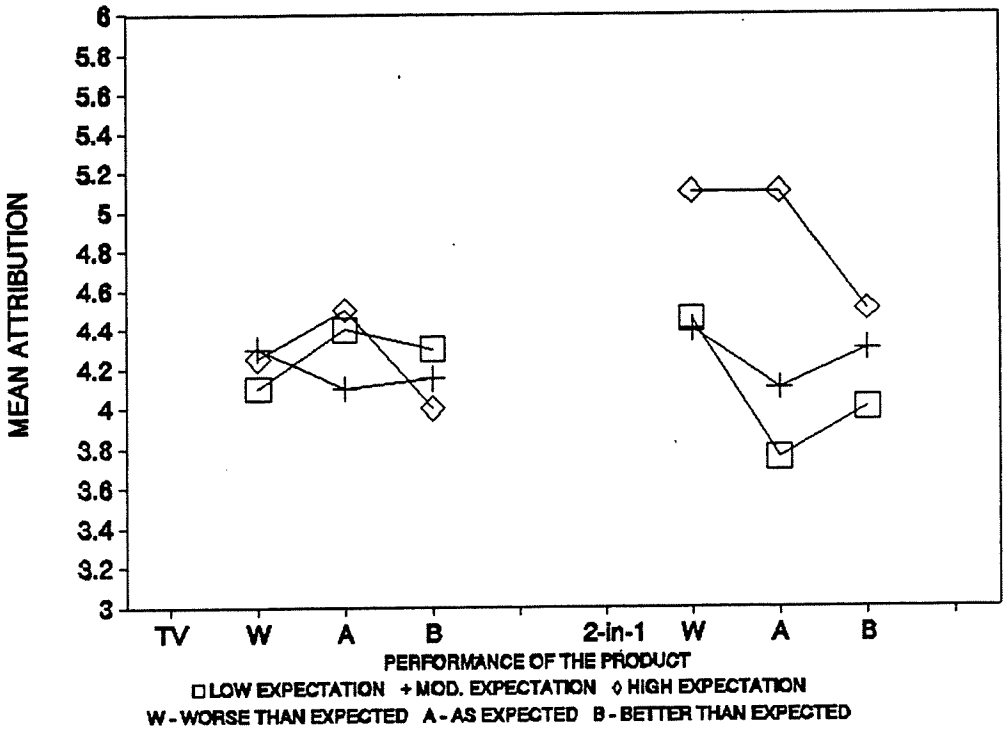


by the consumer. In the left graph, high expectation and worse than expected performance situation (extreme disconfirmation) produce the strongest attributions by the unrealistic consumer. This also speaks for the utility of raising expectations for the product from a purely marketing angle. There is another notable trend in the left-graph of Figure 5. Attribution by an unrealistic consumer is stronger when the performance is worse than expected than when it is better than expected. Also, the consumer with a low expectation has been perceived more unrealistic than a consumer with modest expectation in a positive disconfirmation situation.

The results noted above may be because of the choice of products used in the present study. One is expected to have at least moderate expectations for products like a Color TV and a Two-in-One. This means that the low expectations from the product groups which are already accepted in the market as the average or high quality may put the consumer in a negative position. Furthermore, a consumer is seen as unrealistic if he buys a durable product with low expectation when a wide range of products are available in the market.

The right graph of Figure 5 shows the attribution to product handling by the consumer. In the high expectation condition, a dominant attribution is made to product handling at all performance levels. In other expectation conditions, the curves are 'V' shaped. This pattern clearly shows that both the worse than expected and better than expected levels of performance are attributed to product handling by the consumer.

Figure 7
Mean Attribution to Dealer
Curve Parameter: Initial Expectation



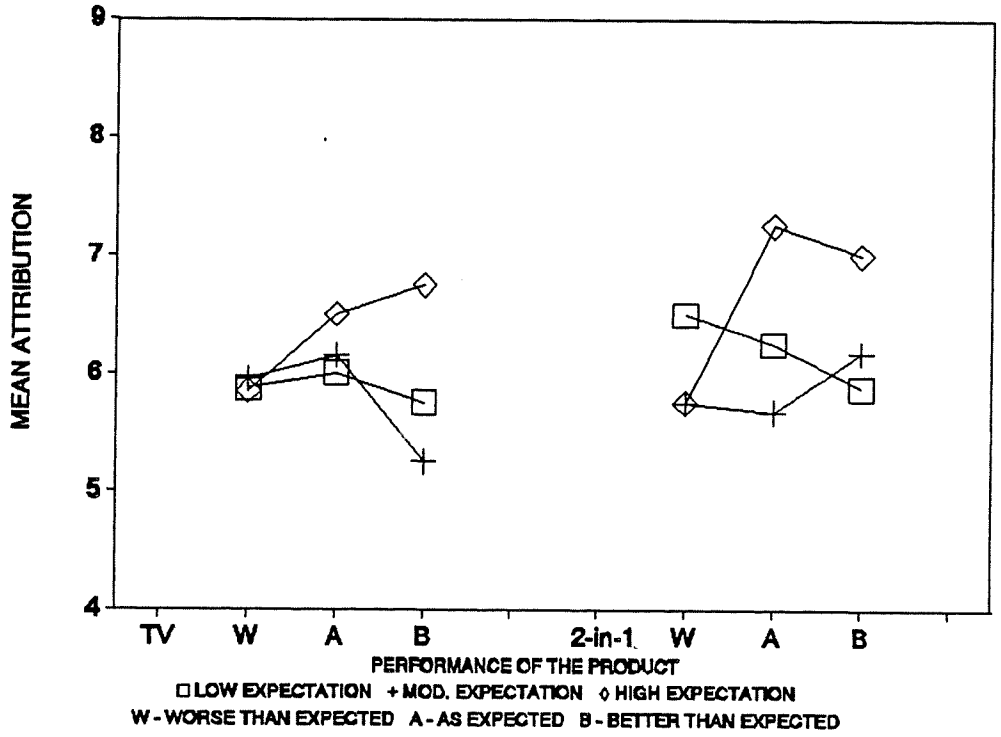
Product Differences

Product Attributions. Figure 6 shows the pattern of attributions to product across product groups under various conditions of expectancy disconfirmation. One significant trend is a positive relationship between initial expectation and performance levels. In both products, Color TV and Two-in-One, product attribution is dominant when high expectations are just confirmed or positively disconfirmed. Product attribution is comparatively insignificant when high expectations are negatively disconfirmed. These trends again support the Zaltman & Wallendorf (1979) hypothesis that marketing situations engender external attributions.

Dealer Attributions. Figure 7 represents differences between two group of products with respect to attribution to dealer. The left graph shows attribution to dealer in the case of Color TV. It can be easily seen that high attribution is made to the dealer when high or low expectations are confirmed. The dealer attribution is not significant when moderate expectations are confirmed. This means that consumers' attributions to the dealer do not depend upon expectation.

The attributional patterns are different in the case of Two-in-One. The right graph of Figure 7 shows that dealer attribution is dominant when initial expectations are either negatively disconfirmed or just confirmed. However, dealer attributions are insignificant when initial high expectations are positively disconfirmed. In other expectation situations the curves are 'V' shaped which shows that significant attributions are made to dealer when expectations are not matched with

Figure 8
Mean Attribution to Company
Curve Parameter: Initial Expectation



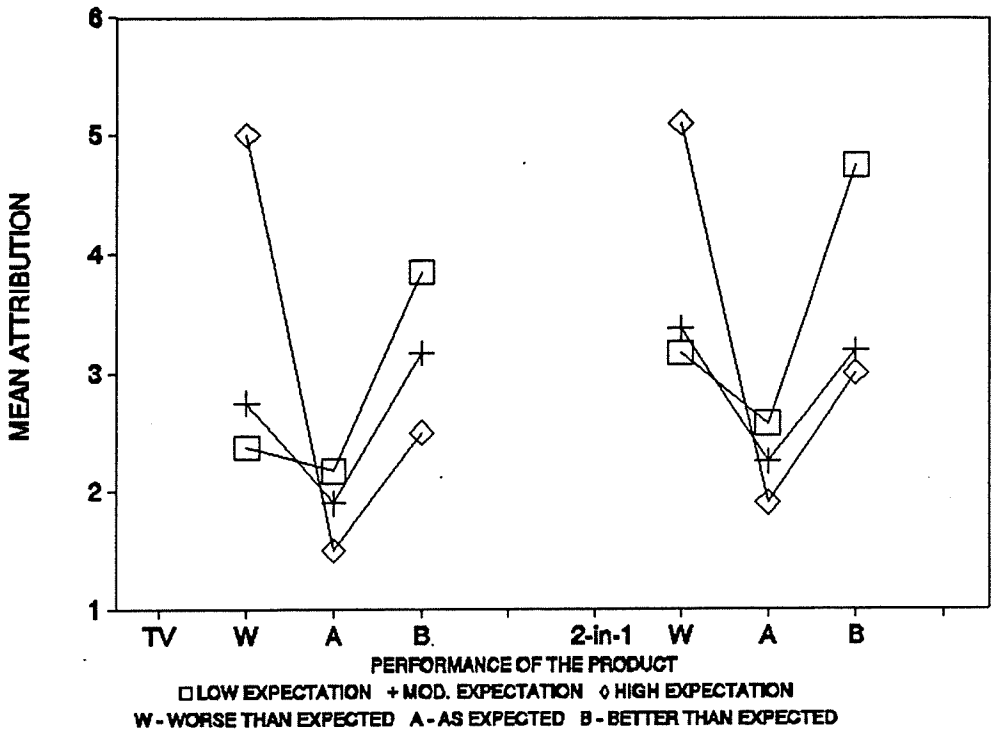
performance.

Company Attributions. Figure 8 presents the company attributions across product groups under various conditions of expectancy disconfirmation. The left graph shows that expectation information is ignored when product performance is worse than expected. However, company attributions are dominant when high initial expectations are just confirmed or positively disconfirmed. This finding also proves that raising expectations from the product invokes stable external attributions. When initial performance is either low or moderate, company attributions are insignificant even when performance is as expected or better than expected.

In the case of Two-in-One, the attributional patterns are significantly different. The company attributions are dominant when high initial expectations are just confirmed or positively disconfirmed. This trend also suggests that high product expectations led to stable external attributions. The relationship is statistically significant also [$F(4,152) = 4.01p < .05$].

Consumer Attributions. Figure 9 presents a remarkable similarity in the patterns of consumer attribution across product groups. The attribution to unrealistic consumer is maximum when high expectations are negatively disconfirmed. Consumer attribution is also high when low expectations are matched with better than expected performance. This clearly shows that when expectation does not match with performance, the consumer is thought to be primary responsible for the situation. The similarity in patterns in both products suggests that attribution to consumer is generalizable across product groups. This finding is at odds with the results of Jha (1984).

Figure 9
Mean Attribution to Unrealistic Consumer
Curve Parameter: Initial Expectation



Overview

Figure 10 shows various attributions under extreme expectancy disconfirmation situations. It is notable that product and company attributions are dominant in this situation but consumer attribution are also significant. Figure 11 represents attributions to different dependent measures when performance matches expectations. The same trends are visible from Figure 12, where attributions to various factors are shown under moderate disconfirmation situations. These findings are similar to the findings of Jha (1984) and propositions of Zaltman & Wallendorf (1979).

Findings

Following are the main findings of the present experiment.

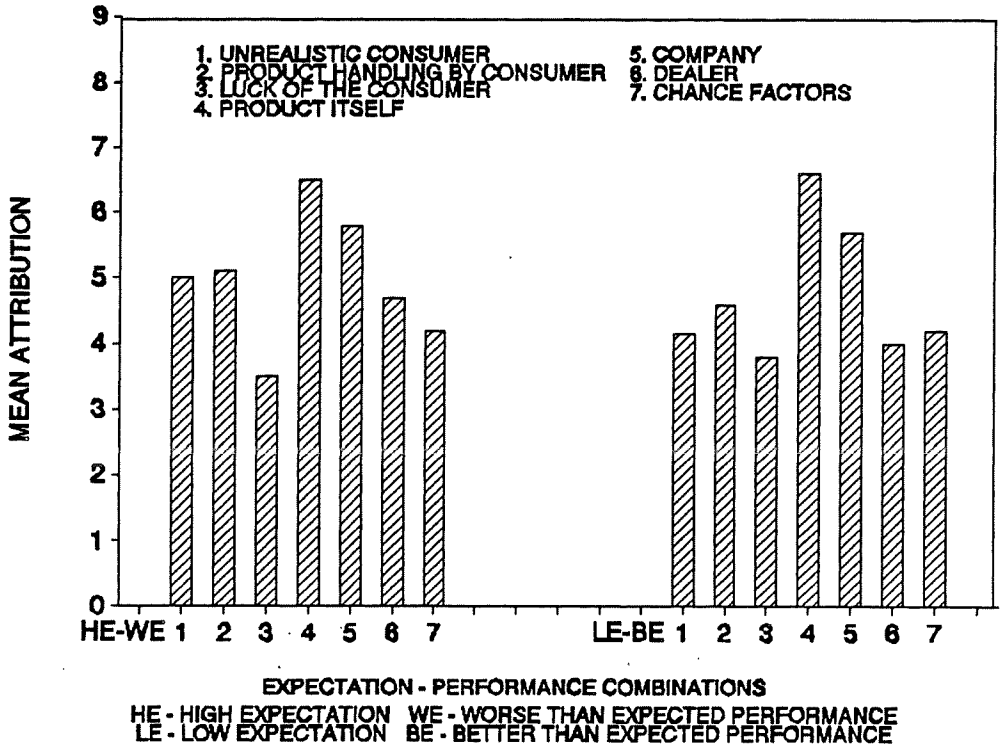
First. Raising consumer expectations about a product seems to be a desirable marketing strategy. This is inferred from the attributional patterns to product, company, and unrealistic consumer under the high expectation condition.

Second. Building excessive attributes in a product does not lead to higher product attributions.

Third. Attributions under various conditions of expectancy disconfirmation are likely to vary across product groups. This is evident from the difference in attributions in Color TV and Two-in-One.

Fourth. People do not distinguish between luck and chance factors. Both are seen as external factors of environment. One interesting finding is

Figure 10
Mean Attribution to Different Factors
Under Extreme Disconfirmation



that attribution to chance factors are made both under positive and negative disconfirmation of initial expectation. Both worse than expected and better than expected performance situations are partly attributed to luck and chance factors.

Fifth. Product and company attributions dominate in all disconfirmation situations. This finding validates the Zaltman & Wallendorf (1979) suggestions.

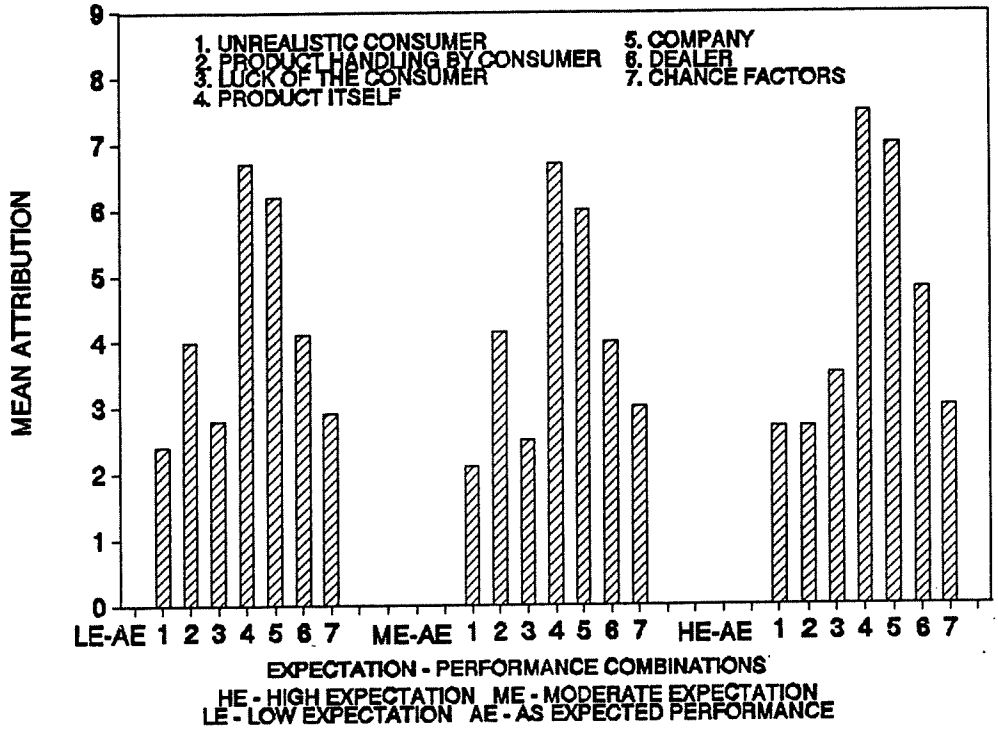
Considered as a whole, the findings of the present experiment indicate that expectancy disconfirmation leads to numerous attributions dominated by product and company factors. Even though attributions are moderated by the nature of the product and the past experiences of attributors, raising expectations about a product emerges as a desirable marketing strategy.

DISCUSSION

General Trends

First. The findings of the present experiment suggest interesting attributional patterns under different conditions of expectancy disconfirmation. For example, attributional processes in a marketing context seem to be different than those in ordinary interpersonal situations. In all disconfirmation situations, significant attributions have been made to external factors (product and company). This is in line with the suggestions of Zaltman & Wallendorf (1979) and research findings of Jha (1984). This also lends support to Burnkrant finding's (1982) that even in mixed product attributions, product is seen as a major cause. This result is at variance with the McArthur's assumptions of people as "black-box"

Figure 11
Mean Attribution to Different Factors
Under Confirmation



theorists who look for more internal than external attribution.

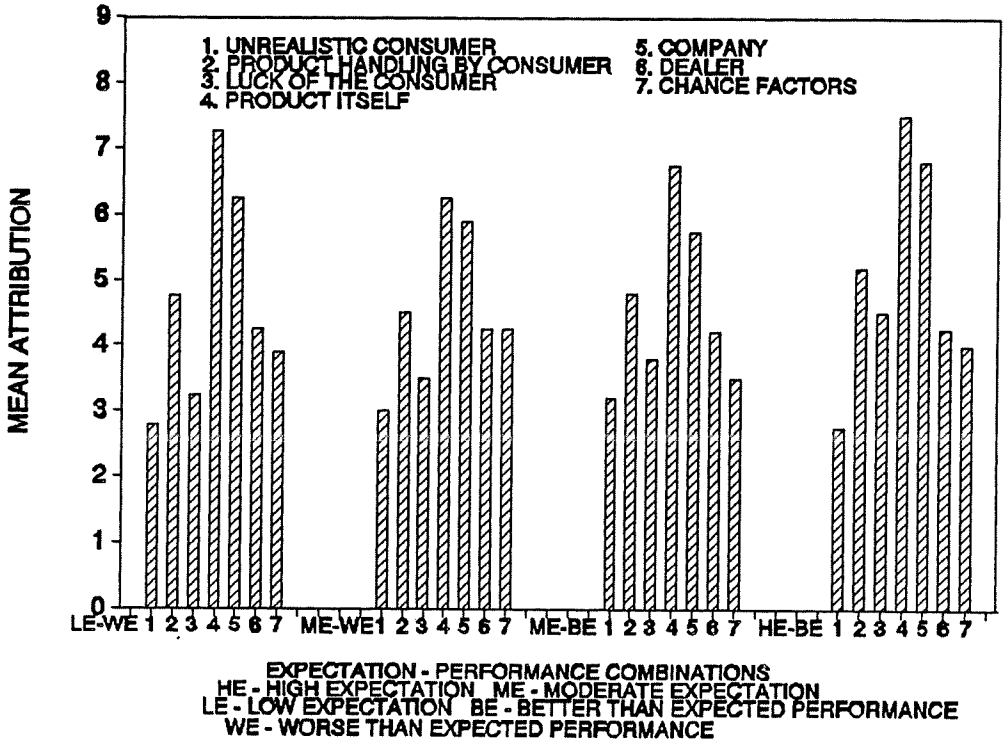
Second. Raising consumer expectations about a product seems to be a desirable marketing strategy. This finding goes against the findings of Bhandari (1978) and Ross & Craft (1983). However, two factors may be responsible for the divergence of results. Whereas, Bhandari and Ross & Craft had used actual consumers in their studies, the present experiment had observers as subjects. Secondly, Bhandari and Ross & Craft had used consumer non-durables (dishwashing liquid and canned peaches respectively) while in the present study, expensive durable products (Color TV and Two-in-One) were used which require considerable involvement of consumers in purchase decision process.

Third. People do not differentiate between luck and chance factors. Both are seen as external factors, some causal happenings in the environment. One interesting finding in this context is that strong luck and chance attributions have been made in all extreme disconfirmation situations.

Limitations

There is no doubt that experimental tasks involve some degree of artificiality due to the limitations in the choice of respondents and the nature of informational cues used. For example, in the present study IIM Ahmedabad students (PGPs, FPMs,& FDPs) were used as observers. Some of these respondents had some problems in identifying themselves with expensive products, especially Color TV. This had led to some

Figure 12
Mean Attribution to Different Factors
Under Moderate Disconfirmation



problems on the part of respondents in matching informational cues with product groups. Second, the sample in the present experiment was relatively small because only forty respondents were used to discern attributional patterns. A larger sample is needed to confirm the variations across different situations.

Concluding Comments

The present study is a step forward in bringing out the attributional framework in marketing situations so as to better understand consumer behavior under various disconfirmation situations. The present experiment has been carried out to test the hypothesis of differences between interpersonal and marketing attributions. The experiment proved that marketing contexts are different than interpersonal contexts and that raising expectations about durable products is a desirable marketing strategy.

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