

EXPLORING THE CONCEPT OF RETRIEVED EXPECTATIONS

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ABSTRACT

The expectations construct as conceptualized in consumer satisfaction research refers primarily to consumers' *prepurchase* beliefs about the overall performance or attribute levels of a product (Churchill and Surprenant 1982; Bearden and Teel 1983; LaTour and Peat 1979; Oliver 1980, 1987; Oliver and DeSarbo 1988; Tse and Wilton 1988). As such, the measurement of expectations should be performed prior to purchase and usage. In reality, however, many satisfaction studies defined expectations as a *prepurchase* construct but, due to research design limitations, measured them in a *postpurchase* context. That is, expectations were measured retrospectively (e.g., "Thinking back to the time before you purchased this product, how durable did you think it would be?"). This approach has some obvious limitations, particularly in terms of its impact on the nature of the expectations-satisfaction relationship. This paper explores the concept of *consumers' postpurchase memories of their prepurchase expectations*--referred to here as *retrieved expectations*-- and tests several hypotheses involving satisfaction and *retrieved expectations*.

INTRODUCTION

A considerable amount of research in the consumer satisfaction area has focused on the theoretical determinants of satisfaction. Playing a major role in the formation of consumers' satisfaction judgments was the concept of consumer expectations. Expectations have been conceptualized as consumers' *prepurchase* beliefs about the overall performance or attribute levels of a product (Churchill and Surprenant 1982; Bearden and Teel 1983; LaTour and Peat 1979; Oliver 1980, 1987; Oliver and DeSarbo 1988; Tse and Wilton 1988). As such, the measurement of expectations should be performed *prior* to purchase and usage.

In reality, however, many previous studies defined expectations as a *prepurchase* construct but, due to research design limitations, measured them in a *postpurchase* context. That is, expectations were measured retrospectively (e.g.,

"Thinking back to the time before you purchased this product, how durable did you think it would be?"). This approach has several obvious limitations.

First, expectations measured retrospectively are subject to a considerable amount of memory loss and/or perceptual distortion on the part of the consumer. Second, it introduces a possible interaction between actual outcomes and prior expectations. Oliver (1981) in particular strongly cautions against this type of measure, but admits that for some aspects of the satisfaction process, "anticipatory expectations will be difficult to achieve because individual identities cannot be known a priori (e.g., complainers) or because the measurement process itself may influence the probability of the occurrence of behaviors (e.g., if all shoppers were queried about the outcomes of complaining behavior before they knew whether they would have cause for a complaint)" (p. 39). Oliver notes that expectations are best measured *ex post* in these cases, and does so himself in one study (Oliver 1987).

This paper therefore argues that a distinction between *actual prepurchase expectations* and *consumers' postpurchase memories of their prepurchase expectations*--referred to here as *retrieved expectations*--should be made. It discusses the theoretical differences between these two constructs and reports on a telephone survey of 404 new carpet owners which examined consumers' satisfaction levels and *retrieved expectations*. While the concepts presented here are exploratory in nature, they may shed new light on the concept of consumers expectations and their relationship with consumer satisfaction.

The paper is organized in the following manner. First, a summary of existing expectations-satisfaction research is provided, followed by a discussion of the concept of *retrieved expectations*. Next, the research design and methodology are presented, as well as two exploratory hypotheses about the satisfaction-*retrieved expectations* relationship. Results are presented with a discussion of the managerial implications and directions for future research.

THEORETICAL BACKGROUND

Consumer Expectations and Satisfaction

Most theoretical and empirical research in consumer satisfaction has supported a positive relationship between prepurchase expectations and satisfaction (e.g., Bearden and Teel 1983; Churchill and Surprenant 1982; Oliver 1987; Oliver and DeSarbo 1988; Tse and Wilton 1988). That is, the higher (lower) one's original expectations, the higher (lower) the satisfaction level reported by consumers. Expectations have been found to have direct effects on satisfaction, as well as indirect effects since expectations are typically compared with product performance levels to form confirmation/disconfirmation beliefs. Negative disconfirmation (when performance falls below expectations) leads to dissatisfaction; with confirmation and positive disconfirmation (when performance matches or exceeds expectations), satisfaction occurs (Oliver 1980).

Support for a positive expectations-satisfaction relationship is found in two separate but distinct theoretical frameworks. The first is Helson's (1948) adaptation level theory. Helson argued that expectations are a baseline against which subsequent product evaluations are made. They therefore serve as an adaptation level which "sustains subsequent evaluations in that positive and negative deviations will remain in the general vicinity of one's position. Only large impacts on the adaptation level will change the final tone of the subject's evaluation" (Oliver 1980, p. 461).

Further theoretical support is found in assimilation/contrast theory (Anderson 1973; Hovland, Harvey, and Sherif 1957; Sherif and Hovland 1961). Anderson proposed that consumer satisfaction judgments will assimilate toward original expectation levels unless there is a significant expectations-performance discrepancy. When a considerable difference exists between a consumer's original expectations and eventual product performance, a contrast effect will occur--a magnification of the discrepancy which results in greater dissatisfaction (1973). As stated earlier, most tests of assimilation/contrast theory in consumer satisfaction support the assimilation effect, i.e., a positive expectations-satisfaction

relationship.

Retrieved Expectations and Satisfaction

As previously defined, consumer expectations can be theoretical determinants of satisfaction only if they are formed prior to purchase. Valid and reliable measures of expectations require that they be taken before purchase as well. This has not always been the case in the literature, where expectations (and some other key constructs) were frequently measured simultaneously (e.g., Duhaime 1988; Kennedy and Thirkell 1988; Oliver 1987; Swan and Combs 1976; Westbrook 1987).

Of primary concern in these studies are the conclusions and implications drawn from the results. The authors generally go no further than to note the methodological limitations of their expectations measure, yet continue to espouse empirical support for a positive *prepurchase* expectations-satisfaction relationship. This may not be the case for a *retrieved* expectations-satisfaction relationship, however. That is, rather than assessing the impact of prepurchase expectations on consumer satisfaction, they have actually measured the impact of satisfaction level (and sometimes subsequent complaining behaviors) on what consumers *remember* their original expectations to be. Retrieved expectations can therefore be defined as those expectations which the consumer reports he or she had about the product originally. As such, they are subject to a considerable amount of memory loss and perceptual distortion, and are quite distinct from the consumer's original expectation levels. The difference between prepurchase and retrieved expectations may be further exaggerated when either the time between purchase and the measurement of expectations is considerable, or if the consumer engages in a substantial amount of postpurchase complaining behavior.

The concept of retrieved expectations has considerable usefulness, however, if treated as a true postpurchase construct. If, as argued often in the satisfaction literature, expectations serve as a standard of comparison, it is the memory of what expectations were (retrieved expectations) rather than actual prior expectations that will be processed and compared to performance. There are important managerial and theoretical

Figure 1
Summary of Expectation Studies

Study	Product Category	Research Design*	Expectations Measure Used	Expectations Type	Empirical Findings
Bearden and Teel (1983)	auto repair services	L survey	sum of attributes	Prior	Expect. and Satis. positively related
Churchill & Surprenant (1982)	plant	Experiment	attributes and global measures	Prior**	Expect. and Satis. positively related
	videodisc				Expect. and Satis. not sig. related
Duhaime (1988)	car dealers	CS survey	attributes x importance	Retrieved	Expect. and Satis. positively related for satis. group, and negatively for dissat. group
Kennedy & Thirkell (1988)	automobiles	CS survey	attributes x importance	Retrieved	Expect. and Satis. positively related for satis. group, and negatively for dissat. group
Oliver (1980)	flu vaccine program	L survey	attributes x evaluation	Prior	Expect. and Satis. positively related
Oliver (1987)	MBA program	CS survey	attributes and global	Retrieved	Expect. and Satis. positively related
Oliver and Linda (1981)	sleepwear	Mall intercept exper.	attributes	Prior	Expect. and Satis. positively related
Oliver and DeSarbo (1988)	stock market scenarios	Experiment	high/low	Prior	Expect. and Satis. positively related
Swan (1988)	restaurant food/service	L survey	sum of attributes	Prior	Expect. and Satis. not related
Swan and Combs (1976)	clothing	CS survey	sum of attributes	Retrieved	Expect. and Satis. negatively related
Swan and Trawick (1981)	restaurant food	L survey	attributes x evaluation	Prior***	Expect. and Satis. positively related
Tse and Wilton (1988)	miniature record	Experiment	favorable/unfavorable	Prior	Predictive Expect. and Satisfaction positively related; Ideal Expec. and Satis. negatively related
Westbrook (1987)	cable TV	CS survey	global x evaluation	Retrieved	Expect. and Satis. positively related
	automobiles				Expect. of benefits and Satis. positively related; Expect. of problems and Satis. inversely related

*L survey = longitudinal survey; CS survey = cross-sectional survey

**Subjects did not actually use or purchase product. Visual inspection only.

***Expectations measured before dining, but only *after* a restaurant visit.

implications of this distinction.

First, in the area of complaint management, knowledge of the consumer's actual prior expectations may be far less important than the consumer's current or retrieved expectations since the consumer's service expectations will be based on their more recent experiences (e.g., past complaint attempts) and memories of the dissatisfactory product experience. Regardless of the expectation level the consumer held originally, the consumer is likely to base most postpurchase behavior (e.g., complaining, word-of-mouth, attitude formation) on the level remembered (or created) after product consumption. It could even be argued that new expectations are formed after purchase, not remembered from before purchase. This might occur when consumers are unfamiliar with product attributes until actual usage, or when product expectations are vague or non-specific.

Second, the distinction between prepurchase and retrieved expectations may provide an explanation for the limited empirical support found for contrast theory in the satisfaction determination process. When applied to consumer satisfaction, contrast theory proposes that if the discrepancy between prior expectations and performance is large, a contrast or magnification effect dominates, causing the discrepancy to be perceived as larger than it actually is. This contrast would lead to an inverse expectations-satisfaction relationship and extreme levels of satisfaction or dissatisfaction, depending on the direction of the discrepancy (Anderson 1973). LaTour and Peat (1979) noted, however, that "a contrast effect for postconsumption beliefs about the performance of a product on an attribute has never been demonstrated" (p. 433). Many later studies (Churchill and Surprenant 1982; Bearden and Teel 1983; Oliver 1980; Tse and Wilton 1988; Westbrook 1987) also failed to find contrast effects. LaTour and Peat discarded the contrast effect evidence found in Swan and Combs (1976) study because their study was based on recall of satisfying and dissatisfying purchases, thus leading to possible "retrospective distortion of expectations" (p. 433). Similarly, Duhaime (1988) and Kennedy and Thirkell (1988) both found evidence supporting the contrast hypothesis (an inverse expectations-satisfaction relationship) *when expectations were measured retrospectively* (i.e.,

when retrieved expectations were used). Thus, the manifestation of the contrast effect may be evident only in terms of retrieved expectations, and the contrast effect may have been dismissed as a viable theoretical explanation because of previous emphasis on prepurchase expectations.

Figure 1 summarizes some of the major consumer satisfaction studies which investigated consumer expectations. For each study, those measuring prepurchase versus retrieved expectations are indicated. As indicated by Figure 1, those studies using retrieved expectations were more likely to find an inverse relationship between expectations and satisfaction than those in which prepurchase expectations were used.

HYPOTHESES

As discussed previously, contrast effects would account for an inverse relationship between satisfaction and retrieved expectations. That is, dissatisfied consumers should report significantly higher retrieved expectations than satisfied consumers because dissatisfied consumers are more likely to perceive large expectations-performance discrepancies and magnify the discrepancy. One way in which the discrepancy may be magnified is that consumers may justify their reported dissatisfaction levels by retrospectively raising their expectation levels and reporting higher retrieved expectations. It must be noted that the ordering of the constructs differs from the standard satisfaction paradigm in which expectations precede satisfaction. By definition, retrieved expectations occur after purchase/usage, thus either following or occurring simultaneously with satisfaction judgments.

In addition to a main effect of (dis)satisfaction on retrieved expectations, a main effect of complaining behavior is hypothesized. Complainers as a group are more likely to report higher retrieved expectations since they may feel a need to justify their formal complaining behavior. In addition, the correlation between dissatisfaction and complaining behavior leads to a similar main effect. Thus:

H1: The retrieved expectation levels of dissatisfied consumers will be significantly higher than the retrieved expectation levels of

satisfied consumers.

H2: The retrieved expectation levels of complainers will be significantly higher than the retrieved expectation levels of noncomplainers.

THE RESEARCH STUDY

The hypotheses were tested as part of a larger study examining consumer satisfaction and complaining behavior in which consumers were divided into two groups--Complainers and Noncomplainers--based on whether or not they had formally complained to a carpet manufacturer about a recent carpet purchase.

Sampling

A nationwide telephone survey of 404 carpet consumers was conducted after preliminary focus groups. All of the consumers had purchased the same brand of carpeting within the last year. Stratified random sampling was conducted from the carpet manufacturer's warranty lists until quotas were reached in each group (Complainers = 196; Noncomplainers = 208).

Measures

Consumers were divided into satisfied and dissatisfied groups based on their responses to the question, "Overall, how satisfied are you with your (brand name inserted) carpet?" A four-point scale was used. Those reporting being very satisfied or somewhat satisfied were combined to form the Satisfied consumer group. Those who were very dissatisfied or somewhat dissatisfied were combined to form the Dissatisfied group.

The retrieved expectations measure was operationalized as the sum of three product attribute expectations, each measured on a four-point scale from "definitely would expect" to "definitely would not expect." The attributes were carpet plushness, durability, and stain resistance. They were selected on the basis of focus group results and previous proprietary research which indicated that carpet consumers consider these three attributes most important when selecting and evaluating carpet. Support for an attribute-based

measure of expectations can be found in Bearden and Teel (1983).

RESULTS

Mean levels of retrieved expectations for Complainers and Noncomplainers and for Satisfied and Dissatisfied Consumers are shown in Table 1. T-tests were used to test the hypotheses since the dependent variable (retrieved expectations) is interval and the independent variables (Satisfied/Dissatisfied and Complainers/Noncomplainers) are nominal. More powerful correlation analysis could have been conducted as well, but since the consumers were divided into groups as part of a larger study, t-tests were deemed acceptable.

Table 1
T-test Results: Retrieved Expectations

Consumer Group	Mean* (sd)	T	df	P-value
H1:				
Dissatisfied Consumers	10.78 (1.45)	4.61	402	0.0001
Satisfied Consumers	10.03 (1.53)			
H2:				
Noncomplainers	9.98 (1.54)	-3.96	402	0.0001
Complainers	10.58 (1.49)			

*Maximum Scale Value Possible: 12

As Table 1 shows, H1 is supported in that dissatisfied consumers did report significantly higher retrieved expectation levels than satisfied consumers ($p = 0.0001$ for a one-tail test). H2 stated that complainers would have significantly higher retrieved expectation levels than noncomplaining consumers. This hypothesis was also supported ($p = 0.0001$ for a one-tail test). Thus, retrieved expectation levels *increase* as satisfaction *decreases*. Retrieved expectations were also higher among complainers when compared to noncomplainers.

It should be noted that, despite the significant differences in mean expectation levels among the consumer groups, retrieved expectation levels appear to be uniformly high across all the groups represented in Table 1. No mean is lower than around ten out of a possible maximum value of

12. This is most likely due to the extensive consumer advertising and retail promotion campaign which emphasized the superior (in fact revolutionary) quality of the new carpet brand.

DISCUSSION

Limitations

Of course, there are limitations which must be acknowledged when evaluating the results of this research. Due to the use of a four-point scale for satisfaction, some lack of variability in this measurement may have occurred. Since this variable was further categorized, however, this may not have presented a major problem. In addition, it is possible that the large sample size may have contributed to some of the significant effects found (Sawyer and Ball 1981). Obviously, these findings are exploratory and cannot be generalized to other populations or settings. But the importance of a re-examination of the concept of consumer expectations and the expectations-satisfaction relationship is validated.

Implications

The distinction between prior and retrieved expectations, and their respective roles as antecedents to and consequences of satisfaction, has important implications. First, the difference between these constructs leads to a questioning of the validity of assimilation theory as a foundation for many of the explanations offered in satisfaction research. The positive expectations-satisfaction relationship which has been found across a variety of studies, and is now commonly accepted, may need re-examination.

Second, researchers should exercise caution when conceptualizing and operationalizing their expectation measures. The possibility of different results depending upon the nature and timing of the expectations construct should be acknowledged. Explicit recognition of the difference between actual prior expectations and postpurchase or retrieved expectations must be acknowledged in future research. The contrast effect, in particular, can only be meaningfully talked about in relation to retrieved rather than prepurchase expectations, since actual prior

expectations by definition cannot change after purchase.

Future research should examine the independence of prior and retrieved expectations. Longitudinal studies could be conducted in which consumer expectations are measured before and after purchase in order to compare prior and retrieved expectations. In addition, additional relationships between retrieved expectations and other constructs of interest should be tested. For example, are retrieved expectations and purchase intention related, and in what way? Does this relationship differ from the relationship between prior expectations and purchase intention? Furthermore, retrieved expectations may actually be modified several times in the postpurchase consumer sequence--after purchase, after usage, after initial (dis)satisfaction judgment, after complaining, and beyond. Several study waves would be necessary to truly capture the concept of retrieved expectations. The relationships between each level of retrieved expectations should be investigated in addition to the relationships with other theoretical constructs.

Marketing and advertising managers must exercise caution with respect to the creation of prepurchase expectations *and* the management of retrieved expectations. Advertising which creates high product expectations will contribute to consumer satisfaction only when backed by product performance which meets those expectations. When consumers perceive that performance does not meet their expectations, dissatisfaction and possibly complaining behavior can occur. Should dissatisfaction and/or formal complaining behavior result, managers must be aware of the distortion of consumers' prepurchase beliefs that may occur. Consumers' negative postpurchase experiences can influence their memories of prepurchase events or cognitions. Thus, customer service managers in particular must be aware of the possible exaggerations and/or counterarguments that consumers may make either during the complaining process or when future service encounters occur. Consumers may not believe future advertising claims or salespersons' assurances if they have been dissatisfied in the past or have had to complain in any way. Furthermore, the level of consumers' *retrieved expectations* should be of most concern to service

and complaint managers since these expectations are most likely to be the standard or frame of reference against which future purchase decisions are made. For complainers, because the consumption experience has been particularly negative, they may no longer compare performance to prior expectations but to their modified, probably higher, retrieved expectations.

REFERENCES

- Anderson, Rolph E. (1973), "Consumer Dissatisfaction: The Effect of Disconfirmed Expectancy on Perceived Product Performance," *Journal of Marketing Research*, 10 (February), 38-44.
- Bearden, William O. and Jesse E. Teel (1983), "Selected Determinants of Consumer Satisfaction and Complaint Reports," *Journal of Marketing*, 20 (February), 21-28.
- Churchill, Gilbert A., Jr. and Carol Surprenant (1982), "An Investigation into the Determinants of Customer Satisfaction," *Journal of Marketing Research*, 19 (November), 491-504.
- Duhaime, Carole P. (1988), "Consumer Satisfaction with the Distribution System of Durable Products," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 1, 53-59.
- Helson, Harry (1948), "Adaptation-Level as a Basis for a Quantitative Theory of Frames of Reference," *Psychological Review*, 55 (November), 297-313.
- Hovland, Carl I., O. J. Harvey and Muzafer Sherif (1957), "Assimilation and Contrast Effects in Reactions to Communication and Attitude Change," *Journal of Abnormal and Social Psychology*, 55 (July), 244-252.
- Kennedy, John R. and Peter C. Thirkell (1988), "An Extended Perspective on the Antecedents of Satisfaction," in *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 1, 2-9.
- LaTour, Stephen A. and Nancy C. Peat (1979), "Conceptual and Methodological Issues in Consumer Satisfaction Research," in *Advances in Consumer Research*, Vol. 6, William L. Wilkie, ed. Ann Arbor, MI: Association for Consumer Research, 431-437.
- Oliver, Richard L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," *Journal of Marketing Research*, 17 (November) 460-469.
- Oliver, Richard L. (1981), "Measurement and Evaluation of Satisfaction Processes in Retail Settings," *Journal of Retailing*, 57 (Fall), 25-48.
- Oliver, Richard L. (1987), "An Investigation of the Interrelationship Between Consumer (Dis)satisfaction and Complaint Reports," in *Advances in Consumer Research*, Vol. 14, Melanie Wallendorf and Paul Anderson, eds. Ann Arbor, MI: Association for Consumer Research, 218-222.
- Oliver, Richard L. and Wayne S. DeSarbo (1988), "Response Determinants in Satisfaction Judgments," *Journal of Consumer Research*, 14 (March), 495-507.
- Oliver, Richard L. and Gerald Linda (1981), "Effect of Satisfaction and its Antecedents on Consumer Preference and Intention," in *Advances in Consumer Research*, Vol. 8, Kent B. Monroe, ed. Ann Arbor, MI: Association for Consumer Research, 88-93.
- Sawyer, Alan G. and A. Dwayne Ball (1981), "Statistical Power and Effect Size in Marketing Research," *Journal of Marketing Research*, 18 (August), 275-290.
- Sherif, Muzafer and Carl I. Hovland (1961), *Social Judgments: Assimilation and Contrast Effects in Communication and Attitude Change*, New Haven: Yale University Press.
- Swan, John E. (1988), "Consumer Satisfaction Related to Disconfirmation of Expectations and Product Performance," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 1, 40-47.
- Swan, John E. and Linda Jones Combs (1976), "Product Performance and Consumer Satisfaction: A New Concept," *Journal of Marketing*, 40 (April), 25-33.
- Swan, John E. and I. Fredrick Trawick (1981), "Satisfaction Explained by Desired Vs. Predictive Expectations," in *Proceedings of the AMA Educators' Conference*, Kenneth L. Bernhardt and William J. Kehoe, eds. Chicago, IL: American Marketing Association, 170-173.
- Tse, David K. and Peter C. Wilton (1988), "Models of Consumer Satisfaction Formation: An Extension," *Journal of Marketing Research*, 25 (May), 204-212.
- Westbrook, Robert A. (1987), "Product/Consumption-Based Affective Responses and Postpurchase Processes," *Journal of Marketing Research*, 24 (August), 258-270.

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