

# THE USE OF COMPARISON STANDARDS IN CUSTOMER SATISFACTION RESEARCH AND MANAGEMENT: A REVIEW AND PROPOSED TYPOLOGY

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This paper reviews the conceptualization, measurement, and empirical findings related to the use of alternative comparison standards in consumer satisfaction research. The evolution of this construct is analyzed with respect to: 1) the move from a single standard to multiple standards, 2) the contingent factors which influence comparison standard choice, and 3) the effects of alternative comparison standards on satisfaction judgments. Evidence suggests that the type of comparison standard determines the nature of its relationship with satisfaction. A typology of comparison standards is developed, and implications for satisfaction research and managerial practice are provided.

## INTRODUCTION

Consumer satisfaction research has increased dramatically in the last two decades (Woodruff and Gardial 1996). Many firms are using customer satisfaction data to diagnose product quality and service problems, improve customer retention rates, or document the effectiveness of a Total Quality Management (TQM) program. Recent research on the customer satisfaction-profitability link has also contributed to the increase in (and perceived importance of) consumer satisfaction research (e.g., Fornell and Wernerfelt 1987; Rust and Zahorik 1993). This research documents the empirical chain that begins with customer satisfaction and culminates in increased profitability (via higher customer loyalty, improved retention rates, and increased market share). Thus, consumer satisfaction issues have substantial bottom-line financial implications as well as quality and service considerations.

Given the importance of consumer satisfaction research to current managerial practice, an examination of the exact determinants of satisfaction and a review of previous research seem appropriate. Limitations in current conceptualizations, operationalizations, and/or research methodology with respect to consumer satisfaction should be addressed. To this end, this research examines the role of one of the primary drivers of consumer satisfaction: the prepurchase comparison standard(s) consumers use against which performance is compared.

The concept of comparison standards has played a central role in models of consumer satisfaction/dissatisfaction (CS/D). Comparison standards refer to the referents used by consumers to evaluate product performance and form disconfirmation and satisfaction judgments. An early conceptualization was Oliver's (1980) notion of predictive expectations (i.e., predictions about a product's overall performance or attribute levels) as a prepurchase standard. The process of confirming or disconfirming prior expectations then leads to consumer judgments of (dis)satisfaction. Referred to as the expectancy-disconfirmation process, this paradigm dominated early satisfaction research (Cardozo 1965; Anderson 1973; Olson and Dover 1976; LaTour and Peat 1979; Oliver 1980; Churchill and Surprenant 1982; Bearden and Teel 1983).

Recent research has called for a re-examination of the traditional expectations construct, arguing for the use of alternative comparison standards (Woodruff et al. 1991; Boulding et al. 1993; Gardial et al. 1993, 1994; Spreng and Olshavsky 1993; Woodruff 1993; Zeithaml, Berry, and Parasuraman 1993). A survey of the standards literature reveals a lack of consensus on the exact nature and meaning of this construct, however. Little standardization in terminology, conceptual development and measurement is evident (for reviews see Woodruff et al. 1991 and Gardial et al. 1993). To date, comparison standards based on predictive

expectations (LaTour and Peat 1979; Oliver 1980), ideals (Parasuraman, Zeithaml, and Berry 1988), desires (Spreng and Olshavsky 1993), product and brand experiences (Woodruff, Cadotte, and Jenkins 1983; Cadotte, Woodruff, and Jenkins 1987), brand comparisons (Prakash 1984), and equity (Miller 1977; Tse and Wilton 1988; Oliver and Swan 1989) have all been proposed or tested. Separate models have even been developed for service expectations (Zeithaml, Berry, and Parasuraman 1993).

One problem with the broadening of the comparison standard construct has been the resulting variation in its theoretical relationships with satisfaction, other satisfaction antecedents (e.g., disconfirmation), and satisfaction outcomes. In fact, Peterson and Wilson (1992) noted that antecedents such as expectations may be partially responsible for the unusually skewed distributions of observed satisfaction scores (p. 62). Theoretical relationships vary depending on the type of standard employed and measurement timing (Cadotte, Woodruff, and Jenkins 1987; Oliver 1987; Halstead 1993). The particular standards used by consumers have, in turn, been found to vary according to numerous situational factors (e.g., Cadotte, Woodruff, and Jenkins 1987; Bolting and Woodruff 1988; Gardial et al. 1993). Differences in the comparison standards used (or recalled) by consumers in postpurchase situations as opposed to the more frequently studied prepurchase contexts have also been documented (Halstead 1993; Gardial et al. 1994).

From a managerial perspective, the variation in consumers' usage of comparison standards poses challenges as well. Identifying the appropriate comparison standard used by consumers in a given usage situation will be important if satisfaction is to be effectively understood and managed. For example, knowing that customers desire product performance which is identical to (or better than) a competing brand will help in product design.

Given the variety of comparison standards used in satisfaction research, a critical review of this construct is needed. Several calls for a typology of comparison standards have also been made (Cadotte, Woodruff, and Jenkins 1987; Woodruff et al. 1991; Gardial et al. 1993). Accordingly, this paper reviews the conceptual and methodological differences in the major studies that examined the standards issue in satisfaction. The evolution from a single expectations type (expectations as predictions) to multiple comparison standards is documented. Next, the situational factors influencing consumers' choice of comparison standards are discussed. This is followed by a proposed typology of comparison standards in an attempt to integrate the findings on consumer comparison standards and guide future satisfaction research. Finally, managerial and research implications are presented.

## BACKGROUND AND LITERATURE REVIEW

Table 1 presents a summary of the comparison standards/satisfaction studies appearing in some of the major marketing journals (i.e., JM, JMR, JCR, JAMS, JR) since 1965. Frequently cited proceedings and articles from the customer satisfaction specialty journal JCS/D & CB were also included. Given space limitations, not every study was included, but the majority of important studies is included in Table 1.

Several historical trends can be noted. First, as early as the 1970s, researchers hypothesized that consumer satisfaction might be based on more than one type of expectation (e.g., Olson and Dover 1976; Miller 1977). Olson and Dover criticized the "shotgun approaches" used by previous researchers in the manipulation of expectations that created "a conceptual vagueness regarding the expectation construct" (p. 168). Miller then identified a variety of consumer standards against which performance might be compared, including the Ideal (what "can be"), the Expected (what "will be"), the Minimum Tolerable (what "must be"), and the Deserved (what "should be").

The empirical studies that followed may have been responding to Olson and Dover's criticism in that a very narrow approach to the conceptualization of expectations emerged in the next decade. Overwhelmingly, researchers followed the LaTour and Peat (1979) and Oliver (1980) definition of expectations, predictive beliefs about a product's attribute and/or performance levels. Thus, a single comparison standard emerged--predictive expectations--Miller's concept of what "will be." With a few exceptions, these empirical studies supported a positive relationship between expectations and satisfaction.

For example, a second trend documented in Table 1 is the difference in empirical results with respect to various study characteristics. One critical difference is the timing of the comparison standard measurement. Studies that measured expectations after product exposure often found either negative expectations/satisfaction relationships (Kennedy and Thirkell 1988; Droge and Halstead 1991) or no significant relationship (e.g., Anderson and Sullivan 1990). Measuring expectations before product exposure resulted in a positive relationship between expectations and satisfaction (e.g., Oliver 1980; Oliver and DeSarbo 1988; Tse and Wilton 1988). One conclusion that can be reached is that these differences are more than just research artifacts. That is, standards used in prepurchase versus postpurchase contexts actually do differ, and that any typology of standards should reflect the pre-versus post-usage classification.

**TABLE 1**  
**THE USE OF COMPARISON STANDARDS IN CONSUMER SATISFACTION RESEARCH**

Study	Conceptualization	Research Method	Measurement Timing	Research Findings
Cardozo 1965	Information gathered from a variety of sources which is used as a guideline to evaluate a product.	Laboratory experiment	Expectations measured before product exposure.	Expectations (and effort) had direct, positive effect on product evaluations for both product and shopping experience. Consumer satisfaction involves evaluation of an entire product offering.
Anderson 1973	Expectations viewed within the context of four psychological theories; never clearly conceptualized	Laboratory experiment	Expectations measured before product exposure	Assimilation-contrast theory was supported. Product ratings were assimilated toward expectations (a positive relationship) until expectations were very high, when evaluation decreased significantly (a contrast effect).
Olson and Dover 1976	Expectations conceptualized as individual belief elements in a consumer's cognitive structure regarding the product; the perceived likelihood that a product possesses a certain characteristics or attribute or will lead to a particular event or outcome.	Longitudinal laboratory experiment	Expectations manipulated before product exposure	Product usage experience had a strong impact on belief-expectancy elements of cognitive structure, supporting the argument that expectations are specific beliefs within consumers' cognitive structure. Thus, existing theories on beliefs and attitudes can be used in consumer satisfaction/dissatisfaction research.
Miller 1977	4 types of expectations were defined: The Ideal: what performance "can be" The Expected: what performance "will be" The Minimum Tolerable: what performance "must be" The Deserved: what performance "should be"	NA*	NA*	Model proposed that the satisfaction process sorts out different "types" of expectations brought to a purchase/consumption situation and suggested consideration of "latitudes" of satisfaction and dissatisfaction. Suggested scales for each expectation type were provided.
LaTour and Peat 1979	Preconsumption beliefs about the overall performance or attribute levels of a product	NA*	NA*	Model proposed basing consumer satisfaction on Thibaut and Kelley's (1959) comparison level theory. Satisfaction with an outcome is determined by the discrepancy between the outcome and a comparison standard. Three factors determine the comparison level: (1) outcomes directly experienced, (2) outcomes of similar others, and (3) special expectations created by the interaction.
Oliver 1980	In general, expectations were conceptualized as the initial standard or reference point against which subsequent judgments are made. Specifically, Oliver followed Olson and Dover's (1976) view that expectations are perceived belief probabilities of attribute occurrence. He operationalized them similar to attitudes, i.e., as outcome belief probabilities times the evaluation of outcome beliefs.	Field survey	Expectations measured before product exposure	Expectations were positively related to satisfaction.
Swan and Trawick 1981	Prepurchase beliefs about how a product will perform on important attributes.	Field survey	Expectations measured before product exposure	Expectations and satisfaction were positively related.

TABLE 1 CONTINUED

Study	Conceptualization	Research Method	Measurement Timing	Research Findings
Churchill and Surprenant 1982	Anticipated performance, which is a function of prior consumption experience and information available.	Laboratory experiment	Expectations were manipulated before product exposure	Plant: Expectations had negative effect on disconfirmation; direct effect on satisfaction. VDP: Expectations had no significant effect on satisfaction, but had an indirect effect on disconfirmation.
Woodruff, Cadotte and Jenkins 1983	Experience-based norms replace expectations as standard of comparison. Focal brand expectations were conceptualized as predictions about performance of the focal brand. Experience-based norms represent what a focal brand should be able to achieve. Two types of experience-based norms were identified: (1) brand-based norms (when one brand dominates consumer experiences), and (2) product-based norms (when consumers have experience with several brands)	NA*	NA*	Proposed model extended the disconfirmation paradigm by offering an expanded view of how prior product category and brand-specific experiences influence disconfirmation. It also reconceptualized the linkage between the cognitive process and emotion. Fifteen research hypotheses were suggested.
Bearden and Teel 1983	Summation of consumer belief about relevant product attributes.	Longitudinal survey	Expectations measured before and after product exposure	Expectations were positively related to satisfaction.
Westbrook 1987	Followed Day's (1977) conceptualization of the subjective likelihood of receiving product benefits, incurring problems and costs, overall levels of expectation and anticipation.	Field surveys	Expectations measured after product exposure.	Expectations were significantly positively related to satisfaction for autos, but not for cable TV.
Oliver and Winer 1987	Consumers' subjective evaluations of the value of that attribute at a particular point in time. Value is a function of 1) the evaluation of the subjective level of the attribute and, 2) evaluations of the attribute's uncertainty, ambiguity, and unknowability.	NA*	NA*	Model proposed three dimensions of expectation processing: 1) arousal (leading to passive or active expectations), 2) knowability (leading to knowable or unknowable outcomes), and 3) uncertainty or ambiguity. Each component then has a corresponding valence. Contribution of the model is in the suggestion of uncertainty, ambiguity, and unknowability as attributes which should be incorporated in expectations.
Cadotte, Woodruff and Jenkins 1987	Experience-based norms were introduced as a substitute for traditional focal brand expectations. The norms reflect consumers' desired performance and are constrained by the performance consumers think is possible based on their concrete experience(s) with known brands. Three comparison standards were evaluated: (1) product type norms, (2) best brand norms, and (3) brand expectations.	Longitudinal survey	Standards measured before product exposure	Product norms and best brand norms were better at explaining satisfaction variation than brand expectations. Comparison standards have differential effects on the prediction of satisfaction depending on the product category and situation.

TABLE 1 CONTINUED

Study	Conceptualization	Research Method	Measurement Timing	Research Findings
Tse and Wilton 1988	Three comparison standards were reviewed and tested: (1) expected (a product's expected or most likely performance; what "will" be, (2) ideal (the optimal performance a consumer can hope for; what "can be," and (3) equity (the performance the consumer ought to or deserves to receive).			The three standards had differential effects on satisfaction. Expectations had a direct positive effect. Equity had no significant effect, and ideal had an indirect negative effect on satisfaction.
Kennedy and Thirkell 1988	The benefits and costs associated with future product usage; both attribute-specific and overall expectations were identified	Mail survey with follow-up telephone survey.	Expectations measured after product exposure.	Expectations and satisfaction were positively correlated for satisfied customers, but negatively correlated for dissatisfied customers.
Oliver and DeSarbo 1988	Prepurchase predictions of product performance characteristics used as a baseline for disconfirmation judgments.	Laboratory experiment	Expectations manipulated before satisfaction measurement	Expectations had a significant positive effect on satisfaction which was not as large as the effects of disconfirmation and performance on satisfaction.
Anderson and Sullivan 1990	Used Oliver's (1980) definition of expectations: prepurchase adaptation standard used as a base-line for postpurchase evaluations.	Telephone survey	Expectations measured after service exposure	Expectations were positively related to quality and disconfirmation, but not to satisfaction. When quality is difficult to evaluate, expectations played a greater role in predicting satisfaction
Droge and Halstead 1991	Prepurchase beliefs or predictions about future performance used as a standard of comparison.	Telephone survey	Expectations measured after product exposure	Expectations significantly predicted satisfaction and affect for complainers, not non-complainers.
Woodruff et al. 1991	Five types of standards were reviewed: expectations, equity, experience-based norms, ideal and promises.	NA*	NA*	Emphasized likelihood of multiple comparison standards used in satisfaction responses, with standards changing as to type, level, perceptual distinctiveness, and means-end hierarchy level
Zeithaml, Berry, and Parasuraman 1993	Olson and Dover's (1979) definition of product expectations was expanded to include services. Expectations are pretrial beliefs about a product which serve as a standard of comparison against which subsequent performance is judged. 3 types of service expectations were identified: (1) predicted service expectations (the service level customers believe is likely to occur), (2) desired service expectations (the service level customers hope to receive), and (3) adequate service expectations (the service level customers will accept).	Focus group interviews	Expectations assessed in open-ended questions by exploratory focus groups	A conceptual model was proposed which defined the nature and determinants of consumers' service expectations. Seventeen service expectations propositions were presented and divided into four groups: (1) the expected service component, (2) antecedents of desired service, (3) antecedents of adequate service, and (4) antecedents of both predicted and desired service. The model distinguished between satisfaction and service quality assessments by arguing that predicted service is relevant only for the latter.

TABLE 1 CONTINUED

Study	Conceptualization	Research Method	Measurement Timing	Research Findings
Spreng and Olshavsky 1993	Consumer desires was used as the comparison standard rather than expectations. Desires were defined as the attributes, levels of attributes, and benefits that consumers believe will lead to higher level values that comprise their life goals and guide their behaviors. Desires congruency is used instead of the traditional disconfirmation of expectations.	Laboratory experiment	Expectations manipulated before product exposure  Desires (benefit levels) measured before product exposure	Expectations did not have a strong significant effect on satisfaction, but desires did. Desires congruency had a significant powerful effect on satisfaction whereas disconfirmation of expectations had no effect. Re-evaluation of the expentance-disconfirmation paradigm is recommended.
Boulding et al. 1993	2 classes of expectations were defined: Will expectations: expectations about what will happen in next service encounter Should expectations: what should happen in next service encounter, what customers feel they appropriately deserve.	Study 1: Laboratory experiment  Study 2: Field survey	Study 1: Expectations measured before and after service exposure  Study 2: Expectations measured after service exposure	Study 1: Will (should) expectations positively (negatively) influenced perceptions of quality.  Study 2: Consistent with Study 1.
Gardial et al. 1993	Standards were classified into seven categories including comparisons to other products, other people, other use experiences, other points in time, internal standards, and marketer supplied expectations.	Personal interviews	Verbalizations elicited after exposure to service	Multiple comparison standards used by consumers. Standards used vary according to level in the means-end hierarchy (standards related to product use experiences increased at higher levels--i.e., when consequences were considered vs. attributes).
Gardial et al. 1994	Two broad categories were identified: Pre- and postpurchase standards. Subcategories were then identified as: product category, product type, other brand, same brand, internal, marketer, and other standards.	Personal interviews	Retrospective verbalizations elicited (after exposure)	Pre- and postpurchase comparison standards varied by type. Other brands used as standard more in postpurchase context while internal standards used more before purchase. Use of between-brand comparisons increased after purchase.
Walker 1995	Predictive expectations--a prediction about what is likely to happen.	NA*	NA*	Expectations will vary depending on the <u>stage</u> in the consumption process. Three stages were identified: pre-consumption, consumption, and post-consumption. Compares to Gardial et al. 1994 regarding "stage" classification.
Droge, Halstead, and Mackoy 1997	Comparison standards may differ for "forced" choice situations. Non-chosen or competing alternatives may serve as standards in addition to predictive expectations, desires, and disconfirmation.	Two-wave self-administered survey	Expectations, desires, and competitive alternatives measured before consumer decision.	Overall satisfaction is influenced by satisfaction with chosen <u>and</u> nonchosen alternatives in addition to expectations, desires, and disconfirmation. Predictive expectations and desires were significantly negatively related to satisfaction.

TABLE 1 CONTINUED

Study	Conceptualization	Research Method	Measurement Timing	Research Findings
Woodruff 1997	Comparison standards may be based on desired customer <u>value</u> , with preference for specific attributes and consequences	NA*	NA*	Customer form satisfaction judgments based on how a product/service compares to their pre-constructed <u>desired value hierarchy</u> .
Oliver 1997	Expectations are primarily predictive probabilities or likelihoods of future events or product performance. Multiple expectations exist when you factor in customer "level-of-desire" which ranges from ideal to intolerable.	NA*	NA*	Expectations may vary by level of certainty with which they are held, knowability of predicted outcome, and degree of passivity. Expectations have several different comparative referents, but all become "channeled into expectations when the product or service is purchased" (p. 68).
Oliver 1997	Equity, like disconfirmation, is a comparison process which uses a prior standard for the comparison (p. 208)	NA*	NA*	Equity uses others' inputs and outcomes as the comparison standard and is used when attributes have fairness or preference implications.

\* NA Not Applicable

The third and most important trend is the move away from a single comparison standard (expectations) toward multiple comparison standards that might include expectations but incorporate distinctly unique standards as well. For example, Woodruff, Cadotte and Jenkins (1983) first proposed a model that replaced expectations with experience-based norms as the consumer's standard of comparison. Experience-based norms take into consideration that a consumer's past experience with other brands in a product category may influence satisfaction. These norms are developed by either deriving "the typical performance of a particular brand" or what might be "an average performance a consumer believes is typical of a group of similar brands" (Cadotte, Woodruff, and Jenkins 1987, p. 306). They found satisfaction models using experience-based norms (best brand and product category norms) were better predictors than models incorporating expectations.

Spreng and Olshavsky (1992, 1993) also tested alternative comparison standards by using consumer desires as a comparison standard in addition to expectations. Desires are the attributes and benefits that consumers believe will lead to higher level values that comprise their life goals and guide behavior. They found that desires had a strong significant impact on satisfaction, but expectations did not. Tse and Wilton (1988) also compared multiple comparison standards (in addition to expectations) and found differential effects on satisfaction. Their results support Spreng and Olshavsky's in that a desired or ideal standard exhibited significant effects on

satisfaction. Although Tse and Wilton refer to their standard as an "ideal" (following Miller's notion of ideal expectations), both Miller's and Tse and Wilton's conceptualizations are more closely aligned with the idea of desires. Clearly, standardization in terminology is needed.

Equity has been proposed as a potential comparison standard by some researchers (e.g., Tse and Wilton 1988; Oliver and Swan 1989; Woodruff et al. 1991). Equity generally refers to the fairness or rightness of something in comparison to other entities. Homans (1961) defined equitable exchanges as rewards which are proportional to inputs, leading to the development of an equity equation--the ratio of outcomes to inputs. This evaluative process regards the "input" (however conceptualized) as the real comparison standard. More recent theoretical work also posits that equity is a distinct cognition involving different comparative referents (Oliver 1997). That is, equity is a process of comparison rather than a comparison standard, similar in some ways to the disconfirmation process. As such, it affects satisfaction outcomes, but is not, per se, a comparison standard itself. The actual standards used when consumers use equity comparisons vary depending on the individual. In some cases, the standard used is the outcome/input ratio of other transactions, of other individuals, of a prototypical character, of an average group, or of any entity with which one has dealings (Oliver 1997). In addition, equity has not always been a consistently significant predictor of satisfaction, particularly for products

(e.g., Tse and Wilton 1988). The other three comparison standards have more consistently and directly influenced satisfaction processes. In interpersonal service situations (especially health care), equity does appear to play a greater role in satisfaction prediction than in traditional product or non-interpersonal service contexts. For example, Oliver (1997) argues that the equity comparison process is primarily passive, becoming more influential in interpersonal social exchanges (p. 208-209). Furthermore, he argues that equity becomes relevant primarily "when perceived inequity exists" (p. 209). Thus, while Oliver notes that equity perceptions may become more salient in influencing satisfaction, he also differentiates equity comparison processes from comparison standards. Accordingly, equity is not included in the proposed typology.

In summary, Table 1 shows that the role of comparison standards in satisfaction research has varied widely. However, the available research does reflect an emerging consensus regarding three types of standards: expectations, experience-based norms, and desires/ideals.

#### Factors Influencing Use of Comparison Standards

Which of the three comparison standards is used eventually by a consumer may depend on several contingent factors. Table 2 provides a summary of the consumer and situational variables that impact the comparison standards chosen by consumers and used in their satisfaction formation processes. This delineation is critical since empirical results (i.e., the prediction of satisfaction) vary according to the standard employed (see "Research Findings" portion of Table 1). Differences have been found in the standards used across varying product categories, information environments, involvement levels, consumer experience levels, and consumer processing levels. For example, Churchill and Surprenant's (1982) study found differences in consumers' use of expectations depending on whether the product was durable or nondurable. Cadotte, Woodruff, and Jenkins (1987) found that the evaluation standard used by consumers to determine satisfaction "clearly depends on which restaurant setting is being examined" (p. 312). In two out of three restaurant settings, different comparison standards (other than expectations) explained their data. This confirmed their 1983 (Woodruff, Cadotte and Jenkins) hypothesis that different situations lead to different evoked product sets. This in turn can lead to variation in the comparison standard used (and ultimately its relationship with satisfaction). The expectations/satisfaction model provided the worst fit with the data, yet other comparison standards were significant predictors (best brand and product norm standards).

As noted earlier, recent research has found differences in standards used depending on the evaluation stage.

Expectations appear to be primarily a prepurchase phenomenon which are significant in postpurchase evaluations only under certain conditions; whereas experience-based norms (especially brand comparisons) and desires appear to influence satisfaction processing primarily in postpurchase contexts, although they may be operational pre-choice as well. This has important implications for the development of a classification of comparison standards.

TABLE 2  
SUMMARY OF CONTINGENT  
FACTORS INFLUENCING USE OF  
COMPARISON STANDARDS

Conditions When Adoption of Standard by Consumer is Likely	Study Authors/Year
<b>EXPECTATIONS</b>	
Product or situational involvement is low	Bolfing and Woodruff 1988 Woodruff/Cadotte/Jenkins 1983
Information not readily available to consumers	Anderson and Sullivan 1990 Oliver and Winer 1987
Information available is ambiguous	LaTour and Peat 1979 Anderson and Sullivan 1990
Product is nondurable	Churchill and Surprenant 1982
<b>EXPERIENCE-BASED NORMS</b>	
Consumer familiarity or experience with product category is high	Gardial et al. 1993 Cadotte/Woodruff/Jenkins 1987 Woodruff/Cadotte/Jenkins 1983
Product or situational involvement is high	Bolfing and Woodruff 1988 Cadotte/Woodruff/Jenkins 1987
Product has already been purchased and used	Gardial et al. 1994
Choice alternatives are either non-comparable or in completely different product categories	Gardial et al. 1994
<b>DESIRES</b>	
Consumer processes on a higher level of the means end hierarchy (e.g., processing in terms of values rather than attributes)	Spreng and Olshavsky 1993 Gardial et al. 1993 Gardial et al. 1994
Consumer's goal is "ideal" attribute set	Spreng and Olshavsky 1993 Miller 1997
Product has already been purchased and used	Spreng and Olshavsky 1992 Spreng and Olshavsky 1993

#### THE PROPOSED TYPOLOGY OF COMPARISON STANDARDS

Classification schemes are important first steps in theory development because they are a primary means for organizing phenomena (Hunt 1983, p. 348). In marketing, classification schemes of consumer complaining behaviors (Singh 1988) and organizational buying decisions (Bunn 1993) have been

proposed and tested recently. Even the classic 4P's categorization of marketing decisions has been updated (van Waterschoot and Van den Bulte 1992). As noted earlier, calls have been made for a typology of standards in order to guide future theory-building efforts.

The typology proposed here is theoretically derived rather than empirically based (e.g., Hunt's notion of "logical partitioning"). The preceding review of theories and empirical findings served as the basis for the classification dimensions. Since no existing typology of standards is available, the typology is clearly somewhat exploratory in nature. However, it does integrate the wide body of literature on comparison standards and should serve as a useful guide for future research. Following Hunt's criteria, an attempt was made to make the categories collectively exhaustive while still maintaining some parsimony. Some empty cells do exist, but all categories are mutually exclusive. At the heart of the typology are the three major comparison standards, expectations, experience-based norms, and desires. This base was then expanded into several other dimensions for each of the three types (see Figure 1). These dimensions include:

1. the stage of the comparison made (prepurchase vs. postpurchase),
2. the nature of the comparison status (competitive vs. non-competitive),
3. the focus of any competitive comparison (competing brand vs. product category),
4. the level of abstraction of the comparison (attribute vs. overall or global),
5. the level of aggregation of the comparison standard (individual-level vs. market-level),
6. the overall level or height of the standard (high vs. low).

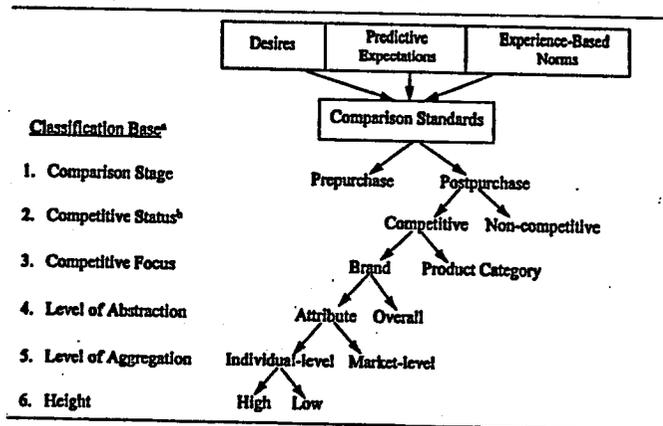
#### Classification Bases

1. Comparison stage (pre- vs. postpurchase). The recent work of Gardial et al. (1993, 1994) has established that postpurchase comparison standards are fundamentally different from prepurchase standards used by consumers. Relative to the prepurchase standards recalled by consumers, the postpurchase standards shifted away from "internal standards" or ideals and toward more frequent between-brand comparisons. This concept is supported by Spreng and Olshavsky (1992) as well. They found desires to be a significant determinant of satisfaction only after the product was purchased and used, whereas expectations were significant in prior evaluations, i.e., the decision to purchase and use a product. This represents a major shift in the conceptualization of comparison standards.

Previously, standards were presumed to be formed pre-choice and become operational post-choice in the exact same form. An "updating effect" on expectations has been acknowledged, but this adaptation was said to occur after each decision, not within the same decision context (e.g., Oliver 1980, 1987; Anderson, Fornell and Lehmann 1994; Johnson, Anderson and Fornell 1995). Thus, any new classification system must reflect this fundamental structural issue.

It is possible that differences in information availability (and consumer information utilization strategies) in pre- versus postpurchase contexts account for some of the differences in pre- and postpurchase standards. The type of information available to consumers (or sought after by them) may vary by stage. Similarly, consumer tendencies to use each information type may differ from one phase to the next. For example, consumer postpurchase evaluations have been found less likely than their prepurchase counterparts to be affected by advertisements (Kamins, Assael and Graham 1990), extrinsic cues such as brand names and country of origin (Tse and Gron 1992), and framing effects (Levin and Gaeth 1988). Postpurchase evaluations are typically dominated by trial (i.e., experience-based) information (Smith 1993). This suggests that, despite the summary in Table 2 which links information issues to the use of expectations, information utilization may play a role regardless of the comparison standard used.

FIGURE 1  
A PROPOSED TYPOLOGY OF CONSUMER  
COMPARISON STANDARDS



a. To save space, not all iterations of the classification scheme are diagrammed. With the exception of "b" noted below, omissions are straightforward.

b. Empty cells will occur in the non-competitive branch because the "competitive focus" classification becomes moot.

2. Nature of the Comparison Status (competitive vs. non-competitive). By definition, experience-based norms reflect comparison standards that are

competitive due to their inherent focus on the alternative brand(s) within the product category (e.g., best brand or product category norms). As a result, the non-competitive branch of experience-based norms represents an empty cell. That is, experience-based norms are always competitive; the other two standard types (expectations and desires) could be either competitive or noncompetitive in nature. For example, a consumer's desire for a healthy lifestyle may result in a desire for a convenient, healthy, and inexpensive food product. The consumer then forms a comparison to the Healthy Choice brand frozen entrees, yet desires a more economical brand. The standard is a desire (attributes desired which are consistent with a personal value-health), but is formed in relation to a competing alternative. Of course, if the standard of comparison is prior experience with the same brand (a repeat purchase, for example), it could be argued that this type of experience-based norm would fill the empty cell.

3. Competitive Focus (brand vs. product category). This represents the focus or target of a competitive comparison—either an individual brand or the product category as a whole. The product category focus represents the average or typical brand in the industry, according to the consumer's evoked set (e.g., Woodruff, Cadotte and Jenkins 1983). They also argue that brand-based norms can be classified further to include comparisons to a best brand, most preferred brand, most recently used brand, or a brand used by a reference person. For parsimony, this fourth-level classification is not in the proposed typology, but their suggestion raises an interesting issue with respect to the processing of competitively-based standards. If a single competitive brand comes to mind, the consumer's comparative processing of that brand as a standard may be quite different from the processing of multiple brands or the average or typical brand within the larger category. In the latter instances, additive or averaging effects will occur during processing. Processing a single brand suggests a simpler, shorter, but perhaps more intense processing effort. The typology proposed here declassifies experience-based norms (and other competitively-based comparison standards) to more precisely reflect processing differences when single brand versus multiple brand (i.e., product category) comparisons are made.

Furthermore, the experience-based norms construct may be insufficient in capturing the totality of brand and category comparisons. As noted earlier, expectations and desires can be formed in relation to

competing alternatives. In this case, both expectations and desires can focus on either a single brand or the product category as a whole. Gardial et al. (1994) support this concept, although they refer to desires or expectations about a product category as "evaluative criteria" (p. 552). An example of a product category-focused expectation would be, "I believe the Taurus will get more miles per gallon than any other car." A brand-focused expectation would be, "I believe the Taurus will get more miles per gallon than the Thunderbird."

4. Level of Abstraction (attribute vs. overall). This categorization reflects differences in the level of abstraction in consumer processing of the means-end hierarchy (Gutman 1982), from lower levels (attributes) to overall consequences and values. The research of Gardial et al. (1993, 1994) and Spreng and Olshavsky (1993) recognizes the importance of this distinction. For example, Gardial et al. (1994) found that, as consumers move from pre- to postpurchase processing, a shift toward higher levels of the means-end hierarchy occurs. This shift results in comparisons to overall values, benefits, and consequences rather than merely comparisons with product attributes. Furthermore, since Oliver (1980), researchers have found differences in the role of expectations depending on whether they were attribute or overall measures.
5. Level of Aggregation (individual-level vs. market-level). A clear distinction between individual-level expectations (or standards) and aggregate-level expectations is needed for two reasons. First, individual standards exhibit different characteristics than market-level standards. Individual expectations exhibit more psychological biases, change more rapidly, and adapt to current information more easily than aggregate expectations (e.g., Anderson, Fornell, and Lehmann 1994; Johnson, Anderson, and Fornell 1995). Market-level expectations typically mask these individual-level differences and are therefore more "rational" in nature (Van Raaij 1989). The propensity for continual updating is an important distinction since it may indicate a change not only in the level of the standard (rising or declining expectations) but a change in the nature of the standard itself (from expectations to experience-based norms). Table 2 highlighted how the availability of information and/or level of experience with a product (i.e., "updating" opportunities) may influence the choice of standard.

6. Overall Level or Height (high vs. low). This last category simply reflects whether the comparison standard will be high or low relative to either some objective measure (miles per gallon) or subjective perception of the consumer. Conceivably, consumers could have two different levels of the same standard for the same product, one which is high and another low, but this is unlikely. This does not mean that the comparison standard level cannot be modified after the consumption experience (e.g., Halstead 1993) or change in form altogether (e.g., Gardial et al. 1994). According to the proposed typology, however, this would not represent the same standard since postpurchase standards are considered to be conceptually distinct from prepurchase standards. Consuming the product, forming a satisfaction judgment, and possibly engaging in complaining or other postchoice behaviors may all serve to modify the original comparison standard so drastically that it loses theoretical meaning as a prepurchase construct. However, an expectation which is low and a desire which is high is clearly possible.

Theory building research requires integration of study concepts and results. When constructs and measures are not consistent within a research area, integration and theory building become more difficult; some standardization or consensus regarding key constructs is crucial. The proposed typology attempts to begin a standardization process based on the extant comparison standards literature. The review and typology also suggest several things for both satisfaction theory and management.

#### IMPLICATIONS FOR SATISFACTION THEORY

One implication of the typology is the positioning of the disconfirmation paradigm within the realm of satisfaction theory. Expectancy-disconfirmation theory has been limited by the traditional view that disconfirmation explains how prepurchase evaluations (e.g., expectations) influence postpurchase evaluations (e.g., disconfirmation, satisfaction). Yet evidence suggests that some standards are constructed postchoice (e.g., Gardial 1993, 1994). This may be especially likely when consumers are unfamiliar with a product category and therefore are unable to form prepurchase expectations (McGill and Iacobucci 1991; Halstead, Hartman and Schmidt 1994). Alternatively, some comparison standards are formed prechoice but are modified substantially postchoice by other postpurchase experiences (what Halstead (1993) refers to as "retrieved expectations"). Accordingly, disconfirmation theory should be broadened to include postpurchase evaluations as well.

Continued measurement of prechoice expectations as the sole comparison standard will limit the usefulness and predictability of satisfaction models. In particular, the theoretical structures within these models may be adversely affected because of the inability of one standard (such as expectations) to adequately capture consumer evaluation processes.

#### MANAGERIAL IMPLICATIONS

To positively influence consumer satisfaction levels, marketing managers and policy makers will need to address the issue of comparison standards as well. One implication relates to how industry satisfaction studies are reviewed and interpreted. For example, this research suggests that caution should be exercised with respect to comparing research findings which are really noncomparable (e.g., comparing expectations-based studies with desires-based studies). As noted by Woodruff and colleagues, the interpretation of standards research (and satisfaction scores) will be highly dependent upon the nature of the standards employed in the studies. Satisfaction scores often vary depending on the standard used in the data collection process (Woodruff 1993), so survey instruments which tap the appropriate comparison standard for a given situation will be needed.

The factors presented in Table 2 are only a beginning. Managers could benefit from research that uncovers the appropriate standard(s) for each usage context. Full-scale studies may be more complex, time-consuming, and expensive than managers are willing to attempt, but pretesting could uncover the most frequently used comparison standards in a given situation. It is likely that academic researchers will need to lead knowledge development in this area. Possible research would include studies of comparison standards used by customers under various purchase situations, involvement levels, and other consumer and marketplace characteristics. Product category studies may be especially helpful for firms attempting to improve their consumer satisfaction programs or achieve certain satisfaction targets. One guide may be the information utilization hypothesis discussed earlier. This notion suggests that managers need to measure customer information levels, information usage strategies, or experience levels with various product categories and brands in order to predict comparison standard choice.

Perhaps the most valuable managerial use of this typology will be in the development of various promotional strategies such as personal selling campaigns or comparative advertising. Comparative advertising is advertising which directly or indirectly names, shows, or refers to (a) competing brand(s) in attempts to better position the seller's brand. In this respect, comparative advertising has many similarities to other consumer comparison processes (i.e., disconfirmation). This

will be especially true when consumers use experience-based norms or other competitively-based standards. Comparative advertising campaigns may be most effective when the specific advertising claims and comparisons made are matched to the consumer's comparison standard focus (brand or product category) and level (attribute or overall). Inconsistencies in message content or message structure (with regard to the internal comparison standard used by the consumer) may inhibit processing of the comparative ad, thereby decreasing effectiveness. Again, understanding the specific comparison standards used by a target market will be needed, so it may be some time before this information is collected and used regularly. Often, however, considerable consumer research is conducted when firms develop long-term advertising campaigns, so studies of comparison standards could be developed in conjunction with these efforts.

Research is needed on the impact of various consumer information utilization strategies on the postchoice evaluation process. For example, do consumers use one kind of information to form experience-based norms and other information to develop expectations? How are different standards retained in consumers' memory structures? What happens when consumers replace one standard with another? How does the initial standard (i.e., the standard employed in a prepurchase context) affect the choice or development of later standards (i.e., in postpurchase stages)? Finally, empirical validation of the typology proposed here is an important next step.

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