

# THE EFFECT OF PRODUCT-LEVEL STANDARDS OF COMPARISON ON CONSUMER SATISFACTION

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## ABSTRACT

Consumer satisfaction with a product is usually modeled relative to other brands. Yet a large body of research shows that product evaluation often includes both brand- and product-level comparisons. Furthermore, theory in consumer behavior and psychology suggests that product-level comparisons might occur in forming satisfaction judgments. An empirical study demonstrates that including product-level standards of comparison in a model of satisfaction significantly increased the amount of explained variance. Additional exploratory evidence suggests that product-level standards of comparison may be more important for non-necessity items such as home improvements and furnishings, sports equipment, kitchen gadgets, musical instruments, and hobby equipment.

## INTRODUCTION

Researchers and managers have expended considerable effort to measure, predict, and monitor consumer satisfaction (Yi 1990); however, consumer satisfaction modeling and measurement continue to suffer from a number of unresolved complexities (Peterson and Wilson 1992; Yi 1990). One of the more significant challenges has been the selection of an appropriate standard of comparison for determining satisfaction (Cadotte, Woodruff, and Jenkins 1987; Tse and Wilton 1988).

When modeling consumer satisfaction, product performance is a key component and yet performance must be compared to some specific standard (Day 1977; Oliver 1977, 1980; Yi 1990), even if the standard is implicit. Previous consumer-level research has generated many possible standards of comparison for judging performance including prior expectations (Oliver 1980), experience-based norms (Cadotte, Woodruff, and Jenkins 1987), values (Westbrook and Reilly 1983), desires (Spreng and Olshavsky 1993; Spreng, MacKenzie, and Olshavsky 1996),

current expectations (Cote, Foxman, and Cutler 1989), degree of equity (Fisk and Young 1985), and prior experience with similar products (LaTour and Peat 1979). All these discussions, however, have limited consumers' standards of comparison to the brand level.

Even research that expands the comparison standard beyond the focal brand conceptualizes and operationalizes the comparison standard at the brand level. For example, Cadotte, Woodruff, and Jenkins (1987) have denoted three types of "experience-based" norms: 1) the product type norm consists of consumers' beliefs about the average attributes possessed by all *brands in the product category*; 2) the best brand norm includes consumers' beliefs about those same *brand attributes possessed by the best product in the category*; and 3) the focal brand expectations captures consumers' beliefs about the *brand attributes of the actual brand chosen*. These three norms are all based on brand-level experiences within a single product category, not across different product categories. Furthermore, most recent research supports an expanded model of satisfaction including desires as a significant comparison standard. Although this research does not focus on brand comparisons, desires are defined at the most concrete level of attributes and benefits; e.g., easy to use (Spreng, MacKenzie, and Olshavsky 1996).

In addition to a brand-level focus in defining the standard of comparison for performance, there has been a brand-level focus in measuring satisfaction with performance. This can be seen in the attributes listed in surveys measuring satisfaction, namely, ease of operation and sound clarity for electronic record players (Tse and Wilson 1988) or fuel economy and handling for automobiles (Oliver 1992). These attributes are all specific to products within a single product category rather than alternative product categories from which the consumer may have chosen to spend their money.

An expanded conceptualization of the satisfaction model would consider product-level

(cross-category) standards in the satisfaction model. To distinguish between product-level standards and brand-level standards, we draw from Lancaster's (1971) work on an economic theory of the consumer (also see Ratchford 1975) to define the term "brand-level" as the same product form filling the same needs. For example, comparisons between three brands of treadmills (e.g., True, Precor, and Trotter) would be at the brand level. Following Day, Shocker and Srivastava (1979), we use the term "product-level" to refer to different product forms, filling either a similar or unrelated need that is important to the consumer. For example, Trotter treadmills might be compared to other exercise equipment (shoes, videotapes, various types of equipment, club memberships), other health maintenance products like monitoring devices or food preparation equipment (scales, blood pressure kits, doctor's visits, kitchen appliances, gadgets, cookbooks, etc.), or any other option the consumer may have considered (category, generic, and budget respectively; Lehmann and Winer 1994).

The purpose of this research is to examine the usefulness of including product-level standards into consumer satisfaction models. More specifically, this study is the first study to simultaneously consider brand-level and product-level standards' effect on explaining consumer satisfaction.

## CONCEPTUAL BACKGROUND

Numerous topic areas in marketing recognize the importance of both brand- and product-level evaluations. We outline several streams of research which discuss how both brand- and product-level comparisons affect product evaluation and choice. The purpose of this discussion is simply to highlight the importance of product-level comparisons. We then use norm and regret theory to justify including product-level comparisons in satisfaction models.

### Choice and Consumption

Within information processing, evidence exists for the idea of a phased decision strategy when making choices (Park and Smith 1989). This strategy is referred to as a "goal-driven, top-down" approach where decision making is based on

hierarchical sets of alternatives. At early stages, consumers' evaluations often include product-level comparisons in order to identify "goal-satisfying alternatives salient or accessible on a particular occasion" (p. 183, Shocker et al. 1991, Johnson 1989). In phased decision making, people move from one level of comparison to another. As such, even if the final decision is a brand versus brand comparison, it may well be that earlier stages included product versus product comparisons.

Likewise, product consumption (not just product choice) is often viewed as being goal-oriented rather than brand (attribute)-oriented (Bagozzi and Warshaw 1990; Gardial et al. 1994; Westbrook and Reilly 1983). Bagozzi and Warshaw (1990) develop a broad model that explicitly recognizes goals can be achieved through different methods including alternative product categories. For example, purchases aimed at enhancing one's career could range from a new suit to an educational program. Viewing products as goal-oriented changes our perspective on product choice and evaluation such that we do not limit our analyses to attributes within a product category but to attributes of the goal.

As noted by Johnson (1984; 1988), evaluations of product category alternatives (i.e., at least two alternatives from multiple product categories) or noncomparables (i.e., only one alternative from each of multiple product categories) is quite different than traditional brand evaluations. In the choice process, different types of attributes may be considered and in different orders, depending on the alternatives considered. Consumers evoke more concrete attributes for comparable brand alternatives and more abstract attributes for noncomparable alternatives (Bettman and Sujana 1987; Johnson 1984). Furthermore, as choice processing continues, the evaluative attributes change, becoming more abstract with noncomparables and more concrete with product category alternatives as consumers hierarchically eliminate categories to focus on within-category brand evaluations (Johnson 1989). These empirical differences demonstrate the importance of brand- and product-level Considerations.

### Levels of Competition

Not only is the prevalence of product-level

considerations evident within the individual consumer as seen in the choice literature, it is also evident in corporate thinking as indicated by the strategy literature. Managers are encouraged to avoid marketing myopia by thinking about their markets and competition at several levels (Kotler 1991; Lehmann and Winer 1994), in terms of their degrees of similarity (Weitz 1985), or as hierarchies (Day, Shocker, and Srivastava 1979). Broad definitions of competition are viewed as essential to making strategic marketing decisions (Day, Shocker, and Srivastava 1979; Lehmann and Winer 1994). An example is given by Cadbury (1975), of Cadbury Chocolates, who stated, "...we talk of the boxed chocolate assortment market, when boxes of chocolate are also competing in the consumer's mind with flowers, records, books, and other semi-casual gifts" (p. 105). Firms such as General Motors have used this approach to determine relevant competition and to design marketing strategies to improve the position of an automobile relative to the competing uses of money, including school tuition, a vacation, and home improvements (Hauser and Urban 1986). Marketing managers recognize that product evaluations and choice are made across brand and product levels of competition. Thus, we see the importance of product-level considerations in individual decision making and in corporate decision making.

### **Theoretical Support for Product-Level Considerations**

Despite demonstrating the importance of product-level considerations in choice and in analyzing competition, no research to date has explicitly included product-level and brand-level evaluations in predicting satisfaction. Two theories from psychology suggest that such considerations will impact satisfaction with the product purchased. According to norm theory, when people are disappointed, they construct alternative realities about what could have happened (Kahneman and Miller 1986). These alternative realities include any foregone options including those not considered at the time of choice. The consumer satisfaction literature provides support for this view. Satisfaction with a brand is influenced by both postpurchase

evaluations of that brand and of other brands considered prior to purchase but foregone (Droge and Mackoy 1995). The notion of nonchoice has been incorporated into satisfaction research by recognizing that foregone brands serve as standards of comparison (e.g., best brand suggested by Cadotte, Woodruff, and Jenkins 1987). Indeed, Droge, Halstead, and Mackoy (1997) found that satisfaction with the nonchoice alternative influenced overall satisfaction. The emphasis on nonchoices in the satisfaction literature focuses only on other brands in the evoked set.

Given that items from other product categories are sometimes considered in prepurchase evaluations (Johnson 1984; Park and Smith 1989), norm theory and current research in satisfaction suggest that these product-level considerations will impact postpurchase evaluations of satisfaction with the chosen item. Norm theory suggests the focus may go beyond the evoked set since consumers may construct a set of all unchosen alternatives including other uses for the money spent. Fully extending norm theory to consumer satisfaction would suggest that if consumers are dissatisfied, they would reevaluate both foregone alternatives and constructed realities including options not previously considered. Since product-level options are likely to be part of these constructed realities, norm theory suggests that product-level comparisons should be included in models of satisfaction.

In addition to norm theory, regret theory also supports including product-level considerations as a comparison standard. Regret theory posits that nonchoices (e.g., items not chosen whether or not they were in the evoked set) can affect evaluations of the choice's utility (Loomes and Sugden 1982). Regret is derived from a comparison "between the assets actually received and the highest level of assets produced by other alternatives" (Bell 1982, p. 963). As such, regret theory would suggest satisfaction with the choice depends on the postpurchase analysis of the consumer's degree of preference of other alternatives. The choice set would include all products, not just alternative brands, considered (Shocker et al. 1991). Therefore, since consumers make prepurchase comparisons at the product level (Bagozzi and Warshaw 1990; Kotler 1991; Park and Smith

1989), postpurchase nonchoice comparisons must also include different types of products. Furthermore, these nonchoices need not have been considered prior to purchase.

### HYPOTHESIS

Both norm theory and regret theory suggest that any reasonable option can become a standard for comparison in evaluating product performance for determining satisfaction. It is irrelevant if the option was considered prior to purchase or consumption. As long as an option represents a potential alternative for purchase, it can be a basis for evaluating postpurchase reactions. The product choice and levels of competition literatures repeatedly demonstrate that other product categories represent potential alternatives. As such, we conclude that product-level comparisons will play a significant role in determining satisfaction.

While product-level comparisons are likely to influence satisfaction, this does not preclude the effects of brand-level evaluations. Different standards of comparison may not operate independently (Cadotte, Woodruff, and Jenkins 1987). By using multiple standards of comparison, a greater amount of variation in satisfaction can be explained (Yi 1990). For example, Spreng and Olshavsky (1993) significantly improved model fit by including both consumer's desires and prior expectations as standards of comparison. Similarly, Oliver and DeSarbo (1988) found that including both prior expectations and equity variables as standards of comparison resulted in the best model fit. We hypothesize that both brand- and product-level standards of comparison will jointly influence satisfaction. Therefore, the following hypothesis is proposed:

**H1:** Product-level and brand-level standards will significantly increase explained variance in satisfaction over that explained by brand-level standards only.

### METHOD

In order to examine the importance of product-level standards, we conducted focus groups to identify a product category where

satisfaction was affected by either brand- or product-level attributes. In addition, the product category had to be one where alternative uses of the money might be considered. Exercise equipment was identified as a commonly owned product that met these criteria.

### Sample

The sample consisted of 106 nontraditional (e.g., older, working) undergraduate and graduate college students. The average student age was just over 31 years and the average income exceeded \$35,000. Respondents were prescreened for ownership of a piece of exercise equipment and completed a questionnaire on their equipment (subject answered the following question: "Please name a piece of exercise equipment that you have bought. Be sure it is something you have bought and not something that was given to you. Briefly identify the piece of equipment"). Those with a large number of missing responses were deleted from the data set. In cases where only one or two responses were missing, the respective means were substituted. After screening, the sample consisted of 96 respondents.

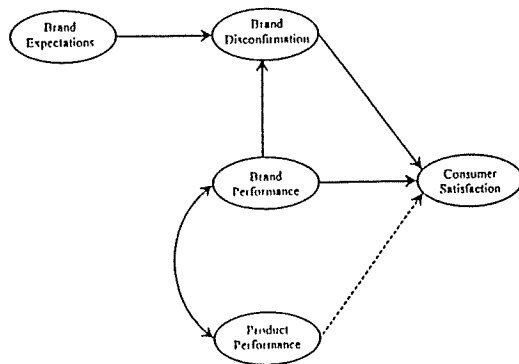
### Model

Research has indicated that there are many different models used to determine consumer satisfaction (e.g., Folkes, Koletsky and Graham 1987; Mano and Oliver 1993; Oliver 1980; 1993; Oliver and Swan 1989; Westbrook 1987). To test the explanatory ability of product-level comparisons, we used a modified disconfirmation model which included a direct effect for performance (Bearden and Teel 1983; Bolton and Drew 1991; Cadotte, Woodruff, and Jenkins 1987; Churchill and Surprenant 1982; Oliver and DeSarbo 1988; Tse and Wilton 1988). This model provided the most parsimonious test of our hypothesis (Sternthal, Tybout, and Calder 1987).

As depicted in Figure 1, product performance was allowed to correlate with brand performance. In the base model, product performance has no direct effect on satisfaction (included only to allow for a nested models test). For the hypothesized model, product performance was allowed to directly affect satisfaction. The difference in

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**Figure 1**  
**Hypothesized Model of Consumer Satisfaction**  
 ( ——— Base and Hypothesized Model;  
 ----- Hypothesized Model only)



model fit and amount of satisfaction explained indicates the unique contribution of adding product-level performance as a predictor of satisfaction. Since theory suggests that foregone alternatives may not have been considered prior to purchase or consumption, it was deemed inappropriate to include either product-level prepurchase expectations or disconfirmation in either model.

### Measures

**Satisfaction.** The satisfaction measures consisted of four single-item measures used extensively in the consumer satisfaction literature. Subjects were asked to, "indicate how you feel about having bought this item:" and responded on the following four scales: "satisfied-dissatisfied," "pleased-displeased," "good-bad," and "delighted-terrible."

**Defining Brand versus Product Evaluations.** After measuring satisfaction, respondents were given detailed instructions explaining the difference between brand- and product-level evaluations. Popular conceptualizations of the various levels of competition typically include either three or four types, such as product form, product category, generic, and budget (Lehmann

and Winer 1994). Unfortunately, distinguishing between these levels for a given product can sometimes be difficult or idiosyncratic to the respondent. Thus, operationalizations have focused on two levels: brand versus brand (brand level) and brand versus product category (product level) (e.g., Johnson 1984; Park and Smith 1989). Therefore, the following instructions were provided:

There are two levels at which people can be satisfied or pleased with a purchase:

1. Satisfaction with the item you bought relative to other brands, models or styles of the item that you did not buy. For example, you might compare your satisfaction with having bought a Hitachi bread machine relative to a Cuisinart bread machine.
2. In this survey, we will refer to this level as brand level satisfaction/dissatisfaction.
3. Satisfaction with the item relative to other things you could have done with your money. For example, you might compare your satisfaction with having bought a bread machine relative to buying a VCR, a plane ticket to visit friends, or saving your money.

In this survey, we will refer to this level as product-category level satisfaction/dissatisfaction. This means that you could be:

- \* Glad you bought the product category (bread machine) but wished you would have bought a different brand (Cuisinart instead of Hitachi). In this case, you are **DISSATISFIED AT THE BRAND LEVEL** but **SATISFIED AT THE PRODUCT-CATEGORY LEVEL**.
- \* Pleased with the brand (Hitachi) you bought but wished you would have spent your money differently (a VCR instead of a bread machine). In this case, you are **SATISFIED AT THE BRAND LEVEL** but **DISSATISFIED AT THE PRODUCT-CATEGORY LEVEL**.
- \* **SATISFIED AT BOTH LEVELS** (glad you bought a Hitachi and glad you bought a bread machine).
- \* **DISSATISFIED AT BOTH LEVELS**

(displeased with the Hitachi brand and unhappy that you purchased a bread machine at all)

We are now going to ask you some questions about your brand level and product-category level satisfaction/dissatisfaction with the item you regret having purchased which you mentioned on page 1.

**Brand and Product Performance.** Consistent with Johnson's (1986) and Corfman's (1991) findings, higher order attributes were used to describe both brand and product performance. Brand performance was assessed by asking subjects to evaluate, "the performance of the particular item you bought relative to other brands, models, or styles of the same type of product." They responded on three semantic differential scales anchored by the terms: "performs well-performs poorly", "high quality-low quality", and "good-bad." Product performance comparisons were assessed relative to the other things you could have done with your money using goal-oriented behaviors as descriptors (Bagozzi and Warshaw 1990; Park and Smith 1989). Subjects were asked to evaluate, "the performance of the type of product you bought, in general, relative to other things you could have done with your money." Responses were indicated on three scales anchored by: "rewarding-not rewarding," "enjoyable-not enjoyable," and "beneficial-not beneficial."

**Expectations and Disconfirmation.** Expectations and disconfirmation were measured only at the brand level. Standard question formats from the literature were used. Expectations were assessed by asking: "Compared to other brands, models, or styles of this type of product, I expected the particular item I bought to perform well-perform poorly, to be high quality-low quality, and to be good-bad." Disconfirmation was assessed by asking: "My expectations about this item's \_\_\_\_\_ was: Too High (It was worse than I expected), Accurate (It was just as I expected), Too Low (It was better than I expected)." Subjects indicated their responses for three descriptors: performance, quality, and effectiveness.

**Table 1**  
**Structural Equation Model Standardized**  
**Estimates**  
**(All Models fit with EQS version 4.0)**

	Brand Only	Brand and Product Model
<b>Factor Loadings</b>		
Satisfaction 1	0.982	0.981
Satisfaction 2	0.989	0.990
Satisfaction 3	0.930	0.934
Satisfaction 4	0.929	0.932
Brand Performance 1	0.880	0.880
Brand Performance 2	0.862	0.864
Brand Performance 3	0.976	0.980
Product Performance 1	0.955	0.950
Product Performance 2	0.875	0.863
Product Performance 3	0.943	0.953
Expectations 1	0.952	0.953
Expectations 2	0.843	0.843
Expectations 3	0.912	0.912
Disconfirmation 1	0.849	0.845
Disconfirmation 2	0.852	0.855
Disconfirmation 3	0.761	0.759
<b>Predictors of Satisfaction</b>		
Brand Performance	0.756	0.068
Product Performance	na	0.704
Disconfirmation	-0.015	-0.224
<b>Total Variance Explained</b>	<b>47.2%</b>	<b>57.0%</b>
<b>Predictors of Disconfirmation</b>		
Brand Performance	-0.843	-0.844
Expectations	0.147	0.154
<b>Correlation Between Brand and Product Performance</b>		
	0.713	0.697
<b>Summary Statistics</b>		
	$\chi^2=246.4$	$\chi^2=67.116$
	df=99	df=1
	CFI=0.921	CFI=0.036

## RESULTS

The brand-only model fit the data reasonably well ( $\chi^2=246.4$ ,  $df=99$ ,  $CFI=0.921$ ). All the loadings were statistically significant and large (See Table 1).

Consistent with previous research (Churchill and Surprenant 1982; Tse and Wilton 1988), satisfaction was explained solely by performance ( $t=4.67$ ). Nevertheless, there is an implicit standard of comparison in the performance measure since respondents made performance comparisons relative to other brands, models, or

styles. Disconfirmation was affected by both performance and expectations ( $t > 2$ ), but did not explain any variance in satisfaction ( $t = .09$ ). The brand- and product-level model showed significant improvement over the brand-only model. Adding the direct effect for product performance raised the amount of satisfaction explained by the model from 47% to 57% ( $\Delta\chi^2 = 67.116$ ,  $df = 1$ ,  $\Delta CFI = 0.036$ ). As such, the results support our hypothesis; adding product-level standards increased the amount of explained variance in satisfaction.

## DISCUSSION

This study is the first attempt to simultaneously incorporate brand- and product-level standards in consumer satisfaction research. In this study both brand-level (feelings about an item relative to other brands) and product-level comparisons (feelings about an item relative to the other things you could have done with your money) are shown to be significantly related to satisfaction. These results suggest that managers may be drawing erroneous conclusions about satisfaction, especially when consumers are dissatisfied.

The ubiquitous questionnaires measuring satisfaction focus on brand-specific, attribute evaluations (e.g., how satisfied are you with power, service, picture clarity, durability, food quality, etc.). Using only brand-level attributes ignores what we know about the nature of competition and consumer choice. Current approaches do not tap consumers' satisfaction relative to other possible uses of their money. The results of our study provide support for the notion that product-level standards affect satisfaction evaluations. Thus, managers should be sensitive to this expanded view to accurately understand their consumers' satisfaction or dissatisfaction.

Our empirical support for product-level comparisons is based on a single product category. In order to understand the conditions under which product-level comparisons would be important, we conducted a brief exploratory survey using the same nontraditional student population. The survey began with an explanation of the two levels of satisfaction, similar to that given in the original study. Subjects were then asked to write about two purchases for which they were dissatisfied at

the brand level and two purchases for which they were dissatisfied at the product level. In particular, at the brand level, they were asked twice to name a product for which they wished they had bought a different brand and then to explain why they were dissatisfied with the brand they bought. Similarly, at the product level, they were asked twice to name a product for which they wished they had used their money some other way, and then to explain why they were dissatisfied with having bought the product.

A total of 51 respondents listed 98 examples of brand-level dissatisfaction and 93 examples of product-level dissatisfaction. The reasons for dissatisfaction were simultaneously examined by two judges and were placed in several categories. We dropped from the analyses any examples that did not unambiguously fit the appropriate level (e.g., for product-level dissatisfaction they compared a different form of a product in the same product category, such as a regular phone with a cordless phone/answering machine combo). After dropping these cases, we had 95 brand examples and 64 product examples. The reasons for dissatisfaction at the brand and product levels as well as the product categories and their frequencies are shown in Table 2.

The reasons for brand versus product dissatisfaction are both different and quite instructive. Brand-level reasons focus almost entirely on performance of a specific attribute (this included respondents displeased because an item lacked a feature). In addition, poor quality or reliability, inferior brands, and poor overall performance were common reasons for brand dissatisfaction. These findings support the previous satisfaction work which has focused on attribute performance as a means of explaining brand-level satisfaction (e.g., Cadotte, Woodruff and Jenkins 1987).

At the product level, the majority of reasons focused on lack of use; not finding enough friends to use the product with, having the fun/excitement/novelty/interest wear off, or they should not have bought the product in the first place. Other reasons for product-level dissatisfaction included that the respondent felt the item was difficult to use, they didn't like the item, or that they should have waited longer to make the purchase.

Table 2

Reasons for Dissatisfaction (exploratory study)	
Brand-Level Reasons	# of Responses
Reliability or poor quality	33
Inferior brand/another brand better	27
Attribute specific comments	59
Didn't perform well	16
Too expensive/not worth money	6
After sales service problems	8
Product-Level Reasons	
Difficult to use	10
Don't use at all or enough	27
Should have bought something different	14
Doesn't fulfill needs, just don't like, didn't work	15
Others won't do	2
Spent too much/not worth money	4
Got tired of it	2
Shouldn't have bought product at all/don't need/ save money	23
Should have waited longer before buying	5
Can't get things need to use	1
Dissatisfaction by Product Category (exploratory study)	
Dissatisfaction with Brands	
Food and Beverage	16
Consumer Electronics	15
Autos & Parts <sup>a</sup>	14
Personal Care Products	11
House Cleaning (durable and nondurable)	9
Misc. durables <sup>b</sup>	9
Clothing and Accessories	7
Misc. nondurables	6
Sports Equipment	4
Furniture	3
Service or Store	1
Dissatisfaction with Products	
Sports Equipment	15
Games, Hobbies, and Musical Instruments	9
Consumer Electronics	8
Autos & Accessories	6
Kitchen Gadgets	5
Lotteries / Money Schemes	4
Misc. Durables	4
Furniture	3
Decorative	3
Jewelry	2
Clothes	2
House Cleaning	1
Food	1
Personal Care Products	1

<sup>a</sup> For brands, autos were usually cars or pickup trucks versus motorhomes and motorcycles for product.

<sup>b</sup> For brand dissatisfaction, examples include washers, dryers, bandsaw, riding mower, heat pump, microwave, sewing machine, and boat cover. For product dissatisfaction, examples include a fence, riding mower, and paint sprayer.

In general, these reasons for dissatisfaction given by respondents fit with emerging research on product nonuse. Bower and Sprott (1995) argue that one of the reasons for product nonuse is that people are poor predictors of future preferences (Kahneman and Snell 1990; Hoch and Loewenstein 1991; Simonsen 1990). Greenleaf and Lehmann (1994) found that one of the reasons for delaying a purchase is that consumers were unsure they "would use the product enough to justify buying it" and that they "wanted to avoid any regrets over having made the wrong decision."

In addition to gaining a better understanding of the reasons for dissatisfaction at the brand and product levels, we were also able to look for product class differences (see Table 1). As might be expected, dissatisfaction with the brand purchased could occur for any product class, as long as there are other brands available for comparison; however, product-level dissatisfaction would be unlikely when the product class is viewed as a necessity and no other uses of one's money would satisfy the need. This is supported by the subject-generated list of products. Namely, foods were only listed in examples of brand-level dissatisfaction. Similarly, cars were listed more frequently at the brand level than at the product level. Non-necessity items dominated the list of product-class items, including such items as home improvements and furnishings, sports equipment, kitchen gadgets, musical instruments, hobby equipment and even motorcycles.

Overall, the 51 subjects provided 64 examples of product-level dissatisfaction, across a wide range of products. This suggests that consumers commonly experience product-level dissatisfaction. As such, the value of adding product-level comparisons to satisfaction models is not limited to the case of exercise equipment. Instead, product-level comparisons appear to occur for a broad range of frequently purchased items.

## IMPLICATIONS

The importance of product-level comparisons in measuring and predicting satisfaction carries implications for marketing practice. Managers frequently use complaint behavior as an indicator of satisfaction and repurchase intent (Gilly and Gelb 1982; Singh 1988). In fact, it has even been



suggested that complaint behavior be incorporated in satisfaction models (Oliver and Swan 1989). Unfortunately, if product-level comparisons create dissatisfaction, customers may be unlikely to complain because their dissatisfaction cannot be remedied by the manager. This would cause managers to wrongly conclude that their customers are in fact satisfied. For example, Bolton and Bronkhorst (1995) found that 37.6 percent of customers discontinuing cellular phone service were somewhat (20.7%) or very (16.9%) satisfied with their provider. In addition, only two-thirds of those discontinuing service went to a competitor, implying that one-third (12.5% of original customers) were satisfied at the brand level but chose not to continue consuming, most likely because overall they were dissatisfied at the product level. By focusing solely on brand-related attributes, the exact causes of satisfaction with cellular phones and exit from the market may be overlooked.

Managers also need to examine the possibility of dissatisfaction caused by product-level comparisons and develop strategies to enhance overall consumer satisfaction. Ram and Jung (1990) suggest combating product nonuse (a major product-level cause of dissatisfaction) by providing user-friendly aids such as manuals or information displays encouraging product usage. Understanding the role of product-level postpurchase comparisons could also facilitate decisions about cross-product advertising (see, for example, Doyle and Saunders 1990), especially when the promotional message is intended to reduce postpurchase dissonance. These strategic implications suggest the managerial importance of product-level postpurchase evaluations.

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