

The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction

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Although both consumption emotion and satisfaction judgments occur in the post-purchase period, little is known about their correspondence. This article investigates the interrelationships between the two constructs by way of taxonomic and dimensional analyses to identify patterns of emotional response to product experiences. Five discriminable patterns of affective experience were uncovered, which were based on three independent affective dimensions of hostility, pleasant surprise, and interest. The results extend prior findings of a simple bidimensional affective-response space and reveal that satisfaction measures vary in their ability to represent the affective content of consumption experiences.

Traditional approaches to the study of consumer behavior have emphasized the concept of consumer satisfaction as the core of the postpurchase period. Satisfaction is believed to mediate consumer learning from prior experience and to explain key post-purchase activities, such as complaining, word of mouth, and product usage (Bettman 1979; Howard 1989). Recent analyses of product-consumption experiences, however, indicate that the postpurchase period may also involve a variety of emotional responses, including such affects as joy, excitement, pride, anger, sadness, and guilt (Havlena and Holbrook 1986; Holbrook et al. 1984; Holbrook and Hirschman 1982). Since emotion constitutes a primary source of human motivation and exerts substantial influence on memory and thought processes (see, e.g., Kuhl 1986), questions naturally arise as to the manner in which consumption emotion and satisfaction judgment are related and the extent of their respective contributions to the explanation of consumer behavior.

Answers to these questions are important for several reasons. First, they may help to clarify the nature of satisfaction as a theoretical construct and to resolve current debates about appropriate conceptualization and measurement. Second, they may encourage the development of more integrative theories to account for the joint determination and effects of both constructs.

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Finally, they may reconcile the emerging dialectic between decision process and experiential perspectives of the study of consumer behavior (Holbrook and Hirschman 1982).

Since little is known at present about the relationship between consumption emotion and satisfaction, the purpose of this article is to examine the correspondence between the constructs. First, we consider the conceptual basis of both consumption emotion and satisfaction and then review previous efforts to relate them. Next, we investigate their interrelationships empirically via a field study of naturally occurring consumption-emotion response patterns and their corresponding satisfaction evaluations for a durable product category. Finally, implications are drawn for the conceptualization of each construct and for further theoretical development of consumption processes.

CONCEPTUAL BACKGROUND

Satisfaction

Consumer satisfaction has been variously defined in the literature, but the conceptualization that appears to have received the greatest support is the view that satisfaction is a postchoice evaluative judgment concerning a specific purchase selection (Day 1984). Although attitude-like in some respects, the concept of satisfaction is distinguished from attitude toward the product or brand, which represents a more generalized evaluation of a class of purchase objects (Oliver 1981). In fact, satisfaction has been established as a key causal agent responsible for experience-based attitude change (Oliver 1980).

The evaluative aspect of the satisfaction judgment is typically assumed to vary along a hedonic continuum,

from unfavorable (i.e., dissatisfied) to favorable (i.e., satisfied). In this regard, satisfaction is generally assumed to be a unidimensional concept. Early proposals from the job-satisfaction literature that the satisfaction judgment is comprised of dual dimensions similar to the two-factor motivator-hygiene theory have not been supported (Maddox 1981).

The satisfaction judgment is generally agreed to originate in a comparison of the level of product or service performance, quality, or other outcomes perceived by the consumer with an evaluative standard. Typically, the evaluative standard most often assumed is the consumer's prepurchase expectation set, which, when compared to the level of perceived product performance, yields disconfirmation beliefs. These in turn are believed to produce the satisfaction judgment (Bearden and Teel 1983; Oliver 1980; Westbrook 1980a). Other standards have been investigated in the literature, including desired levels of product performance or outcomes (Westbrook and Reilly 1983), brand or product-category norms (Woodruff, Cadotte, and Jenkins 1983), and equitable performance or outcomes (Oliver and Swan 1989).

Consumption Emotion

Consumption emotion refers to the set of emotional responses elicited specifically during product usage or consumption experiences, as described either by the distinctive categories of emotional experience and expression (e.g., joy, anger, and fear) or by the structural dimensions underlying emotional categories, such as pleasantness/unpleasantness, relaxation/action, or calmness/excitement (Russell 1979; for a comparison of approaches in consumer behavior, see Havlena and Holbrook [1986]). Consumption emotion is distinguished from the related affective phenomenon of mood (Gardner 1985) on the basis of emotion's relatively greater psychological urgency, motivational potency, and situational specificity.

Within the discrete or categorical approach to emotional experience, numerous pancultural taxonomic schemes for basic emotions have been proposed, of which those of Izard (1977) and Plutchik (1980) have achieved the most widespread use in consumer research. Often, however, emotion researchers have had to develop ad hoc measurement and classification schemes, since the pan-cultural typologies are limited to the fundamental affects and do not address more complex patterns of emotional response that often characterize contemporary experience (e.g., sentimentality, affection, confidence).

Since judgments of satisfaction vary along a hedonic continuum, a natural question is whether satisfaction and consumption emotion are distinguishable theoretical constructs. As stated by Hunt (1977, p. 459), "satisfaction is not the pleasurable of the [consumption] experience, it is the evaluation rendered that the ex-

perience was at least as good as it was supposed to be." Westbrook (1987) further argued that satisfaction necessarily incorporates an evaluation of the emotional aspects of the antecedent consumption emotions elicited by product usage. This position was supported by an empirical study of two different product categories demonstrating that (1) separate and independent dimensions of positive and negative affect underlie discrete emotional responses elicited during consumption (i.e., joy, interest, surprise, anger, disgust, and contempt) and (2) both these dimensions contributed significantly to satisfaction above and beyond expectancy-disconfirmation beliefs.

These distinctions are reaffirmed by the Cohen and Areni (1991) review of affective-processing mechanisms, in which emotions elicited during consumption experiences are believed to leave strong affective traces or "markers" in episodic memory. So marked, these memory elements are believed to be highly accessible to current cognitive operations. When an evaluation of the relevant consumption experience (or its associated product or service) is required, the affective traces are readily retrieved and their valences integrated into the evaluative judgment along with other pertinent semantic memories, such as prior expectancies, disconfirmation beliefs, and so on.

Under these interpretations, only the valence of the consumption emotion response is translated into the satisfaction judgment. Oliver (1989) has questioned this assumption by theorizing that specific types or categories of emotional response may be causally antecedent to, and coexist with, the satisfaction judgment. He proposes five qualitatively different emotional states for instances of satisfaction. Ordered by increasing favorableness and contribution to satisfaction, these are acceptance, happiness, relief, interest/excitement, and delight. For dissatisfaction, the emotional groupings in order of decreasing favorableness are tolerance, sadness, regret, agitation, and outrage. Empirical evidence on these proposals has not yet appeared.

In contrast to the foregoing distinctions between emotion and satisfaction, other investigators have conceptualized satisfaction as itself an emotional response to the judgmental disparity between product performance and a corresponding normative standard (Cadotte, Woodruff, and Jenkins 1987; Woodruff et al. 1983). Studies of emotion meaning and knowledge (Plutchik 1980; Russell 1979) reveal that the state of (high) satisfaction does indeed have unequivocal emotional connotations, notably "happy," "pleased," and "contented" (dissatisfaction, however, is less specific in connotation). Oliver (1989), however, states that connotations such as pleased and contented are satisfaction "prototypes" in that different consumers may have different response motivations for forming satisfaction judgments. Still another view is represented in recent categorization research (Shaver et al. 1987), which clearly places satisfaction not with other prototypical

(basic level) emotional categories such as joy, sadness, or fear, but rather in a distinct grouping based on its more differentiated semantic content.

Patterns of Consumption Emotion

Although studies of consumption emotion have investigated a variety of different emotion types and dimensions, seldom have they considered the patterning, or combinations, of affects across the experiences of consumers. Knowledge of such patterns of emotional response is highly desirable, however, for several reasons. First, it enables description of the consumer's overall emotional experience, rather than partitioning it into separate basic emotion types (e.g., joy, anger, guilt) or reducing it to emotion dimensions (e.g., pleasure, arousal). To the extent that the consumption domain may involve more complex affective experiences defined by the combination of several basic emotions (e.g., pride, which Plutchik [1980] asserts is the result of simultaneous feelings of anger and joy), an analysis of patterns may be helpful in detecting these "higher order" affects.

Second, a taxonomy of the major naturally occurring emotion patterns affords an alternative basis for determining the dimensionality of the psychological space of consumption emotion. Typically, dimensionality is established by a factor analysis of a set of emotional variables without regard to their patterning. Since emotional experience descriptors need not covary in the same fashion across all consumers, defining the space after the major patterns are established may enable improved identification of the affective dimensionality. Once the appropriate dimensionality has been ascertained, positioning of the satisfaction continuum within this space can be established. Also, the extent to which alternative satisfaction indicators capture or reflect these differing emotional domains can be assessed. Thus, a taxonomic approach provides a means of mapping specific consumption experiences onto the satisfaction continuum and thus provides a further avenue for examining the meaning of satisfaction.

In this light, consider Westbrook's (1987) study of the relationship between consumption emotion and satisfaction. Although he found that consumption emotion could be characterized by independent dimensions of positive and negative affect, which in turn were reflected in consumer-satisfaction judgments, the study dealt only with the positive and negative subsets of the basic emotions in the Izard (1977) typology. More important, the research methodology did not allow for the occurrence of more complex patterns of emotional responses. Both of these constraints may have reduced the observed dimensionality of the emotions space. Allowing for patterns of emotional response would enable the assessment of more complex emotional experiences, which may indicate a space of greater dimensionality than simple positive and negative affect.

Study Objectives

Accordingly, the objective of this article is to extend knowledge of the relationship between consumption emotion and satisfaction by employing analytic methods to represent the patterns of emotional experiences of consumers. The specific questions addressed are

- Are there discernable, discrete patterns or "types" of emotional response to consumption experiences, and how do they vary in emotional content?
- What is the dimensionality of the psychological space containing the various patterns of emotional response?
- What is the correspondence of these discrete emotional response patterns to consumer-satisfaction judgments?
- To what extent do alternative satisfaction-measurement instruments reflect the emotional content of consumption experiences?

METHODOLOGY

The objectives of this research indicated a field survey approach to examine naturally occurring emotional responses within the consumer population. Thus, the study was performed on a judgmental area sample of owners of newly purchased cars. Assistants were sent to four geographically dispersed shopping centers in a large northeastern city and were instructed to recruit a convenience sample of shoppers for a survey of "feelings and attitudes" toward their "most recent car purchase." With a quota of 35 surveys per site ($n = 140$), 125 complete and usable questionnaire (89 percent) were obtained.

The average respondent was male (74 percent), 33 years old, and in the \$25,000–\$40,000 income range. Considerable diversity was displayed by the makes and characteristics of the respondents' cars and was presumed necessary for a broad range of emotional responses. The average automobile was 3.8 years old and was of domestic manufacture (61 percent). Almost as many had been purchased new as had been purchased used (49.5 percent vs. 50.5 percent); the average price paid was \$10,100. To facilitate respondent recall of consumption emotion, the sample was limited to those owning their automobiles for approximately one year.

Measures

Consumption Emotion. Izard's (1977) DES-II measure was adopted to represent respondents' emotional reactions to their automobiles. The measure contains 10 subscales representing the frequency with which subjects experience each of 10 fundamental emotions: the positive affects of interest and joy; the negative affects of anger, contempt, disgust, shame, guilt, sadness, and fear; and surprise. There is substantial evidence for the validity of the instrument and its applicability to consumption settings (see Westbrook 1987).

TABLE 1
DESCRIPTIVE STATISTICS, RELIABILITIES, AND INTERCORRELATIONS OF THE DISCRETE EMOTION MEASURES

| Emotion measure | Means ^a | σ | α | Simple correlations ^b | | | | | | | | | | |
|-----------------|--------------------|----------|----------|----------------------------------|------|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| 1. Interest | 2.73 | .96 | .77 | | | | | | | | | | | |
| 2. Joy | 3.39 | .93 | .73 | .20 | | | | | | | | | | |
| 3. Surprise | 2.18 | .86 | .77 | .08 | .30 | | | | | | | | | |
| 4. Sadness | 1.72 | .90 | .88 | .13 | -.30 | .37 | | | | | | | | |
| 5. Anger | 1.55 | .88 | .92 | .27 | -.22 | .28 | .80 | | | | | | | |
| 6. Disgust | 1.47 | .87 | .91 | .22 | -.23 | .39 | .84 | .85 | | | | | | |
| 7. Contempt | 1.39 | .79 | .88 | .22 | -.20 | .45 | .76 | .82 | .92 | | | | | |
| 8. Fear | 1.37 | .74 | .90 | .33 | -.07 | .46 | .67 | .72 | .80 | .83 | | | | |
| 9. Shame | 1.35 | .61 | .82 | .31 | -.08 | .40 | .55 | .60 | .67 | .77 | .76 | | | |
| 10. Guilt | 1.47 | .76 | .84 | .25 | -.21 | .48 | .74 | .68 | .78 | .78 | .70 | .70 | | |

^aEmotions are rated on a frequency scale of 1 = almost never to 5 = very often.
^bCorrelations greater than .18 and .23 in absolute value are significant at the .05 and .01 levels, respectively.

Satisfaction and Related Measures. To reflect the variety of consumer-satisfaction measures in use at present, each of which may vary in its correspondence to consumption emotion, the following indicators were selected: (1) a 12-item satisfaction inventory in Likert format (expanded from Oliver [1980]), (2) the single-item "circles" scale (Andrews and Withey 1976), (3) a single-item, seven-interval, bipolar rating scale (very satisfied/very dissatisfied), (4) an 11-point unipolar satisfaction rating scale, (5) an 11-point unipolar dissatisfaction rating scale, and (6) an 11-point decision-regret scale on which subjects indicated their subjective likelihood (chances in 10) of repeating the act of acquiring the automobile (Hunt 1977). The two unidimensional satisfaction/dissatisfaction scales were intended to capture instances in which individuals entertain varying degrees of both satisfaction and dissatisfaction in their judgments.

In addition, two disparity belief measures were administered to allow more complete coverage of post-purchase cognitive states. The first was expectancy disconfirmation, which was measured by separate disconfirmation appraisals of the product's benefits, problems, and overall impression, on seven-point rating scales anchored by "better than expected" and "worse than expected." The three scales were summed and averaged to yield an overall disconfirmation measure (Oliver 1980). The second disparity measure was a seven-point need-disconfirmation scale ranging from "fulfills all of my needs" to "fulfills none of my needs" (Westbrook and Reilly 1983).

Data Analysis

A taxonomic analysis of consumer emotions was performed via a *k*-means cluster analysis of subjects' standardized scores for the 10 DES-II measures. Using an average of multiple random-seed initial cluster cen-

ters, we examined two-cluster through 10-cluster solutions. On the basis of interpretation, goodness of fit, and a desired minimum cluster size of 10 percent of the sample, a five-cluster solution was chosen for further analysis. Hierarchical clustering was also performed, and, although both the hierarchical and *k*-means clustering solutions produced comparable results, the latter were preferred inasmuch as they yielded more compact and distinct clusters. The dimensionality of the inter-cluster differences was then examined with discriminant analysis that used the original DES-II emotion measures as predictors. The relationship between consumption emotion and satisfaction was assessed by (1) comparing the mean satisfaction and disparity belief ratings of the five clusters and (2) regressing the various satisfaction and belief disparity measures on the dimensions identified in the discriminant analysis.

FINDINGS

Descriptive statistics, alpha reliability estimates, and intercorrelations for all 10 DES-II emotion measures are reported in Table 1. Generally, respondents experienced the positive affects of interest and joy more frequently than the negative affects, with the affect of surprise located between the extremes. These patterns are similar to those reported by Westbrook (1987). Although the negative emotions tend to be highly correlated, of note here is the fact that interest and joy are not. Surprise is moderately correlated with all of the emotions except interest.

Patterns of Emotional Experience

To interpret the five-cluster solution, see the display of the cluster centroids on the 10 standardized DES-II measures in Table 2. Differences in the relative appearance of the different types of emotion across the sample of consumers are evident. As would be expected,

TABLE 2
STANDARD SCORE CLUSTER CENTROIDS FOR FIVE-CLUSTER SOLUTION

| Emotion measure | Happy/content (<i>n</i> = 26) | Pleasant surprise (<i>n</i> = 29) | Unemotional (<i>n</i> = 38) | Unpleasant surprise (<i>n</i> = 18) | Angry/upset (<i>n</i> = 14) |
|-----------------|-----------------------------------|---------------------------------------|---------------------------------|---|---------------------------------|
| Interest | .880 | -.724 | -.386 | -.028 | .949 |
| Joy | .873 | .752 | -.826 | -.580 | -.191 |
| Surprise | -.434 | .696 | -.892 | .585 | 1.033 |
| Sadness | -.674 | -.367 | -.343 | .890 | 1.798 |
| Anger | -.346 | -.570 | -.384 | .657 | 2.020 |
| Disgust | -.503 | -.468 | -.467 | .713 | 2.254 |
| Contempt | -.483 | -.470 | -.488 | .774 | 2.199 |
| Fear | -.375 | -.465 | -.413 | .428 | 2.233 |
| Shame | -.408 | -.501 | -.404 | .788 | 1.879 |
| Guilt | -.544 | -.491 | -.416 | .844 | 2.072 |

the five clusters differed significantly, as shown by a MANOVA on the original DES-II variables used for clustering (Wilks's $\lambda = .012$, $F = 23.47$, $p \leq .001$), and all univariate tests were significant as well ($p \leq .001$). The five groups of consumers were labeled as

1. *happy/content* (21 percent of respondents). These consumers report frequent interest and joy and infrequent occurrences of surprise and all negative emotions.
2. *pleasant (positive) surprise* (23 percent). Although low in the frequency of interest, consumers in this group report a high incidence of joy and surprise and an infrequent occurrence of all negative emotions, suggesting delight.
3. *unemotional* (30 percent). These consumers fall below average in the frequency of all measures of consumption emotion, especially joy and surprise.
4. *unpleasant (negative) surprise* (14 percent). These consumers report frequent surprise and most negative emotions, especially sadness; joy appears infrequently.
5. *angry/upset* (11 percent). These consumers report an extremely elevated frequency of the negative emotions, especially disgust and contempt; they also report surprise, and interest occurs with some frequency.

Cluster Satisfaction Profiles

To show the relationship between the emotional response patterns and satisfaction, we report means of the various satisfaction scales for each cluster in Table 3. The results for the multi-item Likert-type satisfaction measure show that the two most satisfied groups are the happy/content and pleasant-surprise clusters, both of which share frequent joy and infrequent negative emotion. In descending order of satisfaction are the unemotional, unpleasant-surprise, and angry/upset groups, all of which are below the sample mean. This pattern was repeated for the graphic, bipolar, and unipolar satisfaction scales with the exception of the unemotional group, which fell approximately at the mean for the graphic and unipolar scales.

The unipolar dissatisfaction scale mirrored the above findings with two peculiar exceptions: the happy/content group was slightly more dissatisfied than the pleasant-surprise group, and the unemotional group was below the mean dissatisfaction level (i.e., relatively more satisfied). Also notable is the finding that the traditional seven-point bipolar satisfaction scale generated the poorest univariate F -statistic for separating the emotional clusters.

The decision-regret and disconfirmation measures in Table 3 all varied significantly across the emotional experience clusters, in conformity with the satisfaction scales, except that the pleasant-surprise group reported the highest level of positive disconfirmation, as might be expected. These measures appear to discriminate the happy/content and pleasant-surprise groups somewhat better than the satisfaction measures do. The decision-regret scale produced the largest F -statistic of all measures.

Dimensionality of Emotion Space

Results of the discriminant analysis to identify the dimensions of the emotion space that contains the five clusters of automobile consumption emotion are shown in Table 4. As would be expected from the prior partitioning of the data into clusters, the first three discriminant functions were significant ($p \leq .001$); the fourth was only marginally significant ($p \leq .06$). The interpretation of these functions provides the most parsimonious description of the space of consumption-emotion patterns. Four interpretable dimensions are suggested by the correlations between varimax-rotated discriminant functions and the original DES-II variables. The first is a unipolar dimension of "hostility." The second dimension appears to be one of "pleasant surprise," while the third describes the affect of "interest" in combination with joy and very little surprise. The fourth is characterized by a lack of fear in combination with moderate interest. Although suggestive of "confidence," this result may be an artifact, as it is the

TABLE 3
MEAN SATISFACTION AND RELATED-MEASURE SCORES FOR EMOTIONAL EXPERIENCE CLUSTERS

| Measure | Total sample (N = 125) | Happy/ content (n = 26) | Pleasant surprise (n = 29) | Unemotional (n = 38) | Unpleasant surprise (n = 18) | Angry/upset (n = 14) | F |
|--|---------------------------|-------------------------------|----------------------------------|-------------------------|------------------------------------|-------------------------|--------------------|
| Satisfaction scale: | | | | | | | |
| Likert scale [12–60] | 47.50 (10.81) | 54.04 (7.21) | 54.00 (4.92) | 45.55 (8.17) | 40.11 (12.31) | 36.71 (13.47) | 16.28 ^a |
| Graphic "circles" [0–8] | 6.24 (1.60) | 7.08 (1.20) | 7.03 (.73) | 6.26 (1.35) | 5.22 (1.59) | 4.29 (1.90) | 15.66 ^a |
| Bipolar satisfaction [1–7] | 6.25 (1.05) | 6.62 (.75) | 6.86 (.35) | 6.03 (1.00) | 5.83 (1.47) | 5.43 (1.16) | 7.96 ^a |
| Unipolar satisfaction [0–10] | 8.02 (1.87) | 9.12 (1.11) | 9.07 (.80) | 7.97 (1.50) | 6.72 (1.93) | 5.64 (2.27) | 19.74 ^a |
| Unipolar dissatisfaction [0–10] | 2.38 (2.12) | 1.35 (1.72) | 1.24 (.74) | 2.26 (1.75) | 3.61 (2.25) | 5.36 (1.98) | 19.17 ^a |
| Related measures: | | | | | | | |
| Decision regret [0–10] | 7.42 (2.48) | 9.00 (1.26) | 8.69 (.93) | 7.55 (1.91) | 5.00 (2.85) | 4.57 (2.65) | 23.17 ^a |
| Need disconfirmation ^b [1–7] | 5.62 (1.20) | 6.42 (.76) | 6.21 (.49) | 5.63 (1.08) | 4.61 (1.29) | 4.21 (1.05) | 20.48 ^a |
| Expectancy disconfirmation ^b [1–7] | 4.87 (1.23) | 5.26 (1.11) | 5.70 (.80) | 4.75 (1.07) | 4.15 (1.26) | 3.74 (1.17) | 11.44 ^a |

NOTE.—Scale ranges are shown in brackets, SDs in parentheses.

^aOne-way ANOVA, $p \leq .01$.

^bHigh (low) scores reflect positive (negative) disconfirmation.

final extractable function, and, for this reason, is not further interpreted.

Results obtained when the satisfaction, regret, and disconfirmation measures were regressed on the three significant emotional space dimensions are shown in Table 5. Typically the fits are modest, with adjusted R^2 values in the .35–.50 range. The most noteworthy exception is the bipolar satisfaction scale, which performed poorly. With respect to substantive interpretation, all of the satisfaction and related measures are significantly related ($p \leq .05$) in expected directions to the hostility, pleasant surprise, and interest dimensions of the emotional space, although the magnitudes of the latter two relationships vary somewhat across the measures. A consistent pattern is evident in the magnitudes of the standardized regression weights; the largest coefficients are for the hostility dimension, followed by pleasant surprise and interest.

DISCUSSION

The patterns of consumption emotion identified in the taxonomic analysis extend knowledge of postpurchase appraisal by demonstrating that a number of qualitatively different affective experiences coexist with, and are related to, the common, unidimensional satisfaction continuum. Their positioning along the continuum is revealing of the meaning of satisfaction itself. Both the happiness/contentment and delight (pleasant-surprise) patterns were associated with similarly high absolute levels of satisfaction, although certain emotional antecedents clearly vary. Hence, there would appear to be two different experiential bases of high satisfaction, namely, pleasure linked to surprise over the

consumption experience and pleasure coupled with high interest. An implication is that satisfaction measurement might be enhanced by distinguishing between these alternative experiential bases.

The unemotional pattern was linked to moderately high levels of satisfaction, and this finding is enigmatic for understanding the meaning of satisfaction. Relative to the sample norm, these consumers reported infrequent affect of any kind, and yet, their mean evaluative scores were in the "satisfied" region on every measure (above the scale's neutral midpoint). These consumers appear to experience automobiles in an unemotional, largely cognitive-conative manner devoid of strong feelings. The results are suggestive of a more cognitive or "cool" state of satisfaction, in that the affect elements noted previously are not clearly evident. One may wonder whether "satisfied" is the best characterization of these consumers; perhaps a better description might be "not dissatisfied." The situational variability of the unemotional pattern cannot be addressed from the data—that is, whether these "emotionless" automobile owners also respond to aversive outcomes (e.g., product failure) in a correspondingly unemotional manner.

The negative-surprise pattern is associated with lower satisfaction than the positive and unemotional patterns, although it is still within the satisfied range of the measures. It appears that moderate negative affect is tolerated to some extent, and its negative valence is not simply translated into dissatisfaction. Similar observations can be made about the angry/upset pattern, which is associated with the lowest satisfaction of all, and yet, even these consumers do not indicate as high a level of absolute dissatisfaction as might be expected from the frequency of their negative affect.

That surprise can take on both positive and negative valence is consistent with theoretical perspectives on surprise as an amplifier of accompanying emotions (Charlesworth 1969; Oliver 1989). This suggests that surprise may play both an independent and a correlated role in the production of satisfaction and that research into this "dual role" variable should be initiated. As observed here, surprise appears capable of shifting consumer sentiment and, hence, cluster membership.

Overall, these findings indicate that satisfaction appears to be more complex in nature than a simple affective summary of the relative frequencies of positive and negative emotion during consumption experiences, as found in Westbrook (1987). The results also support Oliver's (1989) proposal to distinguish a variety of "satisfaction prototypes" that suggest varying meanings of satisfaction to consumers.

This study, however, does extend Westbrook's (1987) findings on the dimensionality of the psychological space that contains consumption emotion. By employing patterns of emotional responses from the taxonomic analysis to define affective dimensionality, we obtained a three-dimensional space. We confirm the negative-affect dimension reported by Westbrook as comprising a variety of negative emotions. However, we find evidence that the emotions space has two rather than a single positive dimension. Both involve high levels of joy; while one is linked to surprise, the other also comprises interest. Pleasant surprise appears to be largely unipolar and would appear to be a likely explanation for the positive affective nature of most successful consumption experiences. The interest dimension appears bipolar, and its emotional composition is suggestive of the notion of enduring involvement. Since the latter has not previously been considered in relation to post-purchase appraisal, it deserves further inquiry.

TABLE 4

CORRELATIONS BETWEEN THE DISCRIMINANT FUNCTIONS AND THE DES-II SUBSCALES

| | Dimension 1 | Dimension 2 | Dimension 3 | Dimension 4 |
|-------------------|----------------|----------------|----------------|----------------|
| Emotion: | | | | |
| Interest | .129 | .006 | .682 | .394 |
| Joy | -.084 | .748 | .446 | -.121 |
| Surprise | .189 | .669 | -.345 | .099 |
| Sadness | .375 | -.006 | -.278 | .179 |
| Anger | .409 | -.030 | .046 | .021 |
| Disgust | .609 | .067 | -.083 | -.202 |
| Contempt | .586 | .079 | -.084 | .010 |
| Fear | .459 | .043 | .073 | -.579 |
| Shame | .376 | -.001 | -.048 | .239 |
| Guilt | .508 | .001 | -.153 | .153 |
| Eigenvalue | 12.109 | 1.646 | 1.166 | .123 |
| Wilks's λ | .012 | .155 | .411 | .890 |
| p | $\leq .001$ | $\leq .001$ | $\leq .001$ | $\leq .060$ |

TABLE 5

STANDARDIZED REGRESSION WEIGHTS OBTAINED WHEN THE SATISFACTION AND RELATED MEASURES WERE REGRESSED ON THE EMOTION SPACE DIMENSIONS

| Measure | Emotion space dimensions | | | Adjusted R^2 |
|-------------------------------|--------------------------|----------------------|----------|-------------------|
| | Hostility | Pleasant surprise | Interest | |
| Satisfaction scales: | | | | |
| Likert scale | -.476** | .403** | .272** | .450** |
| Graphic "circles" | -.538** | .257** | .218** | .388** |
| Bipolar satisfaction | -.368** | .229** | .167* | .196** |
| Unipolar satisfaction | -.571** | .318** | .252** | .478** |
| Unipolar dissatisfaction | .583** | -.218** | -.209** | .417** |
| Related measures: | | | | |
| Decision regret | -.587** | .221** | .313** | .479** |
| Need disconfirmation | -.580** | .287** | .298** | .495** |
| Expectancy disconfirmation | -.451** | .356** | .200** | .355** |

* $p \leq .05$.

** $p \leq .01$.

Another finding of consequence is that extant satisfaction measures vary in the extent of their correspondence to the underlying dimensionality of postpurchase affective response. Although most were related at moderate levels of association, the commonly used bipolar satisfied/dissatisfied scale was notably weaker. These results affirm efforts to develop more affectively enriched satisfaction measures, such as the "delighted-terrible" scale (Westbrook 1980b).

A number of limitations of a cautionary note should be acknowledged. First, the exploration of consumption-emotion patterns is limited to the categories of basic emotion in Izard's (1977) typology. Other emotion typologies proposed in the literature (e.g., Plutchik 1980) might yield different patterns and, accordingly, dissimilar dimensionalities and relationships to satisfaction. It is also possible that other product categories beyond automobiles will reveal still different dimensional results.

Finally, the dimensionality of consumption emotion and its relationship to satisfaction should be studied across multiple consumption contexts. We assumed that product usage and ownership possessed similar meaning to consumers. The possibility exists that, for some products, ownership and usage are distinct (e.g., an antique or exotic sports car). Other important contexts include purchasing and product care and maintenance, each of which may yield different interpretations.

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