

# POST-CONSUMPTION EMOTIONS: EXPLORING THEIR EMERGENCE AND DETERMINANTS

Thomas E. Muller, McMaster University  
David K. Tse, University of British Columbia  
Ramesh Venkatasubramaniam, University of British Columbia

## ABSTRACT

Using data from a two-stage survey, this paper explores how pre-consumption anchors and post-consumption evaluations affect post-consumption emotions. It investigates whether post-consumption emotional responses can be traced to a consumer's expectations, performance norms from previous experiences, primary evaluation of the experience and the disconfirmation of expectations. We made several interesting findings. Emotions that were classified as positive were affected by a consumer's expectations, norms, primary evaluation of the experience and disconfirmation evaluations. However, negative emotions were less complicated and were affected by pre-consumption expectations and the primary evaluation of the consumption.

## INTRODUCTION

While the growing number of post-choice studies has expanded our understanding of how a consumer reacts during or after the consumption experience--which covers such processes as satisfaction evaluation (Tse and Wilton 1988; Oliver and DeSarbo 1988), attributing product failures (Folkes 1984); complaining (Richins 1979) and developing purchase intentions (LaBarbera and Mazursky 1983)--researchers have not paid as much attention to how a consumer feels during and after the consumption experience. Our paper tries to redress this imbalance by advancing from the pioneering work done on consumption emotions by Hirschman and Holbrook (1982), Holbrook and Hirschman (1982), Westbrook (1980; 1987) and Oliver (1981; 1990) and exploring the emergence and determinants of a person's post-consumption emotional responses.

Integrating past findings, our paper proposes

four sources of post-consumption emotional responses. First, aside from developing beliefs about how a consumption experience may turn out, a consumer is likely to develop some affect, based on imagery and fantasies concerning the anticipated experience (Holbrook and Hirschman 1982). That is, expectations may be invested with both feelings and cognitions. Thus, a consumer's expectations would serve as cognitive and affective anchors for the impending consumption experience. A second source of current emotional responses would be the person's repository of previous consumption experiences. Previous experiences often are laden with emotions and are known to form a normative base, against which a current consumption experience is compared and evaluated (Cadotte, Woodruff and Jenkins 1987). Thirdly, emotional responses can depend on the nature of the current consumption experience. This primary evaluation (or process) is believed to be an immediate and vital antecedent to a consumer's affective process (Oliver 1990). Finally, a fourth source of emotions during the current consumption stage can be activated when a consumer perceives discrepancies between what is expected and what is delivered.

To explore how these four sources determine post-consumption emotional responses, we relied on a two-stage consumer survey. About 500 tourists were interviewed by telephone before and after they visited the city of Toronto, Canada, to measure their pre-visit expectations (expectation), evaluation of previous consumption experiences (norm), post-visit evaluations of the experience (performance), post-visit perceived disconfirmation (disconfirmation), and post-visit emotions. Whether and how these four determinants simultaneously affected a tourist's post-visit emotions was assessed with structural equations in a causal model.

## WHY POST-CONSUMPTION EMOTIONAL RESPONSES?

Though consumer researchers for many years focused on the utilitarian and cognitive representations of consumption behavior, emotional desires as a part of utilitarian motives were studied by motivational researchers in the early 60s (see Hirschman and Holbrook 1982). Within consumer satisfaction research, attention shifted to emotional responses when Westbrook (1980) proposed and tested the Delighted-Terrible scale for evaluating consumer satisfaction sentiment.

Later efforts broadened this focus to include hedonic consumption. Such conceptualizations argued that the predominant cognitive orientation of current consumer research may be limited and partial, ignoring many of the motives and processes that are part of the consumption experience (Holbrook and Hirschman 1982). While some scholars propose that the affective process is complementary to and/or interactive with consumer information processing (see Zajonc and Markus 1982), others contend that the cognitive approach addresses only a small fraction of the phenomena comprising the entire experience of consumption (Holbrook and Hirschman 1982). There is evidence that affective processes can be more important than cognitive ones and can even serve as antecedents to information processing (cf. Zajonc 1980). We believe that emotional responses--long neglected in satisfaction research--are a legitimate and useful focus of inquiry.

Recent studies also point to the need for investigating post-consumption emotions. For instance, Westbrook (1987) found that emotional responses are important in forming consumers' buying intentions and, in particular, that negative affect is a significant predictor of complaining behavior. Emotional responses are also conceptualized as pivotal constructs in Oliver's (1990) typology of satisfaction processes.

To draw a comparison with advertising research, much of the work in that area is preoccupied with pre-consumption or pre-purchase affective processes that are likely to be more transitory, unstable and simple than is the case with post-consumption emotions (e.g., Aaker, Stayman and Hagerty 1985; Gardner 1985).

Satisfaction researchers are in a unique position to study the complexities and dynamics of consumption behavior because, by purchasing and consuming, people make economic, social and temporal sacrifices that are subject to introspection and emotional evaluations.

## DETERMINANTS OF POST- CONSUMPTION EMOTIONS

### Pre-Consumption Expectation

While pre-consumption expectation is included as a key variable in models of satisfaction formation (e.g., Oliver 1980), so far, it has been treated only as a cognitive representation of how a consumer psychologically prepares for the consumption experience. The literature on pre-purchase affective processes (Aaker, Stayman and Hagerty; Gardner 1985) points to the existence and salience of affect when a consumer prepares for purchase and consumption. Indeed, fun, enjoyment, pleasure and other feelings are increasingly recognized as important consumption motives (as explored by Maslow [1968]). Such hedonic processes (Holbrook and Hirschman 1982) underlie many product ownership decisions (Westbrook 1987).

When consumers become tourists, they can be expected to experience fairly strong emotions in the process of building expectations towards the impending travel opportunity. Travel advertisements, colorful and romanticized brochures, word-of-mouth descriptions from earlier visitors offer the would-be tourist many opportunities to develop pre-consumption emotions. The currently held notion that feelings would only be elicited after the disconfirmation process and/or satisfaction evaluations ignores the potential impact of pre-consumption affective processes. It is hard to imagine that the only emotions among tourists would stem from confirmation or disconfirmation of whether their experience matched their utilitarian goals.

The affective component of expectations could impact emotions during and after the consumption experience in more than one way. As in earlier conceptualizations of comparison standards, expectations might serve as an anchor or standard against which experiences are evaluated.

Expectations could also serve as a "lens," through which the consumer interprets the consumption experience. They may also act as an effective locus--in the case of disconfirmation--to provide "reasons" for such discrepancies (Oliver 1990).

### Norms From Experiences

Concerning the formation of experience-based norms and their function in the satisfaction process, Woodruff, Cadotte and Jenkins (1983) proposed that a consumer associates previous consumption experiences with a specific brand (or similar brands) to develop performance norms. These norms form an "equitable" performance standard which the consumer feels a brand ought to deliver or which he or she deserves, given the effort expended and the financial, temporal and social costs incurred in its consumption (Tse and Wilton 1988). If previous consumption experiences have generated emotions--and many will have--affective elements should similarly be embedded in the consumer's performance norms. In fact, affective components of an experience are known to augment a person's ability to recall that experience.

In the case of urban tourism, performance norms would be shaped by trips to other cities (product-based norms) and any previous visits to the city being revisited (brand-based norms). Consumers may also consider cost, and time and effort expended on the trip in order to arrive at an equitable performance standard.

Woodruff, Cadotte and Jenkins' (1983) model makes performance norms pivotal in post-consumption dynamics. Specifically, when performance falls outside of the normal acceptance range, consumers are either pleasantly or unpleasantly surprised. In the latter case, equity theory would suggest that since consumption costs and effort were not matched by performance, the feeling of "injustice" fuels strong emotions.

### Perceived Performance

Though the impact of perceived performance on satisfaction evaluation is widely acknowledged (Churchill and Surprenant 1982; Tse and Wilton 1988; Oliver and DeSarbo 1988), its ability to shape post-consumption emotions is more germane

here. Zajonc's (1980) paper on the primacy of affect would suggest that emotions elicited by the consumption experience are more spontaneous and readily available than are the cognitive aspects of the disconfirmation process. This primary process also figures in Oliver's conceptualization of satisfaction response modes: a consumer's happiness, contentment or anger may be a direct response to how well a product performs. In addition, the experiential component can trigger a stream of emotions in the form of imagery and day dreaming.

Consumers of pleasure travel use photographs, video tapes, postcards and souvenirs to capture the emotional aspects of their experience and to aid the memory after the experience is over.

### Perceived Disconfirmation

A final factor is the salience of a consumer's perceived discrepancy between pre-experience standards and the nature of the experience--a construct that is treated as the most important determinant of the satisfaction process (Hunt 1977). When such a discrepancy is perceived, a psychological disequilibrium occurs (Tse, Nicosia and Wilton 1990) which triggers immediate emotional responses (Oliver 1981) and these emotions (such as surprise) may serve to vent the disequilibrium. In comprehensive models of mood states, moods like "surprised" (Watson and Tellegen 1985), "bewildered" (Plutchik 1980), or "astonished" (Russell 1980) are supposed to arise from comparisons between what is being experienced and what was expected.

More importantly, researchers also think of disconfirmation as a motivator of subsequent post-consumption behavior (Tse, Nicosia and Wilton 1990). By integrating attribution theory and emotions, Oliver (1990) has proposed more than one post-consumption emotional response mode, based on the degree of disconfirmation. For example, when a consumer perceives the disconfirmation to be minor, a "contentment" response may operate, whereas if the disconfirmation is large, a "surprise" response may emerge.

Given the earlier research tendency of considering only the utilitarian aspect of consumers' comparisons of product performance

against expectations, disconfirmation resembled a cognitive rather than affective construct. However, as the most recent literature suggests, disconfirmation by itself can set off some important emotional responses through the pleasure principle: performance that is better than expected would be pleasurable and performance below expectations would elicit anger, frustration and disappointment. In addition, disconfirmation may stimulate the attribution process which may lead to some secondary, attribution-dependent emotions (Oliver 1990).

### METHOD

United States residents planning a pleasure trip to Metropolitan Toronto during the summer months were surveyed at home, about a week before their departure for Canada. Names and telephone numbers were obtained from the reservation lists of nine hotels in the Metro Toronto area. The hotels were sampled systematically, so that their room rates ranged from medium to high and their locations varied from downtown to highway sites near the fringes of the city. Budget hotels were excluded. In scanning the hotel reservations, all entries giving U.S. home addresses and telephone numbers, for a stay of at least two nights, and with an arrival date at least one week away were included in the tourist sample. The person named on the reservation was the person interviewed. For reservations naming couples, interviews alternated between females and males, within couples, once telephone contact had been made with that household. This produced a sample of 49% males and 51% females.

Respondents were screened to ensure that this was a visit for pleasure, not for business. Interviewing was done from central research facilities and the entire interview was computer assisted, with answers being entered directly on the keyboard. To negate any response bias due to question order, multiple items within blocked questions always appeared in a different randomized order, from interview to interview, on the interviewer's computer screen.

During this stage of the survey, data were obtained on the respondent's expectations of what Toronto would be like as a city on 16 touristic

attributes (on a 10-point rating scale from "1" for "don't expect this" to "10" for "definitely expect this"). These measures were later factor analyzed with oblique rotation to yield two pre-consumption expectations (expect1 and expect2). Respondents were then asked to list the large cities they had visited for pleasure in the past (up to seven cities were recorded); they then were asked to rate (on a 10-point scale) the degree of enjoyment experienced in each of the cities mentioned. Answers were later averaged across the cities in order to establish a respondent's average performance norm (norm).

About a week after respondents returned home, they were reinterviewed (but not told earlier about this second interview; recontact dates were estimated from answers to a question on total duration of trip) and asked about their perceived experience of the visit (10-point scales measuring the degree of agreement) on the same 16 attributes. These ratings were later factor analyzed with oblique rotation to yield two post-consumption performance measures (perform1 and perform2). Disconfirmation measures were obtained by asking the respondents to compare the Toronto visit to (a) their pre-visit expectation and (b) past pleasure visits to other large cities like Toronto on two separate 7-point scales (from "very much worse" to "very much better").

Respondents' overall emotional responses to their experience were assessed with two sets of mood adjectives: positive and negative (agreement or disagreement--on 10-point scales--with the statements, "My visit to Toronto leaves me touched or moved; delighted; contented; disappointed; angry; frustrated"). Degree of agreement with the statements: "I would recommend to my friends and relatives that they visit Toronto" and "Given my experiences during this visit, I intend to make another pleasure visit to Toronto" served as the two measures of future purchase intent. In all, 364 respondents completed both parts of the survey.

### Touristic Attributes Used

Measures chosen to represent the touristic experience in a large city should be salient to a broad cross-section of international urban tourists and include urban environmental factors which

would likely affect the visitor. A set of 16 attributes was chosen with the following research findings in mind:

1. Touristic attractiveness criteria which correlated with travel behavior (Gearing, Swart and Var 1974; Var, Beck and Loftus 1977);
2. Important experiential variables from a nationwide survey of potential U.S. pleasure travellers to Canadian cities (Tourism Canada 1986);
3. Boyer and Savageau's (1985) urban livability measures that would be of relevance to big-city visitors; and
4. The potential richness of the big-city experience deserves measures that capture the experiential aspects of a visit (cf. Holbrook and Hirschman 1982).

The attributes we used were:

1. Safety from crime during your visit
2. Being in a clean, well-kept city
3. Being able to walk/stroll about the city
4. Friendliness and helpfulness of citizens
5. Ease of finding/reaching places of interest
6. Seeing a city with great scenic beauty
7. Hotel accommodation meeting your standards
8. Availability of good health care in emergencies
9. Attractiveness of price levels
10. Experiencing artistic/cultural offerings
11. Shopping in stores during visit
12. Large choice of good restaurants
13. Avoiding crowds and congestion
14. Avoiding the feeling of being a stranger
15. Pleasantness of city's weather during visit

### FINDINGS AND DISCUSSION

Respondents' scores on six mood adjectives were used to capture their post-consumption emotional responses. When the six scales were factor analyzed, the resulting two distinct factors separated the emotions into positive and negative moods. Adjectives within each set were then summed and used as dependent variables in an ordinary least-squares regression analysis. The

independent variables were pre-consumption expectation (expect1, expect2), pre-consumption norm (norm), post-consumption performance ratings (perform1, perform2) and disconfirmation (compared to [a] expectations, and [b] other cities).

Table 1 shows how these four pre- and post-consumption evaluations affect emotional responses. The results differ between the two emotion types. For positive emotions, all four evaluations were significant at .05. Thus, respondents derive positive feelings from their pre-consumption expectation (hence "expect1" is significant), performance norm, the perceived performance ("perform1"), and the perceived disconfirmation of the consumption ("compared with expectation"). In terms of their relative magnitude, the two pre-experience anchors are weaker than the two post-consumption evaluations, perhaps because the latter two were measured at the same time as the post-experience emotions.

**Table 1**  
**OLS Regression On Two Types**  
**of Emotional Responses**

<u>Dependent Variable</u>	<u>Independent Variables</u>	<u>R<sup>2</sup></u>
Positive Emotional Responses <sup>a</sup>	Perform1** Compared with Expectation** Average rating on cities Visited* Expect1*	.88
Negative Emotional Responses <sup>b</sup>	Perform1** Expect2*	.14

<sup>a</sup> Sum of three scales measuring whether respondent felt touched, delighted, or contented with visit.

<sup>b</sup> Sum of three scales measuring whether respondent felt angry, frustrated, or disappointed with visit.

\*\* significant at .01; \* significant at .05

By contrast, negative emotions were affected only by prior expectations and perceived performance. This discrepancy between negative and positive emotions was observed by Westbrook (1987), who found that positive and negative affect were independent constructs. Our finding confirms the need to develop individual, distinct mood adjectives, rather than using semantic scales, as suggested by many studies of emotional response.

Our findings also hint that the post-consumption emotional process may be more complicated than has been modeled by others. In addition to disconfirmation as a major motivator in the process (Cadotte, Woodruff and Jenkins 1987; Westbrook 1987), other determinants such as perceived performance (Oliver 1990), expectations and performance norms are salient to understanding a consumer's post-consumption emotions. Though we could not yet identify the specific ways in which these constructs operate, their salience in the process needs to be addressed.

The significance of perceived performance and expectations in predicting both positive and negative emotions indicates that the two constructs are important starting points in understanding post-consumption emotions. The consistent impact of perceived performance signifies that a primary process along the pleasure principle is an important operator here.

In order to explore how post-consumption emotional responses affect further visit intentions, we developed and tested a causal model specifying the relationships among expectations, norms, performance, disconfirmation, emotional responses and purchase intention (Figure 1). Several interesting findings surfaced from this structural equations analysis.

The two types of emotional responses correlated weakly with one another, hence cannot be regarded as measures of the same underlying construct. We therefore treated the two measures as separate constructs in a revised model, but found that the negative emotions exerted no influence on purchase intentions; thus, negative emotions were dropped from the model and Figure 1 shows only the positive emotional responses. The two measures of perceived performance also correlated weakly, so one of these measures was dropped.

The standardized coefficients are reported in Figure 1, with the measurement errors omitted for clarity. The entire model has 33 degrees of freedom and yields a Chi-square of 92.98 ( $p < .001$ ). For samples as large as those used in this study, the significance of chi-square is of less importance. Rather, the adjusted goodness-of-fit index (.93) and the root mean square residue (.02) signal that this model is a reasonable representation of the underlying data.

The coefficients for the antecedents of positive emotional responses confirm the findings in Table 1. Perceived performance (.51) and perceived disconfirmation (.47) each have a greater influence than expectations (.04) and performance norms (.04).

The strongest cause of subsequent purchase intentions was perceived performance (.73), while expectations had a much weaker direct influence on this. Given the smaller coefficient for positive emotional responses (.27), there appears to be some attenuation in the influence of positive emotions on intentions, and future research should examine this relationship because it may be more complex than modeled here. Finally, the most interesting finding is the lack of any direct influence of disconfirmation on subsequent purchase intent. The causal path between these two constructs was nonsignificant and was, therefore, dropped from the model. In our study, the influence of disconfirmation on intentions was mediated by positive emotional responses.

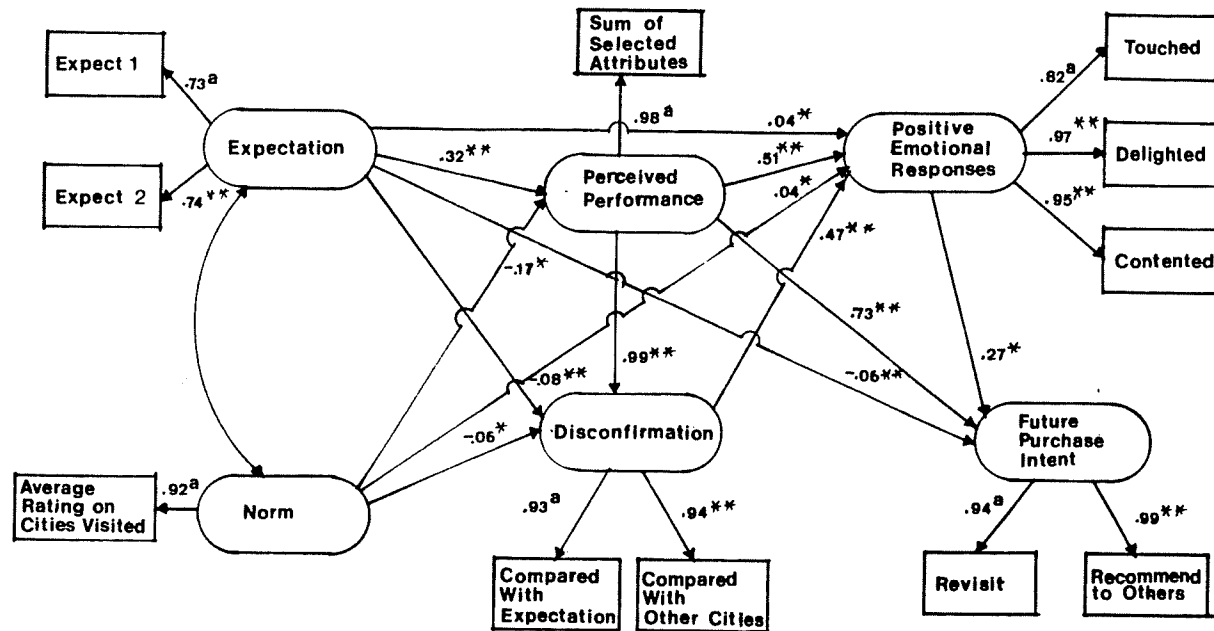
## CONCLUSION

Whereas much consumer research has taken a cognitive approach to the study of the consumption process, the findings in this study insinuate that further research on the function of post-consumption emotional responses in this process will be rewarding. In any case, cognitive and affective processes are likely to be complementary, if not interactive, in their influence on what the consumer does and experiences.

Our results imply that the post-consumption emotional process could be more complicated than the way it has been conceptualized, to date. In particular, the findings suggest that many determinants are significant in predicting post-consumption emotions. As shown in our empirically tested causal model, a consumer's post-consumption emotions can be traced backwards to the point when the person prepares for the consumption experience.

The present study has three limitations. First, the mood states measured were rather limited, especially when compared to published comprehensive models of mood states. Second, the study did not assess the role of attribution, a possible mediator for post-consumption emotional

Figure 1  
A Casual Model for Post-Consumption Emotional Responses



<sup>a</sup> Constrained  
Significant at:  
\*\* .01  
\* .06

responses. Finally, while we were careful about controlling for confounds in our survey, the two-stage approach for collecting data on consumers' pre- and post-consumption experiences may have introduced confounds that could not be eliminated.

REFERENCES

Aaker, David A., Douglas M. Stayman and Michael R. Hagerty (1985), Warmth in Advertising: Measurement, Impact and Sequence Effects," *Journal of Consumer Research*, 12 (March), 365-81.

Boyer, Richard and David Savageau (1985), *Place Rated Almanac*, Chicago: Rand McNally.

Cadotte, Ernest R., Robert B. Woodruff, and Roger L. Jenkins (1987), "Expectations and Norms in Models of Consumer Satisfaction", *Journal of Marketing Research*, 24 (August), 305-14.

Churchill, Gilbert A., Jr. and Carol Surprenant (1982), "An Investigation into the Determinants of Consumer Satisfaction", *Journal of Marketing Research*, 19 (November), 491-504.

Folkes, Valerie S. (1984), "Consumer Reactions to Product Failure: An Attributional Approach", *Journal of Consumer Research*, 10 (March), 398-409.

Folkes, Valerie S. (1988), "Recent Attribution Research in Consumer Behavior: A Review and New Directions", *Journal of Consumer Research*, 14 (March), 548-565.

Gardner, Meryl Paula (1985), "Mood States and Consumer Behavior," *Journal of Consumer Research*, 12 (December), 281-300.

Gearing, E.E., W.W. Swart, and Turgut Var (1974), "Establishing a Measure of Tourist Attractiveness," *Journal of Travel Research*, 12 (4), 1-8.

Hirschman, Elizabeth and Morris B. Holbrook (1982), "Hedonic Consumption: Emerging Concepts, Methods and Propositions," *Journal of Marketing*, 46 (Summer), 92-101.

Holbrook, Morris B. and Elizabeth Hirschman (1982), "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun," *Journal of Consumer Research*, 9 (September), 132-140.

Hunt, H. Keith (1977), "CS/D - Overview and Future Research Directions," in *Conceptualization and Measurement of Consumer Satisfaction and*

- Dissatisfaction*, Keith H. Hunt ed., Cambridge, MA: Marketing Science Institute, 455-488.
- LaBarbera, Priscilla A. and David Mazursky (1983), "A Longitudinal Assessment of Consider Satisfaction/Dissatisfaction: The Dynamic Aspect of the Cognitive Process", *Journal of Marketing Research*, 20 (November), 393-404.
- Maslow, A. H. (1968) *Towards a Psychology of Being*, 2nd Edition, Princeton, N.J. Van Nostrand.
- Oliver, Richard L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions", *Journal of Marketing Research*, 17 (November), 460-469.
- Oliver, Richard L. (1981), "Measurement and Evaluation of Satisfaction Processes in Retail Settings", *Journal of Retailing*, 57 (Fall), 25-48.
- Oliver, Richard L. and Wayne S. DeSarbo (1988), "Response Determinants in Satisfaction Judgments", *Journal of Consumer Research*, 14 (March), 495-507.
- Oliver, Richard L. (1990), "Processing of The Satisfaction Response in Consumption: A Suggested Framework and Research Propositions," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*.
- Plutchik, Robert (1980), *Emotion: A Psychoevolutionary Synthesis*, New York: Harper & Row.
- Richins, Marsha L. (1979), "Negative Word of Mouth by Dissatisfied Consumers: A Pilot Study", *Journal of Marketing*, 47 (Winter) 68-78.
- Russell, James A. (1980), "A Circumplex Model of Affect," *Journal of Personality and Social Psychology*, 39, 1161-1178.
- Tourism Canada (1986), *U.S. Pleasure Travel Market—Canadian Potential: Highlights Report*. Ottawa: Department of Regional Industrial Expansion.
- Tse, David K. and Peter C. Wilton (1988), "Models of Consumer Satisfaction Formation: An Extension," *Journal of Marketing Research*, 25 (May) 204-212.
- Tse, David K., Franco M. Nicosia and Peter C. Wilton (1990), "Consumer Satisfaction as a Process," *Psychology and Marketing*, 7(3), 177-193.
- Var, Turgut, R.A.D. Beck and P. Loftus (1977), "Determination of Touristic Attractiveness of the Touristic Areas in British Columbia," *Journal of Travel Research*, 15 (3), 23-29.
- Watson, David and Auke Tellegen (1985), "Toward a Consensual Structure of Mood," *Psychological Bulletin*, 98 (September), 219-235.
- Westbrook, Robert A. (1980), "A Rating Scale for Measuring Product/Service Satisfaction", *Journal of Marketing*, 44 (Fall), 68-72.
- Westbrook, Robert A. (1987), "Product/Consumption Based Affective Response and Post-Purchase Processes", *Journal of Marketing Research*, 24 (August) 258-70.
- Woodruff, Robert B., Ernest R. Cadotte, and Roger L. Jenkins (1983), "Modeling Consumer Satisfaction Processes Using Experience-Based Norms," *Journal of Marketing Research*, 20 (August), 296-304.
- Zajonc, Robert B. (1980), "Feeling and Thinking: Preference Need no Inferences," *American Psychologist*, 35, 151-175.
- Zajonc, Robert B. and Hazel Markus (1982), Affective and Cognitive Factors in Preferences," *Journal of Consumer Research*, 9 (September), 123-131.

**Send correspondence regarding this article to:**

Thomas E. Muller  
 Faculty of Business  
 McMaster University  
 Hamilton, Ont.  
 CANADA L8S 4M4