

THE ROLE OF PRODUCT/SERVICE EXPERIENCE IN THE SATISFACTION FORMATION PROCESS: A TEST OF MODERATION

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ABSTRACT

This study investigates a potential moderator of the relationship between affect and cognition and consumer satisfaction/dissatisfaction. We propose that consumer experience with the product or service category serves to alter the impact of affect and cognition on satisfaction. More specifically, for consumers who have higher levels of experience the effect of disconfirmation becomes increasingly important, while the role of affect diminishes. Consistent with this reasoning, empirical results of a field study reported here support the moderating ability of consumer experience. The findings contribute to the growing literature on the influence of situational variables on the satisfaction judgment process.

INTRODUCTION

Of all the concepts in the marketing discipline, consumer satisfaction/dissatisfaction (CS/D) is perhaps the single most important construct. Marketing practitioners are well aware of the importance that customer satisfaction plays in the success of their businesses. Likewise, marketing academicians have conducted and published literally hundreds of studies investigating the antecedents and outcomes of consumer satisfaction (see Perkins 1991). This paper presents a study expanding our current knowledge of the CS/D field by investigating the role of a situational factor -- consumer experience -- on the satisfaction formation process.

Despite its obvious importance and extensive research, the question as to how consumers form satisfaction judgments has evaded a universal, consistent answer. Early attempts at answering this evasive question were most often based on the expectancy disconfirmation model (Anderson 1973; Oliver 1980; Swan and Trawick 1981). In this model, consumers are posited to compare preconsumption expectations with observed product/service performance to form disconfirmation expectancies which strongly

influence the formation of satisfaction judgments. Considered primarily cognitive in nature (Oliver 1980), substantial research exists which indicates that consumer disconfirmation is the most immediate influence on CS/D (Churchill and Surprenant 1982, Oliver 1980, 1993; Swan and Trawick 1981; Westbrook 1987).

Although many of the previous conceptualizations of CS/D have been based in cognitive evaluation, affect, as an essential variable of purchase and usage, is increasingly attracting the attention of consumer researchers within the context of postpurchase response (Mano and Oliver 1993; Oliver 1994). Several recent studies have found strong interrelationships between CS/D and product-elicited emotions (Mano and Oliver 1993). This suggests that considerable overlap exists in the determinants underlying consumer formation of satisfaction judgments (Oliver 1989; Westbrook 1987; Westbrook and Oliver 1991). Thus, it appears -- conceptually and empirically -- CS/D is naturally tied to both cognitive evaluations and affective reactions elicited in consumption (Mano and Oliver 1993).

The intent of this paper is to investigate the nature of the relationships among cognition, affect, and CS/D. More specifically, this study examines whether consumer experience with the product or service category, acting as a moderator, can alter the influence that expectancy disconfirmation and affect have on satisfaction measures. Although it does provide evidence consistent with previous reasoning establishing the independent influences of cognitive and affective variables on CS/D, this research broadens our understanding of consumer satisfaction by documenting the ability of moderators to alter these relationships.

CONCEPTUAL BACKGROUND

The following section provides a brief overview of past research investigating the roles of cognition and affect in consumer satisfaction formation. This study accepts the increasingly

popular premise that both cognition and affect are important influences on CS/D, choosing to focus on the relative effects of these constructs.

Cognitive Predictors of CS/D

While "the concept of satisfaction has defied exact specification" (Oliver 1981, p.26), our discipline appears to have commonly treated CS/D as a state resulting largely from a comparison of the level of outcome (i.e., performance, quality, etc.) with an "evaluative standard" (Hunt 1977, p. 459; Westbrook and Oliver 1991, pp. 84-85; Westbrook 1987, p. 260; Oliver 1980; Woodruff et al. 1983). Most frequently, this evaluative standard is assumed to be the consumer's set of preconception expectations regarding the product/service (Woodruff, Clemons, Schumann, Gardial, and Burns 1991). Primarily derived from assimilation-contrast theory (Sherif 1963), this disconfirmation paradigm assumes that the contrast of a standard with perceived performance directly influences CS/D in a linear, monotonic fashion (Woodruff, Cadotte, and Jenkins 1983). This expectancy disconfirmation model is the most popular theoretical basis for examining consumer satisfaction (see Oliver 1976; Westbrook 1980; Oliver 1980; Swan and Trawick 1981; Churchill and Surprenant 1982; Bearden and Teel 1983; Oliver and DeSarbo 1988; Tse and Wilton 1988; and Woodruff et al. 1991).

While disconfirmation is the most common cognitive variable examined in the CS/D literature, more recent works in CS/D explicitly recognize that the consumer satisfaction process is more complicated than being influenced solely by expectancy disconfirmation. Specifically, researchers have also considered perceived performance, prior expectations, attributions, and equity/inequity as predictors of satisfaction, with varying degrees of success. Furthermore, several alternative approaches have been utilized to model the relationship among these constructs. For example, Churchill and Surprenant's (1982) data revealed a direct path between performance and satisfaction, as opposed to performance combining with expectations to influence satisfaction through the disconfirmation measure. Subsequent studies across a variety of product and service categories have reported corroborating results (Tse and

Wilton 1988; Bolton and Drew 1991). Oliver and DeSarbo (1988), however, provide support for both a direct and indirect (through disconfirmation) effect of performance on CS/D. Oliver (1981) has suggested that a direct path from expectations to performance may exist as well. These studies indicate that performance and expectations may both directly influence satisfaction, as well as being compared with each other to impact satisfaction through disconfirmation.

Although receiving less attention, evidence also exists that causal attributions and equity assessments can significantly effect satisfaction. Folkes (1990; Folkes, Koletsky, Graham 1987) has shown that attributing the success or failure of a product experience or service encounter to the consumer, situation, or manufacturer/service provider can influence satisfaction judgments. In a very similar vein, Oliver and Swan (1989) have suggested that consumer perceptions of equitable or inequitable treatment can also effect satisfaction.

The common thread that runs through all of these studies is that they examine antecedents of CS/D that are viewed as "primarily cognitive...mostly conscious, overt activities that consumers may or may not perform" (Oliver 1993, p. 419). Thus, one can conclude that many attempts at explaining postconsumption reactions have concentrated on the underlying cognitive processes involved in satisfaction formation.

Affective Predictors of CS/D

The majority of the research on consumer satisfaction formation has focused on cognitive variables at the exclusion of affective predictors. However, beginning with Westbrook's (1987) study of satisfaction with automobiles, affective determinants of satisfaction have increasingly gained acceptance in CS/D research. By administering the Differential Emotions Scale (DES; Izard 1977), Westbrook was able to show that affective measures significantly influenced consumer satisfaction. In addition, two relatively uncorrelated affective factors (essentially positive and negative emotions) emerged, both effecting consumer satisfaction. Perhaps more importantly, Westbrook showed that the affective variables remained significant predictors of satisfaction even with the addition of expectancy disconfirmation to

the model.

Researchers are continuing to consider the role of affect in satisfaction formation, while struggling with the precise nature of emotion. A key issue has centered on the dimensionality of affect. Westbrook's (1987) two dimensional interpretation of positive and negative affect has been challenged as researchers have utilized different measures in studies across varying contexts. For instance, Westbrook and Oliver (1991) found support for three affective dimensions: hostility, pleasant surprise, and interest. Using the same measurement device (Izard's DES), Oliver (1993) reports three subdimensions of negative affect and either one or two (depending on the product or service studied) dimensions of positive affect. Mano and Oliver (1993) then used a different set of affective items and report the existences of an arousal dimension in addition to positive and negative affect. In a broader context, Babin, Griffin, and Darden (1995) examined several different conceptualizations of emotion, including satisfaction and dissatisfaction measures, in an attempt to determine the dimensionality. They report evidence of separate positive and negative affect dimensions, but could not find evidence that these affective measures are distinct from satisfaction itself.

In sum, while considerable disagreement may exist over the dimensionality of the operational measures, strong empirical support has been offered which indicates affect plays an important role in the satisfaction process.

Cognition and Affect as Joint Predictors of CS/D

It has been established that cognition and affect are both important determinants of consumer satisfaction. Oliver (see 1980) has long proclaimed that the expectancy disconfirmation model is essentially a cognitive construct, arising from conscious and deliberate information processing in order to compare preconsumption expectations with perceived product performance. In contrast, the affective bases of satisfaction are not completely under the consumer's control. Recently, strides have been made in understanding the respective roles of cognition and affect in the formation of postconsumption reactions.

Perhaps the most explicit recognition of cognitive and affective predictors of satisfaction is the "two-appraisal" representation of determinants of satisfaction judgments (Oliver's 1989). Subsequent research has provided evidence in support of the two appraisal model. Oliver (1993) investigated both a product (automobiles) and a service offering (a marketing principles course) in an attempt to determine the predictors of satisfaction. The results for both areas studied indicate that both cognition and affect are significant predictors of CS/D. Mano and Oliver (1993) came to a similar conclusion, finding that affect and utilitarian appraisal both predicted satisfaction. Finally, Oliver (1994) showed that both disconfirmation and affect influenced satisfaction with a child's treatment at a hospital. Oliver (1994, p. 20) succinctly summarizes this research:

"Apparently two mechanisms operate in tandem in consumers' minds, one involving the assessment of functional or comparative outcomes (what the product/service gives me) and one relating to how the product/service influences affect (how the product makes me feel)."

Thus, both cognition (in the form of expectancy disconfirmation) and affect have been found to be significant determinants of satisfaction across contexts.

The relative degree of influence of cognition and affect on satisfaction judgments, however, is largely undetermined. The preponderance of current evidence appears to indicate that cognition has greater influence on satisfaction. For example, both Westbrook (1987) and Oliver (1993) found the cognitive measure (disconfirmation) to be a more powerful predictor of satisfaction than affect. Nonetheless, and despite the results of his own research, Oliver (1993, p. 428) concludes that whether "disconfirmation is the most important antecedent in a group of independent effects or is an artifact of the present data is unknown."

Situational Influences on CS/D

In comparison to other areas of study (such as brand choice), a relatively limited number of

variables have been shown to relate to consumer satisfaction. As a result, some researchers have recognized the need to focus on situational factors influencing the relationship between CS/D antecedent and consequence variables (Westbrook 1987; Westbrook and Oliver 1991). Research taking this approach is more molecular in nature, examining how the satisfaction process changes across consumption experiences.

Babin, Griffin, and Babin (1994) is illustrative of such an approach. In their study, consumer involvement with the product/service category was treated as a moderator of two relationships. First, involvement was found to moderate the relationship between disconfirmation and satisfaction, with highly involved subjects displaying relatively more extreme satisfaction scores. Second, involvement was also a significant moderator of the relationship between ambient mood and satisfaction, with mood of the respondent being significantly related to satisfaction only under the low involvement condition. This study shows that situational variables can moderate the relationship between antecedent variables and consumer satisfaction.

THE CURRENT STUDY AND RESEARCH HYPOTHESES

Prior studies have established that both cognitive and affective variables are independent influences of CS/D. While inconclusive, empirical results suggest that disconfirmation asserts greater influence in satisfaction formation than does affect. In addition, research has found that situational variables can play an important role in the satisfaction formation process.

We agree, in general, that both cognition and affect are important determinants of satisfaction. However, by combining the research findings discussed above, we propose that the relative importance of disconfirmation compared to affect is situational and can be altered by the presence of moderator variables. Specifically, we propose that the consumer's level of experience with the product/service category will serve as a moderator of the relationship among disconfirmation, affect, and CS/D.

Experience as a Moderator of Disconfirmation

The disconfirmation paradigm requires consumers to compare preconsumption expectations with observed product performance to form disconfirmation expectancies. As several researchers have noted, this is a highly cognitive process (Oliver 1980, 1981; Tse and Wilton 1988; Yi 1990). Furthermore, an essential element of the disconfirmation process is the establishment of preconsumption expectancies. LaTour and Peat (1980) identified three basic determinants of such expectations: 1) the consumer's prior experience with the product/service; 2) situational factors, such as promotional efforts by the manufacturers or retailers; and 3) the experiences of other consumers acting as referent persons. They propose, and provide empirical support, for the view that product experience is the most important determinant of consumer expectations.

What about consumers with limited product/service category experience? Since these individuals must rely on LaTour and Peat's less important determinants of expectations, we propose they will face difficulties in forming preconsumption expectations. Furthermore, we believe any expectations these consumers do form will be less strongly held than the expectations possessed by consumers relying on their own prior experience. As a result, consumers with limited experience will tend to assimilate rather than contrast performance with expectations. Conversely, experienced consumers will make more precise cognitive judgments, comparing perceived performance with firmly held expectations, yielding powerful expectancy disconfirmation. Thus, we hypothesize:

H1: The predictive power of disconfirmation in the satisfaction process is positively related to consumers' length of product/service experience.

Experience as a Moderator of Affect

Psychologists have long recognized that novel stimuli tend to be emotionally arousing (see McClelland, Atkinson, Clark, and Lowell 1953; Atkinson 1964; Helson 1964). Applying this concept to the study of CS/D, we propose that

consumers facing a new situation will respond more emotionally than more experienced consumers. Further, we propose that affective measures will be a more powerful predictor of satisfaction judgments for inexperienced consumers than for those with greater experience.

A similar effect has been reported in the study of consumer satisfaction with automobile purchases. Mittal, Katrichis, Forkin, and Konkel (1994) found that "exterior styling" played a very important role in initial (prepurchase) satisfaction formation, but a reduced role in satisfaction 3-5 months after the purchase. Conversely, "durability/reliability" was the most important predictor of satisfaction 3-5 months after purchase. We believe that consumer reaction to styling is largely an emotional one ("how the product makes me feel") versus the cognitive assessment of reliability ("what the product/service gives me"). Generalizing this finding to other settings suggests that initial reactions and/or new experiences will evoke affective responses that heavily influence CS/D. As the newness wears off and experience increases, the role of affect diminishes. Thus, we hypothesize:

H2: The predictive power of affect in the satisfaction process is negatively related to consumers' length of product/service experience.

Perhaps an example will help illustrate our hypotheses. Consider a family taking their first vacation to Disney World. On this initial trip, the family does not really know what to expect, but gets caught up in the atmosphere, the activity, the colors, the costumes, and the characters. All these highly emotional elements play a substantial role in their overall satisfaction. Contrast this with the experience of a repeat trip. On their next visit to Disney World, they begin to think about the length of the lines, the expensive prices, and the cleanliness, comparing these attributes to the expectations they formed based on their first trip. Being previously exposed to the emotional elements, the affective reaction is less powerful, but the cognitive evaluation is much more important. We believe such an effect is present across a wide variety of product experiences and service encounters.

RESEARCH METHODS

Study Description and Data Collection

A field study was undertaken to test the research hypotheses developed above. In order to enhance the validity of the study, we were interested in assessing consumer reaction to an actual consumption experience (see Scherer and Tannenbaum 1986). In addition, we desired a situation where substantial variance existed across product/service experience, preconsumption expectations, and satisfaction. The context investigated was that of student satisfaction with the class registration process. This experience evokes sufficient involvement on behalf of the consumer as they attempt to arrange desirable class schedules, involves a significant investment of their time, and the utilization of substantial resources in the form of tuition. Furthermore, wide variation exists in student experience and satisfaction with class registration.

Participants in the study were two hundred and thirty undergraduate students at a mid-sized private university in the midwest. The data were collected in eight separate classes over a three day period. Data collection took place during the week of registration, allowing virtually all of the respondents to complete the research questionnaire within thirty-six hours of registering for class. Before distribution of the survey, a brief discussion of class registration was conducted. The subjects were then asked to reflect on their personal experience with the registration process they had recently completed and were given a few minutes to write down their thoughts to insure that the registration experience was fresh in their minds.

Participants were then each provided with a two page research survey. The questionnaire contained six items assessing subjective disconfirmation, five affect items, five items measuring satisfaction, four objective experience items, and a variety of demographic questions, all imbedded in distractor items. After completing the questionnaire, another class discussion was held regarding the course registration process and the study being conducted. Based on the class discussion, there is no evidence suggesting that the subjects were demand aware.

Measurement Results

Satisfaction/Dissatisfaction. The dependent measure in this study is consumer satisfaction. Thus, a reliable measure of CS/D is a basic requirement. The (dis)satisfaction questions were patterned after previous efforts (Westbrook 1980; Oliver 1980; Holbrook and Batra 1987) and used a number of different scaling approaches to avoid common problems associated with measuring satisfaction (i.e., severe skewness and ceiling effects; see Westbrook 1980 and Peterson and Wilson 1992). The five items displayed a high degree of consistency as indicated by coefficient α (.93). Since the (dis)satisfaction items were on a variety of scales, these items were scaled to a constant metric and summated to provide a composite measure of CS/D.

Disconfirmation. The disconfirmation scale included five items assessing respondent subjective disconfirmation of various attributes of the registration process and a sixth item, assessing "overall" disconfirmation. The specific disconfirmation attributes were identified through a prior series of three focus groups discussions. The disconfirmation items were evaluated on a 7-point "better than expected - worse than expected" scale (Oliver 1980). The six items all loaded on a common factor and displayed acceptable internal consistency ($\alpha = .78$). Thus, these items were summed to obtain a disconfirmation score for each individual.

Affect. The affect items were taken from Oliver's (1994) list of affect items. All five positive affect items were included on the survey. Respondents were asked to indicate how well each of the terms described their feelings while registering for class on a 7-point "not at all - very well" scale. Exploratory factor analysis indicated that these items all load on a single factor and the items displayed high internally consistency ($\alpha = .85$). These items were also summed to form an individual affect score for each respondent.

Experience. Experience was assessed by four objective measures. Each respondent was asked to indicate their year in school, total number of credit hours, number of credit hours at this university,

and the number of times they had registered for class. Obviously, these are highly correlated measures and displayed a very high degree of reliability ($\alpha = .95$). These items were scaled to a constant metric and summed, to provide a multiple item measure of experience with the registration service.

ANALYSIS AND RESULTS

Initial examination of the data consisted of regression analysis with the disconfirmation and affect items predicting satisfaction (see Table 1). This analysis serves to establish the predictive ability of these items and provides a comparison base for the current study vis-a-vis previous research. The results are as expected, with both disconfirmation ($t = 7.06$; $p < .0001$) and affect ($t = 9.45$; $p < .0001$) significant predictors of CS/D. This "two-appraisal" representation explains a substantial proportion of variance in subject satisfaction scores ($R^2 = .63$; $F_{2,211} = 175.96$; $p < .0001$).

The results reported in Table 1 are quite comparable to previous studies of satisfaction using affect and disconfirmation as predictors. In this study, it appears that the affect measures (standardized β coefficient of .50) are stronger predictors of CS/D than disconfirmation (standardized β coefficient of .38). Nonetheless, the overall results and strength of relationship are generally consistent with other CS/D research, suggesting that the test of moderation of these relationships is reasonable with this data.

The next stage of analysis directly tests the linear moderating effects of consumer experience. Following the procedure advanced by Baron and Kenny (1986), a second linear regression model was run incorporating the moderator terms as predictors along with affect and disconfirmation. In this case, the product of the moderator (experience) and the independent variables (affect and disconfirmation) were added to the model. The overall model is significant, but displays only a slight increase in explanatory power over the regression including just affect and disconfirmation ($R^2 = .66$; $F_{4,198} = 95.02$; $p < .0001$). More importantly, the results show that experience significantly moderates the role of both affect (EXP*AFF; $t = -4.30$; $p < .0001$) and

disconfirmation (EXP*DIS; $t = 3.46$; $p < .001$) in their relationship with CS/D (see Table 2).

Examining the results further indicates that the direction of the signs is in the hypothesized direction, providing support for both research hypotheses. The standardized β coefficient for experience as a moderator of disconfirmation is .48. This provides evidence that the role of disconfirmation in satisfaction formation increases with consumer product/service experience, in support of H1. Conversely, the standardized β coefficient for experience as a moderator of affect is -.62. Thus, as predicted by H2, as experience increases, the influence of affect in determining consumer satisfaction diminishes. Overall, these results provide strong support for the research hypotheses.

Table 1
Preliminary Regression Results

| Variance Explained | | | | | |
|----------------------------|--------------------------|------------------|--------------|-------|-------|
| Multiple R = .79068 | R-Square = .62517 | | | | |
| Adjusted R-Square = .62161 | StandardError = 28.47675 | | | | |
| Analysis of Variance | | | | | |
| | DF | Sum of Squares | Mean Square | | |
| Regression | 2 | 285379.53116 | 142689.76558 | | |
| Residual | 211 | 171105.20248 | 810.92513 | | |
| F = 175.95924 | | Signif F = .0000 | | | |
| Variables in the Equation | | | | | |
| VARIABLE | B | SE B | Beta | T | Sig T |
| AFFECT | 18.20926 | 1.92661 | .50306 | 9.45 | .0000 |
| DISCONFIRMATION | 17.46357 | 2.47362 | .37577 | 7.060 | .0000 |
| (Constant) | 9.16658 | 7.83967 | | 1.169 | .2436 |

A third analysis was performed to further investigate the moderating effects of consumer experience. In this analysis, the respondents were divided into three roughly equal-sized groups based on their level of experience (Baron and Kenny 1986, Case 2). Separate linear regression analyses were then performed for each subset of

respondents to allow comparison of the relationships being studied. In all three regressions, the overall model is highly significant ($p < .0001$) and explains over 60% of the variance in CS/D.

Table 2
Effects of Experience as a Moderating Variable

| Variance Explained | | | | | |
|----------------------------|--------------------------|------------------|-------------|--------|-------|
| Multiple R = .81085 | R-Square = .65748 | | | | |
| Adjusted R-Square = .65057 | StandardError = 26.71070 | | | | |
| Analysis of Variance | | | | | |
| | DF | Sum of Squares | Mean Square | | |
| Regression | 4 | 271169.87237 | 67792.46809 | | |
| Residual | 198 | 141265.41827 | 713.46171 | | |
| F = 95.01907 | | Signif F = .0000 | | | |
| Variables in the Equation | | | | | |
| VARIABLE | B | SE B | Beta | T | Sig T |
| AFFECT | 9.14771 | 2.61213 | .25742 | 3.502 | .0006 |
| DISCONFIRMATION | 25.51483 | 3.28388 | .56350 | 7.770 | .0000 |
| EXP*AFF | -.44274 | .10291 | -.61551 | -4.302 | .0000 |
| EXP*DIS | .43485 | .12623 | .47757 | 3.445 | .0007 |
| (Constant) | 5.76608 | 7.94356 | | .726 | .468 |

Substantial differences, however, exist across the three regressions when the predictor variables are examined. Perhaps the most interesting results can be found in the "low experience" group. In the analysis for this group, affect is a significant predictor of satisfaction ($p < .0001$) and has a standardized β coefficient of .73. In comparison, disconfirmation is insignificant ($p > .10$) and has a standardized β coefficient of only .14, about one fifth of that of affect. As experience increases to the "medium" level, disconfirmation becomes a significant predictor of satisfaction ($t = 2.63$; $p < .05$) and the standardized β coefficient for disconfirmation is over 35% of that for affect (.24 compared to .67). Finally, for the "high

Table 3
Three Group Analysis

Group 1: Low Level of Experience
Variance Explained

R-Square = .68627

Adjusted R-Square = .67646

Analysis of Variance

| | <u>DF</u> | <u>Sum of Squares</u> | <u>Mean Square</u> |
|------------|-----------|-----------------------|--------------------|
| Regression | 2 | 78681.55806 | 39340.77903 |
| Residual | 64 | 35970.11358 | 562.03302 |
| | F = | 69.99727 | Signif F = .0000 |

Variables in the Equation

| <u>Variable</u> | <u>B</u> | <u>SE B</u> | <u>Beta</u> | <u>T</u> | <u>Sig T</u> |
|-----------------|----------|-------------|-------------|----------|--------------|
| AFFECT | 22.48773 | 2.81771 | .72863 | 7.981 | .0000 |
| DISCONFIRMATION | 6.36418 | 4.03624 | .14395 | 1.577 | .1198 |

Group 2: Medium Level of Experience
Variance Explained

R-Square = .76969

Adjusted R-Square = .76260

Analysis of Variance

| | <u>DF</u> | <u>Sum of Squares</u> | <u>Mean Square</u> |
|------------|-----------|-----------------------|--------------------|
| Regression | 2 | 122374.33553 | 61187.16776 |
| Residual | 65 | 36617.60565 | 563.34778 |
| | F = | 108.61349 | Signif F = .0000 |

Variables in the Equation

| <u>Variable</u> | <u>B</u> | <u>SE B</u> | <u>Beta</u> | <u>T</u> | <u>Sig T</u> |
|-----------------|----------|-------------|-------------|----------|--------------|
| AFFECT | 22.15338 | 2.99067 | .67945 | 7.407 | .0000 |
| DISCONFIRMATION | 11.73435 | 4.45675 | .24150 | 2.633 | .0106 |

Group 3: High Level of Experience
Variance Explained

R-Square = .65079

Adjusted R-Square = .64082

Analysis of Variance

| | <u>DF</u> | <u>Sum of Squares</u> | <u>Mean Square</u> |
|------------|-----------|-----------------------|--------------------|
| Regression | 2 | 76032.39156 | 38016.19578 |
| Residual | 70 | 40797.85501 | 582.82650 |
| | F = | 65.22729 | Signif F = .0000 |

Variables in the Equation

| <u>Variable</u> | <u>B</u> | <u>SE B</u> | <u>Beta</u> | <u>T</u> | <u>Sig T</u> |
|-----------------|----------|-------------|-------------|----------|--------------|
| AFFECT | 15.69153 | 2.75757 | .46956 | 5.690 | .0000 |
| DISCONFIRMATION | 17.30328 | 3.12685 | .45664 | 5.534 | .0000 |

experience" group, both affect ($t = 5.69$; $p < .0001$) and disconfirmation ($t = 5.53$; $p < .0001$) are highly significant. Furthermore, a comparison of the standardized β coefficients shows that they are virtually equal (.47 to .46). This three group analysis illustrates the changing importance for both affect and cognition as consumer experience with the product/service varies.

Summary

The research hypotheses appear to be supported by the data. As illustrated in Table 2, consumer experience significantly moderates the relationship between both affect and disconfirmation and CS/D. As consumer experience with the product/service category increases, disconfirmation becomes a more important predictor of satisfaction while the role of affect decreases. However, for consumers who possess less experience with the product/service category, affect emerges as a more important predictor of satisfaction. Thus, this study provides evidence of the importance of situational variables and corroborates LaTour and Peat's (1980) contention that product/service category experience is an important determinant of consumer expectations.

DISCUSSION AND LIMITATIONS

The findings reported here are important for several reasons. First, the research replicates the importance of both affect and disconfirmation in determining satisfaction judgments. Secondly, we provide an initial test of one situational variable, experience which is shown to moderate the impact of either affect or disconfirmation on consumers' satisfaction judgments. Finally, the results indicate how consumers who possess differential levels of experience utilize either affect and/or disconfirmation when making satisfaction judgments. Therefore, this study replicates and extends our current understanding of the importance of consumers' cognitive and affective evaluations in determining CS/D.

This research represents an initial attempt to examine the moderating role of experience as a situational variable influencing the importance of cognitive and affective evaluations of a

product/service. However, additional research is needed to determine whether these findings can be generalized to other product/service contexts. For instance, the present study found affect to be a more important determinant of consumer satisfaction which contradicts previous findings (c.f. Oliver 1993; Westbrook 1987). Thus, additional research is warranted to determine when affect or disconfirmation may emerge as a more powerful predictor of satisfaction.

Additionally, further research is needed to explore other potential contextual or situational factors which could provide a moderating influence in determining the importance of either affect or disconfirmation in satisfaction judgments. As mentioned previously, consumers may form expectations based on advertising, personal sales efforts, and informal word-of-mouth communication from referent persons (LaTour and Peat 1980). Thus, research which investigates the moderating role of these variables in addition to consumer's level of experience would be warranted.

As mentioned previously, debate continues regarding the dimensionality and measurement of affect (c.f. Westbrook 1987; Westbrook and Oliver 1991; Mano and Oliver 1994; Oliver 1993; Oliver 1994). The present study utilized items taken from Oliver's (1994) list of affect items for the positive subscale. Hence, other affect items were not included in the analysis. The positive subscale was utilized by itself due to the relatively high correlation reported by Oliver (1994; -.45) among the two dimensions of affect. Furthermore, the analysis of experience as a moderator of affect would be complicated by the addition of multiple affect measures. However, researchers should continue to evaluate the dimensionality and measurement of consumer affect and strive to develop a reliable and valid measure which can be utilized across studies.

CONCLUSIONS

There is no question that, as a discipline, marketing academicians have made significant progress in gaining an understanding of the antecedents, formation, and consequences of consumer satisfaction/dissatisfaction. Hopefully the present study sheds some interesting light on

one aspect of CS/D, the role of situational influences on the satisfaction formation process. Certainly the results are inconclusive, yet intuitively and theoretically appealing. We encourage other researchers to consider these findings in their own studies of consumer satisfaction and hope that we have provided one small step toward a fuller understanding of CS/D.

REFERENCES

- Anderson, Rolph E. (1973), "Consumer Dissatisfaction: The Effect of Disconfirmed Expectancy on Perceived Product Performance," *Journal of Marketing Research*, 38 (February), 38-44.
- Atkinson, J. W. (1964), *An Introduction to Motivation*, Princeton: Van Nostrand.
- Babin, Barry J., Mitch Griffin and Laurie Babin (1994), "The Effect of Motivation to Process on Consumers' Satisfaction Reactions," in *Advances in Consumer Research*, 21, Chris T. Allen and Deborah Roedder John, eds., Provo, UT: Association for Consumer Research, 406-411.
- Babin, Barry J., Mitch Griffin and William R. Darden (1995), "An Empirical Comparison of Alternative Conceptualizations of Postconsumption Phenomena," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 7, 172-183.
- Baron, Reuben M. and David A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research," *Journal of Personality and Social Psychology*, 51 (July), 1173-1182.
- Bearden, William O. and Jesse E. Teel (1983), "Selected Determinants of Consumer Satisfaction and Complaint Reports," *Journal of Marketing Research*, 20 (February), 21-28.
- Bolton, Ruth N. and James H. Drew (1991), "A Multistage Model of Customers' Assessments of Service Quality and Value," *Journal of Consumer Research*, 17 (March), 375-384.
- Churchill, Gilbert A. and Carol Surprenant (1982), "An Investigation into the Determinants of Customer Satisfaction," *Journal of Marketing Research*, 19 (November), 491-504.
- Folkes, Valerie S. (1990), "Conflict in the Marketplace: Explaining Why Products Fail," in *Attribution Theory: Applications to Achievement, Mental Health, and Interpersonal Conflict*, Sandra Graham and Valerie S. Folkes, eds., Hillsdale, NJ: Erlbaum, 143-160.
- Folkes, Valerie S., Susan Koletsky and John L. Graham (1987), "A Field Study of Causal Inferences and Consumer Reaction: The View from the Airport," *Journal of Consumer Research*, 13 (March), 534-539.
- Helson, H. (1964), *Adaptation-Level Theory: An Experimental and Systematic Approach to Behavior*, New York: Harper & Row.
- Holbrook, Morris B. and Rajeev Batra (1987), "Assessing the Role of Emotions as Mediators of Consumer Responses to Advertising," *Journal of Consumer Research*, 14 (December), 404-421.
- Hunt, H. Keith (1977), "CS/D - Overview and Future Research Directions," in *Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction*, H. Keith Hunt, ed. Cambridge, MA: Marketing Science Institute, 455-488.
- Izard, Carroll E. (1977), *Human Emotions*, New York: Plenum Press.
- LaTour, Stephen A. and Nancy C. Peat (1979), "Conceptual and Methodological Issues in Consumer Satisfaction Research," *Advances in Consumer Research*, 6, William Wilkie, ed., Ann Arbor, MI: Association for Consumer Research, 431-437.
- Mano, Haim and Richard L. Oliver (1993), "Assessing the Dimensionality and Structure of the Consumption Experience: Evaluation, Feeling, and Satisfaction," *Journal of Consumer Research*, 20 (December), 451-466.
- McClelland, D. C., J. W. Atkinson, R. A. Clark and E. L. Lowell (1953), *The Achievement Motive*, New York: Appleton-Century-Crofts.
- Mittal, Vikas, Jerome M. Katrichis, Frank Forkin and Mark Konkel (1994), "Does Satisfaction With Multi-Attribute Products Vary Over Time? A Performance Based Approach," in *Advances in Consumer Research*, 21, Chris T. Allen and Deborah Roedder John, eds., Provo, UT: Association for Consumer Research, 412-4417.
- Oliver, Richard L. (1976), "Hedonic Reactions to the Disconfirmation of Product Performance Expectations: Some Moderating Conditions," *Journal of Applied Psychology*, 61, 246-250.
- 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. (1989), "Processing of the Satisfaction Response in Consumption: A Suggested Framework and Research Propositions," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 2, 1-16.
- Oliver, Richard L. (1993), "Cognitive, Affective, and Attribute Bases of the Satisfaction Response," *Journal of Consumer Research*, 20 (December), 460-469.
- Oliver, Richard L. (1994), "Conceptual Issues in the Structural Analysis of Consumption Emotion, Satisfaction, and Quality: Evidence in a Service Setting," in *Advances in Consumer Research*, 21,

- Chris T. Allen and Deborah Roedder John, eds., Provo, UT: Association for Consumer Research, 16-22.
- Oliver, Richard L. and Wayne S. DeSarbo (1988), "Response Determinants in Satisfaction Judgments," *Journal of Consumer Research*, 14 (March), 495-507.
- Oliver, Richard L. and John E. Swan (1989), "Equity and Disconfirmation Perceptions as Influences on Merchant and Product Satisfaction," *Journal of Consumer Research*, 16 (December), 372-383.
- Perkins, Debra S. (1991), "A Consumer Satisfaction, Dissatisfaction and Complaining Behavior Bibliography: 1982-1990," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 4, 194-228.
- Peterson, Robert A. and William R. Wilson (1992), "Measuring Customer Satisfaction: Fact and Artifact," *Journal of the Academy of Marketing Science*, 20 (Winter), 61-71.
- Scherer, Klaus R. and Percy H. Tannenbaum (1986), "Emotional Experiences in Everyday Life: A Survey Approach," *Motivation and Emotion*, 10 (December), 295-314.
- Sherif, Carolyn W. (1963), "Socialization as a Function of Latitude of Acceptance and Series Range," *Journal of Abnormal Social Psychology*, 67, 148-156.
- Swan, John E. and Frederick I. Trawick (1981), "Disconfirmation of Expectations and Satisfaction with a Retail Setting," *Journal of Retailing*, 57 (Fall), 49-67.
- Tse, David K. and Peter C. Wilton (1988), "Models of Consumer Satisfaction Formation: An Extension," *Journal of Marketing Research*, 25 (May), 204-212.
- Westbrook, Robert A. (1980), "Intrapersonal Affective Influences on Consumer Satisfaction with Products," *Journal of Consumer Research*, 7 (June), 49-54.
- Westbrook, Robert A. (1987), "Product/Consumption-based Affective Responses and Postpurchase Processes," *Journal of Marketing Research*, 24 (August), 258-270.
- Westbrook, Robert A. and Richard L. Oliver (1991), "The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction," *Journal of Consumer Research*, 18 (June), 84-91.
- Woodruff, Robert B., Ernest R. Cadotte and Roger L. Jenkins (1983), "Modelling Consumer Satisfaction Processes Using Experienced-Based Norms," *Journal of Marketing Research*, 20 (August), 296-304.
- Woodruff, Robert B., D. Scott Clemons, David W. Schumann, Sarah F. Gardial and Mary Jane Burns (1991), "The Standards Issue in CS/D Research: A Historical Perspective," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 4, 103-109.
- Yi, Youjae (1990), "A Critical Review of Consumer Satisfaction," in *Review of Marketing 1990*, Valarie
- A. Zeithaml, ed., Chicago: American Marketing Association, 68-123.

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