THE INFLUENCE OF AFFECTIVE STATE ON SATISFACTION RATINGS

Beverly K. Brockman, University of Alabama

ABSTRACT

The author examines the influence of affective state – both temporary affect unrelated to the product/service being evaluated and life satisfaction – on consumer satisfaction ratings. Temporary affect is manipulated and then separated into two states, positive and negative. Three different scales are used to measure consumer satisfaction with the most recent shoe purchase and restaurant experience: 1) an adaptation of Oliver's (1997) consumption satisfaction scale, 2) the single-item delighted/terrible scale developed by Andrews and Withey (1976) and 3) a single-item, bipolar, very satisfied/very dissatisfied scale. The results indicate that the Oliver (1997) scale is the most robust against influence from temporary positive affect and life satisfaction. No influence from negative affect was found.

INTRODUCTION

The past two decades have seen a significant amount of empirical study intended to further our understanding of consumer satisfaction. These research efforts resulted in the predominance of the confirmation/disconfirmation paradigm (Yi 1990), which assumes satisfaction arises from cognitive processes of comparison. Despite our focus on cognitive processes, the role of affect in satisfaction has also been considered for quite some time (Isen, Shalker, Clark, and Karp 1978; Westbrook 1980; Westbrook 1987; Westbrook and Oliver 1991; Mano and Oliver 1993). A review of the various definitions of consumer satisfaction (Yi 1990) reveals disagreement with regard to the role of affect within the construct. For example, Howard and Sheth (1969, p. 145) define consumer satisfaction as "the buyer's *cognitive* state of being adequately or inadequately rewarded for the sacrifices he has undergone" (emphasis added). Thus, satisfaction is defined as purely cognitive. In contrast, Oliver (1981, p.27) defines consumer satisfaction as "the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feeling about the consumption experience." Oliver clearly includes affect in his definition. In his most recent work, Oliver (1997, p.13) presents a revision of his earlier definition. "*Satisfaction* is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a *pleasurable* level of consumption-related fulfillment, including levels of under- or overfulfillment" (emphasis in original). His latest definition still incorporates affect, but the word *judgment* implies a cognitive process as well. In fact, Oliver (1997) actually presents different forms of satisfaction, each of which incorporates different types of affect and cognitive processes.

In order to adequately define consumer satisfaction we must understand the role affect plays within it. Another important question, however, involves the influence of unrelated affect on the *measurement* of satisfaction. In other words, how much does one's affective state at the time of reporting influence his or her satisfaction rating? Are certain measures more susceptible to the influence of affective state unrelated to the product/service being evaluated? It is these questions that the author has addressed in this study. We are aware that affect may arise from the consumption experience (Westbrook 1987; Westbrook and Oliver 1991); we are also aware that it may act as a dimension in the formation of satisfaction (Alford and Sherrell 1996). This study, however, considers unrelated affect experienced at the time of reporting as a nuisance variable, which debilitates the *measurement* of satisfaction. Temporary affect is manipulated and then separated into two states, positive and negative. Thus, the influence of both states on the satisfaction rating is assessed.

The role of one's general disposition, or life satisfaction, has also been considered in consumer satisfaction research (Westbrook 1980; Peterson and Wilson 1992). Most work has focused on the correlation between life satisfaction and the satisfaction rating. While this is helpful, the researcher cannot separate the different roles life satisfaction might play in the true satisfaction

evaluation and the satisfaction rating, a measurement issue. This author did not distinguish between these two different roles either, but the manipulation and measurement of temporary affect enables us to examine the interaction between the two variables: life satisfaction and temporary affective state unrelated to the product/service being evaluated. The research also extends previous studies by comparing the susceptibility of several different satisfaction scales to affective state, and by investigating the separate influence of positive and negative affect.

LITERATURE REVIEW

Westbrook (1980) used regression analysis to determine the influence of expectations, level of optimism/pessimism, overall life satisfaction, consumer discontent, and mood on automobile and footwear satisfaction. The results indicated support for relationships between automobile satisfaction and the realization of expectations, overall life satisfaction, and consumer discontent; neither optimism/pessimism nor mood displayed significant relationships. The results for footwear satisfaction only indicated support for a relationship with expectancy realization; none of the hypothesized affective influences appeared to be related. One reason given by Westbrook for the absence of the hypothesized effect of mood on satisfaction was the stable environment in which the research was conducted. The subjects of the study were undergraduate students at the University of Arizona, enrolled in an introductory business course. A questionnaire was administered during class, which included measures of product satisfaction, dispositional sources of affect, and concurrent affective states. Moods extreme enough to influence satisfaction ratings were probably not experienced by the subjects since no manipulation of affective state was made and the subjects completed the questionnaire in a stable situation.

Peterson and Wilson (1992) used a telephone survey to test the relationship between subjective well being, satisfaction with a vehicle, and mood. Correlations between the three variables revealed statistically significant positive relationships between life satisfaction and mood, life satisfaction

and vehicle satisfaction, and vehicle satisfaction and mood. The correlation between vehicle satisfaction and mood (.19) was smaller than the correlation between vehicle satisfaction and life satisfaction (.27). Intuitively, the smaller correlation makes sense because an individual's mood at a certain moment would be expected to have a stronger relationship with their satisfaction with life in general than with their satisfaction with a product that can be replaced. Additionally, the small correlation between vehicle satisfaction and mood could be expected after reviewing the results of Westbrook's (1980) study. Affect manipulation was not conducted in either study, but Peterson and Wilson's respondents did complete the survey in different environments. Thus, the respondents' affective state had enough variance to have a slight influence on satisfaction ratings.

A significant amount of research involving manipulation of affective state can be found in the psychology literature; however, those studies conducted for the explicit purpose of determining the influence of affect on satisfaction ratings are rare. Isen et al. (1978) found that manipulation to induce good moods (a free gift), resulted in higher satisfaction ratings for automobiles and television sets. The reason suggested for these results is that positive feelings cue positive memories, which then influence judgment.

A thorough literature review produced no studies involving manipulation of negative affect to determine its effect on consumer satisfaction ratings. One reason for this could be that in research experiments the influence of manipulated negative affect on behavior has been less significant than that of manipulated positive affect. Isen (1984) discussed the conflicting evidence concerning the impact of negative affect on behavior. Positive affect manipulations have been shown to result in more positive judgment and behavior. Negative affect manipulations sometimes result in thought and behavior opposite of those with positive affect (Cialdini and Kenrick 1976; Moore et al. 1973; Weyant 1978); other times negative affect results in the same kinds of behavior as that produced by positive affect (Isen 1970; Mischel et al. 1968; Mischel et al. 1976). One reason proposed for this discrepancy is that individuals in a negative affective state attempt to improve their mood through positive actions

(Cialdini et al. 1973; Isen, et al. 1973; Weyant 1978). Individuals in a positive mood, however, strive to maintain the nice feeling.

Westbrook (1987), Westbrook and Oliver (1991), and Mano and Oliver (1993) studied the role of both positive and negative affect in satisfaction. Their research, however, was approached from the theory that the consumption experience elicits certain emotions, which then influence the postpurchase product/service evaluation. It is worth noting that Westbrook (1987) acknowledged Isen's (1984) interpretation of the effects of affective state on cognitive retrieval processes, which includes the possibility of affective state at the time of reporting systematically biasing satisfaction ratings. Thus, true satisfaction derived from consumption could interact with the temporary affective state felt at the time the satisfaction measurement was taken.

Any conclusions that can be drawn from prior research regarding the influence of life satisfaction and positive and negative affect on satisfaction ratings are shaky at best. Although two studies (Westbrook 1980; Peterson and Wilson 1992) found an influence of life satisfaction on automobile satisfaction ratings, Westbrook (1980) found no such influence on footwear satisfaction ratings. It seems plausible that life satisfaction may have more influence on ratings of high involvement products and services. At this point, however, such predictions are more speculative than conclusive.

Similar conflict in research results has been found in studies of temporary affect and its influence on satisfaction ratings. Westbrook's (1980) initial study did not reveal any influence of mood state on satisfaction ratings with either automobiles or footwear. An influence of positive affect on satisfaction ratings of automobiles and television sets was found, however, by Isen et al. (1978) when positive affect was manipulated. Peterson and Wilson (1992) also found influence of mood state on satisfaction ratings for automobiles. These authors did not manipulate affect, nor separate its measurement into positive and negative categories. The greater variance in mood found in this study, compared to Westbrook (1980), can be attributed to the respondents' completion of the survey instrument in different environments. Thus, there is some evidence of

influence on satisfaction ratings from temporary mood state in general and positive affect in particular; no influence of negative affect has been found.

Due to the conflict in prior research results, and the lack of research into the influence of negative affect on satisfaction ratings, no formal hypotheses were developed for this study. Rather, it is intended to be a more thorough exploration into the role life satisfaction and affective state play in the measurement of satisfaction. It is hoped that the results of this study lead to a better understanding of these variables in the context of satisfaction measurement.

METHOD

The subjects of the study were undergraduate students enrolled in finance and marketing courses at a major university located in the southeast United States. After excluding unusable surveys the sample size was 228, broken down into 54.7% male and 45.3% female. All subjects first completed the Diener, Emmons, Larsen, and Griffin (1985) satisfaction with life scale. After completing this measure, each class was then subjected to one of three mood manipulations: positive, negative, or control (no manipulation). The purpose of the manipulation was to insure that enough variance with the temporary affective state variable was obtained to determine its influence on satisfaction ratings.

The positive manipulation group was shown an uplifting video and given candy as appreciation for participating in the study. The negative manipulation group was shown a sad video; immediately after the subjects viewed the video, the researcher made a few brief comments about the seriousness of the subject matter – how the families of plane crash victims are treated by the airline. Both positive and negative videos also included a commercial at the beginning. A positive commercial for O'Douls nonalcoholic beer was shown to the positive manipulation group; a serious commercial for medical books published by Time Life Books was shown to the negative manipulation group.

Both positive and negative manipulation groups were told that they were helping with two projects. One concerned satisfaction ratings for

life, products, and services. The other concerned the effectiveness of television advertisements when viewed with certain types of news segments. To make the cover story more believable, the survey instrument included questions about the commercials. The control group was not subjected to a mood manipulation. They were simply told that they were helping with a project regarding satisfaction with life, products, and services.

Once the mood manipulations were conducted, the students completed a survey instrument which consisted of the following scales: 1) the PANAS scale developed by Watson et al. (1988), used to measure positive and negative affect felt at the time the survey was completed, 2) an adaptation of Oliver's (1997) consumption satisfaction scale, measured on a five point scale, 3) the single-item

EXHIBIT 1

Satisfaction With Life Scale (Diener, Emmons, Larsen, and Griffin 1985)
7-point scale:1= strongly disagree, 2= disagree, 3= slightly disagree, 4= neither agree nor disagree, 5= slightly agree, 6= agree, 7= strongly agree   1. In most ways my life is close to my ideal.   2. The conditions of my life are excellent.   3. I am satisfied with my life.   4. So far I have gotten the important things I want in life.   5. If I could live my life over, I would change almost nothing.
Shoe and Restaurant Satisfaction (Adapted from Oliver's (1997) consumption satisfaction scale)
5-point scale: 1= strongly agree, 2= agree, 3= neither agree nor disagree, 4= disagree, 5=strongly disagree   1. This is one of the best pair of shoes I could have bought.   2. This pair of shoes is exactly what I need.   3. This pair of shoes hasn't worked as well as I thought they would.   4. I am satisfied with my decision to buy this pair of shoes.   5. Sometimes I have mixed feelings about wearing this pair of shoes.   6. My choice to buy this pair of shoes was a wise one.   7. If I could do it over again, I'd buy a different style/brand.   8. I have truly enjoyed this pair of shoes.   9. I feel bad about my decision to buy this pair of shoes.   10. I am not happy that I bought this pair of shoes.   11. Owning this pair of shoes has been a good experience.   12. I'm sure I made the right choice in buying this pair of shoes.   Note: The restaurant measure used the same items with " restaurant" substituted for "shoes"
Shoe and Restaurant Satisfaction (Andrews and Withey 1976)
7 point scale: 1= delighted, 2= pleased, 3= mostly satisfied, 4= mixed about equally satisfied and dissatisfied, 5= mostly dissatisfied, 6= unhappy, 7= terrible   1. How do you feel about the purchase of these shoes (restaurant)?
Shoe and Restaurant Satisfaction (Overall Satisfaction Measure)
7 point scale: 1= very satisfied, 4= satisfied, 7=very dissatisfied   1. Overall, how satisfied have you been with this pair of shoes (restaurant)?
Temporary Positive and Negative Affective State (Watson, Clark, and Tellegen 1988)
Respondents indicated how they felt at the present time for 20 different emotions, 10 for positive affect, and 10 for negative affect   5 point scale: 1= very slightly or not at all, 2= a little, 3= moderately, 4= quite a bit, 5= extremely   <u>Positive Affect Emotions</u>   Interested, Excited, Strong, Enthusiastic, Proud, Alert, Inspired, Determined, Attentive, and Active   <u>Negative Affect Emotions</u>   Distressed, Upset, Guilty, Scared, Hostile, Irritable, Ashamed, Nervous, Jittery, Afraid

"delighted-terrible" scale developed by Andrews and Withey (1976), measured on a seven point scale, and 4) a single-item, seven point, bipolar rating scale (very satisfied/very dissatisfied). The subjects completed the measures in regard to their satisfaction with their most recent shoe purchase and restaurant experience. The measures used in the study are shown in Exhibit 1.

RESULTS

Manipulation Checks

Dissipation of Temporary Affect. The measure of positive and negative affect, the PANAS scale, also served as a manipulation check. Perdue and Summers (1986) discussed solutions to the problems found in using manipulation checks within the main experiment. The counterbalancing approach, in which half of the subjects complete the check before the dependent measures and the other half afterward was one approach suggested by these authors. This method is particularly applicable for this study because of the inconsistencies found with negative affect manipulations conducted in previous research.

A t-test was used to check for differences in negative and positive affect based on the placement of the manipulation check. For the sample as a whole, with combined results of the three manipulation groups, no significant differences in negative and positive affect scores were found between groups who completed the manipulation check at the beginning of the survey versus the end. A t-test conducted within each individual manipulation treatment group, however, revealed an interesting change in negative affect in the negative manipulation treatment group.

The mean negative affect score for those respondents who completed the manipulation check at the beginning of the survey was 19.63; this same score for those respondents who completed the manipulation check at the end of the survey was 15.38. The difference between these two groups was significant at p=.005. Thus, the negative affect from the manipulation dissipated within the short period of time that the respondents completed the survey, approximately ten minutes. A significant difference (p=.032) was also found

in the control group for the difference in positive affect between the front (mean positive affect score = 28.08) and back (mean positive affect score = 23.23) manipulation check groups. No dissipation of positive or negative affect was found in the positive manipulation treatment group. Two-way Anova's revealed a significant interaction between the manipulation treatment group and the manipulation check placement. The results from these manipulation checks are given in Exhibits 2 through 4.

Difference in Affective State Between the Treatment Manipulation Groups. A one-way ANOVA revealed a significant difference in positive affect between the positive affect manipulation group and the negative affect manipulation group, while there was not a significant difference in negative affect between any of the three treatment groups. The quick dissipation of negative affect appears to have eliminated any significant difference in this affective state between the manipulation treatment groups. The results of this manipulation check are given in Exhibit 5.

Satisfaction Ratings

Correlations were conducted to determine the influence of temporary positive and negative affect and life satisfaction on product and service satisfaction ratings. A significant, positive correlation was found between life satisfaction and shoe satisfaction measured with the Andrews and Withey (1976) delighted/terrible scale. Additionally, a significant, positive correlation was found between positive affect and shoe satisfaction measured with the single item scales, the delighted/terrible measure and the overall very satisfied/very dissatisfied measure. A significant correlation was not found between negative affect and any of the restaurant or shoe satisfaction measures. Thus, significant correlations were only found with shoe satisfaction, and these relationships were only maintained with positive affect and life satisfaction. Additionally, no significant correlations were found with the adapted Oliver (1997) measure. The results of the correlation analysis are given in Exhibit 6.

A one-way ANOVA was conducted to identify

Exhibit 2
Dissipation of Manipulated Affect for Combined Sample T-Tests

Affective State	Manipulation Check Placement	Mean	Significant Difference (p value)
Positive Affect	Front	27.46	.176
	Back	25.99	
Negative Affect	Front	16.26	.332
	Back	15.50	

Exhibit 3
Dissipation of Manipulated Affect Within Each Treatment Group T-Tests

Negative Affect

Manipulation Check Placement	Negative Affect Manipulation Treatment	Positive Affect Manipulation Treatment	Control Group Manipulation Treatment
Front	19.63	15.62	15.14
Back	15.38	15.27	16.18
Significant Difference (p value)	**.005**	.803	.416

Positive Affect

Manipulation Check Placement	Negative Affect Manipulation Treatment	Positive Affect Manipulation Treatment	Control Group Manipulation Treatment
Front	25.13	28.11	28.08
Back	24.40	29.89	23.23
Significant Difference (p value)	.681	.319	**.032**

significant differences in satisfaction ratings by manipulation group; however, a test of homogeneity of variances revealed a violation of the equal variance assumption. Therefore, the Kruskal-Wallis non-parametric test was conducted to identify significant differences in satisfaction ratings by manipulation group. Significant differences (alpha = .10) were found between the positive and negative manipulation groups for the overall measure and the delighted/terrible measure of shoe satisfaction. Using these measures, the negative affect manipulation group had a significantly lower satisfaction rating than the positive affect manipulation group. The results of this test are given in Exhibit 7.

To further test the practical significance of the correlations between life satisfaction and positive and negative affect with the shoe and restaurant satisfaction ratings, multiple regression analysis was conducted. Six multiple regressions were run with each shoe and restaurant satisfaction rating as the dependent variable. To eliminate problems with multicollinearity, the remaining measures were combined into a revised shoe satisfaction variable and a revised restaurant satisfaction variable. The combinations varied depending on which measure served as the dependent variable. Temporary affective state did not indicate a significant coefficient in any of the multiple regression analyses. These results are consistent

Exhibit 4

Difference in Positive Affective State: By Manipulation Treatment Group and Manipulation Check Placement Two-Way Anova

		F	Significance
Main Effects	(Combined)	4.423	**.005**
	Treatment Group	5.671	**.004**
	Manipulation Check	1.298	.256
2-way Interactions	Treatment Group * Manipulation Check	3.030	**.050**
Model		3.682	**.003**

Difference in Negative Affective State: By Manipulation Treatment Group and Manipulation Check Placement Two-Way Anova

		F	Significance
Main Effects	(Combined)	2.074	**.105**
	Treatment Group	2.645	**.073**
	Manipulation Check	2.172	.142
2-way Interactions	Treatment Group * Manipulation Check	3.752	**.025**
Model		2.461	**.034**

Exhibit 5
Difference in Affective State by Manipulation Treatment Group One-Way Anova

Affective State	Manipulation Treatment Group	Mean	Significant Difference (p value)
Positive Affect	Negative	24.64	**.004***
	Positive	28.99	
	Control	26.64	
Negative Affect	Negative	16.76	.283
	Positive	15.45	
	Control	15.45	

* A post hoc multiple comparison test using Tukey HSD indicated a significant difference in positive affect between the negative and positive manipulation treatment groups.

with the findings of Westbrook (1980).   Life satisfaction only displayed a significant coefficient for the multiple regression analysis using the Andrew's and Withey (1976) delighted/terrible measure of shoe satisfaction as the dependent variable.   Westbrook (1980) found a significant coefficient for life satisfaction when automobile satisfaction was used as the dependent variable; no significance of this variable was found when footwear satisfaction was used as the dependent variable.   The results of the regression analyses are given in Exhibit 8.

Consideration was also given to the possible interaction effect between life satisfaction and temporary affect. Not surprisingly, a significant, positive relationship was found between life

Exhibit 6
Correlation Analysis

	Life Satisfaction	Positive Affect	Negative Affect
Life Satisfaction	1.000	.181**	-.170**
Positive Affect	.181**	1.000	.072
Negative Affect	-.170**	.072	1.000
Shoe Satisfaction (adapted from Oliver 1997)	.017	.105	.032
Shoe Satisfaction (Delighted/Terrible, Andrews and Withey 1976)	.177**	.226**	-.002
Shoe Satisfaction (Very Satisfied/Very Dissatisfied)	.109	.145*	.005
Restaurant Satisfaction (adapted from Oliver 1997)	-.014	-.017	-.068
Restaurant Satisfaction (Delighted/Terrible, Andrews and Withey 1976)	.049	-.021	-.037
Restaurant Satisfaction (Very Satisfied/Very Dissatisfied)	.034	.006	-.013

*   significant at alpha = .05
** significant at alpha = .01

Exhibit 7
Non-Parametric Test
Difference in Satisfaction Scores By Manipulation Treatment Group

Scale	Treatment Group	Mean Rank	Significant Difference (p value)
Shoe Satisfaction (12 item scale adapted from Oliver 1997)	Negative Positive Control	105.89 117.65 111.21	.534
Shoe Satisfaction (single item: very satisfied/very dissatisfied)	Negative Positive Control	99.95 122.82 112.05	**.080**
Shoe Satisfaction (single item: delighted/terrible, Andrews and Withey 1976)	Negative Positive Control	98.26 119.76 118.19	**.052**
Restaurant Satisfaction (12 item scale adapted from Oliver 1997)	Negative Positive Control	104.03 110.18 114.08	.623
Restaurant Satisfaction (single item: very satisfied/very dissatisfied)	Negative Positive Control	103.55 118.86 110.70	.333
Restaurant Satisfaction (single item: delighted/terrible, Andrews and Withey 1976)	Negative Positive Control	105.57 119.46 108.08	.350

Exhibit 8
Multiple Regression Analysis: Significance of Coefficients

- Dependent Variables -

Independent Variables	SHOEDT	SHOEOSAT	SHOETOT	RESDT	RESOVSAT	RESTOT
Shoe	.000	.000	.000	.052	.063	.905
Restaurant	.201	.421	.697	.000	.000	.000
Life	.033	.520	.168	.737	.662	.436
Neg. Affect	.755	.687	.905	.201	.622	.487
Pos. Affect	.355	.164	.576	.096	.342	.561
R^2	.793	.877	.289	.915	.923	.452

Shoedt: Andrews and Withey's (1976) delighted/terrible measure of shoe satisfaction; single item
Shoeosat: Single item overall measure of shoe satisfaction
Shoetot: Adaptation from Oliver's (1997) consumption satisfaction scale; 12 item measure of shoe satisfaction
Resdt: Andrews and Withey's (1976) delighted/terrible measure of restaurant satisfaction
Resovsat: Single item overall measure of restaurant satisfaction
Restot: Adaptation from Oliver's (1997) consumption satisfaction scale; 12 item measure of restaurant satisfaction
Shoe: Combined shoe satisfaction measures (combination determined by dependent variable)
Restaurant: Combined restaurant satisfaction measures (combination determined by dependent variable)
Life: Life Satisfaction Scale
Positive Affect: Temporary Positive Affect Measure
Negative Affect: Temporary Negative Affect Measure

satisfaction and temporary affect. This finding is consistent with previous research (Westbrook 1980; Peterson and Wilson 1992). However, a significant interaction was not found between life satisfaction and temporary affect in determining shoe and restaurant satisfaction ratings.

DISCUSSION

The manipulation checks revealed a significant problem with dissipation of negative affect. Although the objective of this study is not to research mood manipulation, the results reveal a need for further exploration into this area, particularly manipulation of negative affect. If manipulated negative affect can indeed dissipate within a brief ten minute period, while positive affect lingers, the results from studies in which this dissipation was not tested, are questionable.

Regression analysis indicated no influence of temporary affective state on satisfaction ratings. These results are consistent with Westbrook's (1980) study, and cause one to question the practical influence of unrelated affective state on satisfaction measurement. It is important to note, however, that the regression analyses were run

with the measures combined. It does appear that some scales are more prone to influence by affective state unrelated to the product or service being evaluated. In particular, the Andrews and Withey (1976) delighted/terrible scale appears to be susceptible.

The single item very satisfied/very dissatisfied measure of shoe satisfaction was influenced by the affective state manipulation treatment groups; however, the correlation analysis revealed that life satisfaction did not influence this measure. The adapted consumption satisfaction scale (Oliver 1997) was not influenced by either life satisfaction or temporary affect. One possible explanation for the greater sensitivity of the delighted/terrible and very satisfied/very dissatisfied measures is that these are single item scales, while the modified Oliver scale includes twelve items. Single item measures may be more susceptible to the influence of affective state unrelated to the product or service being evaluated. The varying susceptibility of the different measures is consistent with the results of Westbrook and Oliver (1991) who found that satisfaction measures vary in the extent of their relationship to the postpurchase affective response. These authors, however, were studying

consumption elicited emotions rather than unrelated affect.

Limitations

There are several limitations to this research. First, the quick dissipation of negative affect limits the ability to test the true influence of this variable on satisfaction ratings. Second, there is potential testing bias in measuring consumer satisfaction of the most recent shoe purchase and restaurant experience. The respondent could have been referring to experiences that occurred months before the measure was completed. In such situations, one may expect a larger bias from life satisfaction and affect than would be present at the time of consumption. A third limitation is the placement of the shoe and restaurant measures on the survey instrument. The instrument used in this study had all three shoe satisfaction measures listed first, then the measures of restaurant satisfaction.

CONCLUSION

This study demonstrates that life satisfaction and temporary affective state unrelated to the product or service being evaluated do sometimes influence product and service satisfaction ratings. The effect, however, is inconsistent. The Andrews and Withey (1976) delighted/terrible scale appears to be most susceptible to the influence of unrelated affective state. In this research project, affective state only had influence over the measures of shoe satisfaction; no effect was found for restaurant satisfaction ratings. This result raises questions regarding the susceptibility of product versus service evaluations.

The respondent's level of involvement with the product or service is also an issue that warrants further attention. Previous research presents the possibility that life satisfaction may have more influence on ratings of high involvement products and services. The role of involvement as a moderating factor in the relationship between temporary affect and satisfaction is a valid research concern. In this particular study it could be argued that student subjects are more highly involved with shoes – as a visible, symbolic, personal item – than with restaurants – which students on a traditional campus do not use much

and when used are primarily fast food. If involvement is indeed a moderating factor between temporary affect and satisfaction, the influence of affective state on measures of shoe satisfaction but not restaurant satisfaction ratings can be explained.

The fact that only positive affect had an influence on the ratings is also significant. Previous research, primarily in the psychology literature, has indicated inconsistent effects of negative affect. Further understanding of negative affect and its influence on the satisfaction evaluation and ratings are needed.

Although life satisfaction and temporary affect do not always influence satisfaction ratings, there are significant managerial implications, regardless. Temporary affect does show evidence of influence in certain situations. Therefore, managers must be careful to eliminate any inadvertent manipulation of mood prior to obtaining customer evaluations. If affect were systematically influenced (intentionally or not), then the ratings might be inflated or deflated and wrong conclusions drawn. Managers may also consider research to understand the naturally-occurring temporary mood states of their customers at the time of satisfaction measurement, which may vary by product or service. If mood is a big issue, then perhaps it should be accounted for in satisfaction measurement. Evidence from this research suggests that the multiple item Oliver (1997) scale is particularly robust against influence from affect and life satisfaction. Knowledge of the susceptibility of a satisfaction measure to unrelated affective state and life satisfaction is the first step toward controlling for these nuisance variables so that the true satisfaction evaluation can be obtained.

REFERENCES

Alford, Bruce L. and Daniel L. Sherrell (1996), "The Role of Affect in Consumer Satisfaction Judgments of Credence-Based Services," *Journal of Business Research*, 37, (1), 71-84.

Andrews, Frank M. and Stephen B. Withey (1976), *Social Indicators of Well-Being*, New York: Plenum.

Cialdini, R. B., B. Darby and J. Vincent (1973), "Transgression and Altruism: A Case for Hedonism," *Journal of Experimental Social Psychology*, 9, 502-516.

Cialdini, R. B. and D. T. Kenrick (1976), "Altruism as Hedonism: A Social Development Perspective on the

Relationship of Negative Mood State and Helping," *Journal of Personality and Social Psychology*, 34, 907-914.

Diener, Ed, Robert A. Emmons, Randy J. Larsen and Sharon Griffin (1985), "The Satisfaction With Life Scale," *Journal of Personality Assessment*, 49, (1), 71-75.

Howard, John A. and J. N. Sheth (1969), *The Theory of Buyer Behavior*, New York: John Wiley & Sons.

Isen, Alice (1970), "Success, Failure, Attention and Reaction to Others: The Warm Glow of Success," *Journal of Personality and Social Psychology*, 15, 294-301.

Isen, Alice, N. Horn and D. L. Rosenhan (1973), "Effects of Success and Failure on Children's Generosity," *Journal of Personality and Social Psychology*, 27, 239-247.

Isen, Alice, Thomas E. Shalker, Margaret Clark and Lynn Karp (1978), "Affect, Accessibility of Material in Memory, and Behavior," *Journal of Personality and Social Psychology*, 3, (January), 1-12.

Isen, Alice (1984), "Toward Understanding the Role of Affect in Cognition," *Handbook of Social Cognition*, R. Wyer and T. Srull, (eds.), Hillsdale, NJ: Lawrence Erlbaum Associates, 179-236.

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.

Mischel, W., B. Coates and A. Raskoff (1968), "Effects of Success and Failure on Self-Gratification," *Journal of Personality and Social Psychology*, 10, 381-390.

Mischel, W., E. Eggesen, and A. Zeiss (1976), "Determinants of Selective Memory About the Self," *Journal of Counseling and Clinical Psychology*, 44, 92-103.

Moore, B. S., B. Underwood and D. L. Rosenhan (1973), "Affect and Altruism," *Developmental Psychology*, 8, 99-104.

Oliver, Richard L. (1997), *Satisfaction: Behavioral Perspective on the Consumer*, McGraw-Hill: New York.

Oliver, Richard L. (1981), "Measurement and Evaluation of Satisfaction Processes in Retail Settings," *Journal of Retailing*, 57, (Fall), 25-48.

Perdue, Barbara C. and John O. Summers (1986), "Checking the Success of Manipulations in Marketing Experiments," *Journal of Marketing Research*, 23, (November), 317-326.

Peterson, Robert A. and William R. Wilson (1992), "Measuring Customer Satisfaction: Fact and Artifact," *Journal of the Academy of Marketing Science*, 20, 1, 61-71.

Watson, David, Le Anna Clark and Auke Tellegen (1988), "Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales,"

Journal of Personality and Social Psychology, 54, (June), 1063-1070.

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*, XXIV, (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.

Weyant, J. M. (1978), "Effects of Mood States, Costs, and Benefits of Helping," *Journal of Personality and Social Psychology*, 36, 1169-1176.

Yi, Youjae (1990), "A Critical Review of Consumer Satisfaction," *Review of Marketing*, V.A. Zeithaml, (ed.), Chicago: American Marketing Association, 68-75.

Send correspondence regarding this article to:
Beverly K. Brockman, Doctoral Student
University of Alabama
Culverhouse College of Commerce and Bus. Admin.
Department of Management and Marketing
105 Alston Hall, Box 870225
Tuscaloosa, Alabama 35487-0225 USA