

# EFFECT OF USER ORIENTATION ON DISCONFIRMATION PROCESSING

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## ABSTRACT

The purpose of this study was to conduct an indirect test of Propositions 4 and 5 of Oliver's (1989) satisfaction framework by analyzing the effect of user orientation on disconfirmation processing. Two sample groups that varied in user orientation were chosen to represent the contentment and pleasure response modes of Oliver's model. As predicted, results indicated that disconfirmation did not occur in the case of the sample representing the contentment mode, but did occur in the case of the sample representing the pleasure mode.

## INTRODUCTION

In a new framework for analyzing satisfaction, Oliver (1989) argued that consumer product orientation affects the subsequent satisfaction response. Five satisfaction modes (contentment, pleasure, relief, novelty, and surprise) differing in arousal level, nature of cognitive processing that occurs, operant emotion, and attribution processing were proposed.

The contentment mode was characterized by Oliver as involving no processing of expectations, performance, disconfirmation, or attributions owing to the low arousal state that would be associated with continuous use or ongoing repeat buying. As a result, the primary affect would be acceptance or tolerance. Thus, Proposition 4 of the satisfaction framework stated:

Given the ongoing consumption of a low arousal product, disconfirmation (or subsequent attribution processing) should not be present. In this event, the primary affect state, based on performance or expectations in situations where performance is not processed . . . will be the central emotion expressed in this response mode (Oliver, 1989, p.8).

It was noted that, because in repeat consumption situations the consumer has adapted or "acclimated" to a "usual level of performance," the contentment mode could apply not only to low involvement products but also to high involvement products.

The pleasure mode was characterized by Oliver as involving active processing of expectations, performance, disconfirmation and moderately active attribution processing. The primary affect would be happiness/sadness depending on the processing of expectations, outcomes, and disconfirmation. Thus, Proposition 5 stated:

Given a product which has the intended outcome of adding to a benefit set, disconfirmation processing will generate attribution processing. The specific emotions which result are posited to operate with but not obscure the effect of the primary affect. These specific emotions and the primary affect are thought to combine to produce the consumer's summary state toward the product (Oliver, 1989, p. 8).

To date, few studies have tested Oliver's propositions. In one study, Francis and Davis (1992, in press) posited that "the reinforcement satisfaction mode in which the summary state of satisfaction is pleasure appears to be appropriate for the analysis of clothing," due to the moderate to high arousal state and moderate to high consumer interest associated with this mode. Results of their study confirmed Oliver's belief that consumer product orientation would affect subsequent satisfaction. Specifically, Francis and Davis reported that satisfaction was dependent on consumers' level of fashion involvement.

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disconfirmation processing. Specifically, participants' satisfaction with products and playing conditions of two sport activities was analyzed within the context of the contentment and pleasure satisfaction modes. Products and playing conditions were chosen for testing, rather than satisfaction with the sport itself, for two reasons. First, the primary orientation of consumer behaviorists has been toward product acquisition and usage, rather than toward consumption of activities. Second, a high level of liking could be expected, and has been found, to accompany participation in both of the chosen sports (Browne & Francis, 1991; Wankel & Kreisel, 1985). Therefore, the sports themselves could be assumed to generate similar arousal, cognitive processing, operant emotion, and attribution processing.

## PROCEDURE

### Sample

As part of a larger study of family dynamics, two groups of sports participants, interscholastic baseball players and teenage skateboarders, were chosen as comparison groups. The composition of the two sample groups was: (1) 61 14 - 18 year old male members of high school baseball teams; and (2) 161 12 - 19 year old predominantly male (91%) skateboarders. Preliminary analyses revealed no differences between male and female skateboarders on satisfaction variables so data for both sexes were combined for purposes of analysis.

The baseball players were considered to have a user orientation toward baseball clothing, products, and facilities consistent with the contentment response mode described by Oliver (1989). Baseball is a very traditional sport with almost no individual choice in clothing, playing conditions, or basic equipment. Because of this uniformity and longevity of clothing styles and sports conditions, it was assumed that baseball players would be likely to exhibit low arousal, possibly to the extent of disinterest, with products and equipment used in conjunction with the sport.

The skateboarders were considered to have a user orientation consistent with the pleasure response mode that was described by Oliver (1989) as characterized by moderate to high arousal and

interest. Skateboarding is a non-traditional sport not offered as part of school athletic programs and having a brief history. Facilities, equipment, and clothing for skateboarding tend to lack uniformity, to be customized, and to attract attention. For example, skateboarders personalize clothing and equipment by adding styling modifications, decoration, and interchanging parts. These activities are not exhibited by baseball players with respect to their uniforms and equipment. It was reasoned that greater personalization was indicative of greater involvement with the products used, greater arousal, and elicitation of satisfaction responses characteristic of the pleasure mode as previously reported by Francis and Davis (1992, in press).

Two checks were conducted to confirm the appropriateness of the two sample groups for the purposes of this study. First, in order to confirm that skateboarders are seen as daring and unconventional, a semantic differential consisting of 14 word pairs including conventional/unconventional and cautious/rash, was administered to 50 college students. As expected, skateboarders were viewed as more unconventional and more rash than were baseball players. Also, results of Chi<sup>2</sup> analysis indicated a greater degree of involvement in their sport for skateboarders than for baseball players (Chi<sup>2</sup> = 38.89, df = 3,  $p < .001$ ). These two checks appeared to indicate that nonparticipants viewed skateboarders as less traditional and that skateboarders viewed the sport as involving.

Because skateboarders were sampled at two competitions held in different areas of the northwest, the two groups were compared to determine whether there were differences with respect to satisfaction variables. Preliminary tests indicated no differences between the groups; therefore, the data from the two groups were combined for hypothesis testing.

### Instrumentation

Two parallel questionnaires were developed to measure satisfaction with three aspects of the two sports: facilities, equipment, and clothing. The satisfaction items were measured on 5-point scales ranging from "Not at all satisfied" (1) to

"Completely satisfied" (5). Level of involvement was operationalized as the number of hours per week spent by participants in their sport during the school year. This operationalization of involvement was chosen to ensure that the greater provision of time and facilities for baseball would not be a factor. Demographic data were also collected.

### Data Collection

To administer the questionnaire to the baseball player group, one researcher distributed and collected completed questionnaires during regularly scheduled practices at two local high schools. Administration of questionnaires to skateboarders was more complex because skateboarding is not an organized interscholastic activity with regular practice times and places. To administer the questionnaire to the skateboarder group, the two researchers approached participants at two regional skateboard competitions held on the West Coast. Skateboarders, like baseball players, were asked if they would be willing to participate. They were told that participation was voluntary and responses would be anonymous. As compensation for participation in the study, skateboarders were given a candy bar. All questionnaires were completed by participants themselves.

### Hypotheses

Because baseball players were considered to have a user orientation consistent with the contentment response mode (low arousal, possibly disinterest), disconfirmation processing was not expected to occur. Therefore, the following three hypotheses were developed:

- H<sub>1</sub>: Disconfirmation processing will not be present in the case of baseball players' satisfaction with baseball facilities.
- H<sub>2</sub>: Disconfirmation processing will not be present in the case of baseball players' satisfaction with baseball equipment
- H<sub>3</sub>: Disconfirmation processing will not be present in the case of baseball players' satisfaction with baseball uniforms.

Because skateboarders were considered to have

a user orientation consistent with the pleasure response mode characterized by moderate to high arousal and moderate to high interest due to its non-traditional nature and brief history, disconfirmation processing was expected to occur. Therefore, the following three hypotheses were developed:

- H<sub>4</sub>: Disconfirmation processing will occur in the case of skateboarder's satisfaction with places to skateboard.
- H<sub>5</sub>: Disconfirmation processing will occur in the case of skateboarders' satisfaction with skateboard equipment.
- H<sub>6</sub>: Disconfirmation processing will occur in the case of skateboarders' satisfaction with clothes for skateboarding.

### Analysis

One-sample *t*-tests were calculated to test the six hypotheses. For Hypotheses 1, 2, and 3, the null hypothesis was that the sample mean would be equal to the mean of the satisfaction scale ( $M = 3$ ). For Hypotheses 4, 5, and 6, the null hypothesis was that if no attribution processing occurred, respondents would be tolerant and satisfied, and not possess strong negative or positive feelings of satisfaction. Conversely, if attribution processing was present, high levels of satisfaction (in the case of confirmation of benefits) or dissatisfaction (in the case of disconfirmation of benefits) would be present.

## RESULTS

Means, standard deviations, and the *t* statistics generated by the one-sample analysis are presented in Table 1.

As predicted by H<sub>1</sub>, disconfirmation processing was not present in the case of satisfaction of baseball players with baseball facilities ( $t = 1.78$ ,  $p > .051$ ). Specifically, the mean level of satisfaction with baseball facilities reported by the baseball players (3.23) was not significantly different from the mean of the satisfaction scale (3.0).

Similarly, as predicted by H<sub>2</sub>, disconfirmation processing was not present in the case of satisfaction of baseball players with baseball

equipment ( $t = 0.98$ ,  $p > .05$ ). The mean level of satisfaction with baseball equipment reported by the baseball players (3.13) was not significantly different from the mean of the scale (3.0).

**Table 1**  
One Sample Analysis of  
Disconfirmation Processing

Satisfaction Variable	mean	SD	t	p
Baseball Players (n=60)				
Baseball facilities	3.23	1.01	1.78	.08
Baseball equipment	3.13	1.05	0.98	.33
Baseball uniforms	3.12	1.39	0.65	.52
Skateboarders (n=161)				
Places to skate	2.60	1.10	-4.67	.0001
Skateboard equipment	3.90	1.04	11.00	.0001
Clothes for skating	3.73	1.27	7.30	.0001

Also, as predicted by  $H_3$ , disconfirmation processing was not present in the case of satisfaction with baseball uniforms ( $t = 0.65$ ,  $p > .05$ ). Specifically, the mean level of satisfaction with baseball uniforms reported by the baseball players (3.12) was not significantly different from the mean of the satisfaction scale (3.0).

As predicted by  $H_4$ , disconfirmation processing did occur in the case of satisfaction with places to skateboard ( $t = -4.67$ ,  $p < .0001$ ). The mean level of satisfaction with places to skateboard reported by the skateboarders (2.60) was significantly different than the mean of the satisfaction scale (3.0).

Similarly, as predicted by  $H_5$ , disconfirmation processing did occur in the case of satisfaction with skateboard equipment ( $t = 11.00$ ,  $p < .0001$ ). Specifically, the mean level of satisfaction with skateboard equipment reported by the skateboarders (3.90) was significantly different than the mean of the satisfaction scale (3.0).

Also, as predicted by  $H_6$ , disconfirmation processing did occur in the case of satisfaction with clothes for skateboarding ( $t = 7.30$ ,  $p < .0001$ ). The mean level of satisfaction with clothes for skateboarding reported by the skateboarders (3.73) was significantly different than the mean of the satisfaction scale (3.0).

## CONCLUSIONS

Overall, results of this study supported Oliver's (1989) satisfaction model. Specifically, disconfirmation did not occur in the case of satisfaction with three selected aspects of a traditional sport, baseball; hence, Oliver's Proposition 4 was confirmed. According to the Oliver model, two mechanisms could be at work to produce a contentment mode. The first is that baseball players have a user orientation characterized by low arousal, low interest, and acclimation to a "usual level of performance." In other words, baseball clothing, equipment, and facilities may be seen as secondary to the game, as long as they are adequate. Oliver also posited that the contentment mode applied to products associated with a constant level of high involvement that results in consumer adaptation to a "usual level of performance." In other words, participants may see baseball clothing, equipment, and facilities as very important but repeated use of adequately performing goods has resulted in habituation. Unfortunately, however, the design of the present study did not provide data that would directly test user orientation characterized by high involvement versus low involvement. Such future investigation should prove interesting.

Oliver's Proposition 5 was also confirmed. Disconfirmation did occur in the case of satisfaction with three selected aspects of a non-traditional sport (skateboarding). This sport was assumed to have a user orientation characterized by moderate to high arousal and moderate to high interest in equipment, clothing, and facilities based on observed personalization of products used by skateboarders. Skateboarders indicated satisfaction with clothing and equipment that was significantly different from the mean. With respect to facilities for skateboarding, they indicated significant dissatisfaction. Dissatisfaction with facilities may have been influenced by the lack of ideal facilities for skateboarding and by special interest magazine presentations of desirable facilities not available to most participants. Again, the present study provided no direct way of testing these assumptions.

It is apparent from the present results that Oliver's framework for analyzing satisfaction holds great promise for future work. However, a critical

preliminary step will be development of measures by which to accurately categorize products and/or consumption experiences so that the analysis will be framed within the appropriate satisfaction mode. Also, the framework will be even more useful when it is refined to clearly include satisfaction with services and experiences other than those involving consumer goods, such as job satisfaction.

### REFERENCES

- Browne, B. A. & Francis, S. K. (1991), "Perceptions of Self and Family Among Adolescent Participants in School-Sponsored and Independent Sports," In Review.
- Francis, S. K & Davis, L. L. (1992), "Effect of Consumer Socialization on Clothing Shopping Attitudes, Clothing Acquisition, and Clothing Satisfaction," *Clothing and Textiles Research Journal*, 10, In Press.
- Oliver, R. L. (1989), "Processing of Satisfaction Response in Consumption: A Suggested Framework and Research Propositions," *Journal of Satisfaction, Dissatisfaction and Complaining Behavior*, 2, 1-16.
- Wankel, L. M. & Kreisel, P. S. J. (1985), "Factors Underlying Enjoyment of Youth Sports: Sport and Age Group Comparisons," *Journal of Sport Psychology*, 7, 51-64.

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