

# LEVEL OF INVOLVEMENT IN RELATION TO SATISFACTION WITH A STUDENT-OWNED DINING FACILITY

Carol C. Caughey, Oregon State University

Dian A. Nafis, Oregon State University

Sally K. Francis, Oregon State University

## ABSTRACT

Consumer satisfaction/dissatisfaction with facilities as opposed to goods and services has received little attention from researchers. The purpose of the present study was to examine the effect of involvement on satisfaction with a student-owned dining facility at a west coast university. Stepwise multiple regression analysis was used to examine the relationship between four indicators of involvement and overall satisfaction with the dining facility. Whether subjects studied at the facility was found to be a significant predictor of overall satisfaction.

## INTRODUCTION

Architects and designers traditionally have assumed that their products affect the users. In recent years some attention has been paid to assessing the nature of these effects (Bennett, 1977; Bitner, 1992; Cadotte & Turgeon, 1988; Weale, Whiteside, Danford, & Day, 1977), but few studies have been of the type which are easily generalized, usually due to the lack of uniform stimulus material, or to the lack of a uniform model for evaluating perceptions of the built environment.

Most studies to date in the consumer satisfaction/dissatisfaction (CS/D) literature have explored dimensions of consumer behavior regarding goods and services and have only occasionally focused on elements of the physical environment (Bitner, 1990; Cadotte & Turgeon, 1988; Pate, 1993). The reason for this lack of research may be that perceptions of the built environment have not been regarded as quantifiable and therefore not amenable to empirical study.

According to Swan and Trawick (1993), consumer satisfaction/dissatisfaction has been examined in most cases from the point of view of what is known as the "standard disconfirmation paradigm." This paradigm was summarized by Woodruff, Cadotte and Jenkins (1983) as

consisting of "a sequence of forming standards for performance, comparing how an object actually lived up to the standard, and perceiving any discrepancy (disconfirmation) as reason for feelings of satisfaction or dissatisfaction" (p. 118).

In comparing current models of consumer satisfaction/dissatisfaction, Erevelles and Leavitt (1992, p. 111) categorized the models developed in the 1980's into the following types: the expectations disconfirmation model, the perceived performance model, norms in models of consumer satisfaction, multiple process models, attribution models, affective models, and equity models.

A more recent path of exploration, particularly in the field of behavioral psychology, has been the relationship of level of involvement to consumer satisfaction/dissatisfaction. This is the relationship that forms the theoretical or conceptual framework of the present study. Product (or service, or facility) involvement has been used to refer to the amount of interest or attention a consumer demonstrates toward a product or service (Richins & Bloch, 1991). Involvement studies have often differentiated between enduring involvement (EI) and situational involvement (SI). Some wine connoisseurs and antique car enthusiasts, for example, may be considered to demonstrate a high level of EI because they spend considerable time discussing and reading about their interests over a period of many years. Situational involvement, on the other hand, often includes intense research at the time of an important purchase (e. g., a house). But interest in the product wanes with time as the situational involvement decreases in intensity (Richins & Bloch, 1991, p. 147).

Level of involvement is a problematic concept to measure, and researchers generally have used resulting behaviors as indicators of the level of involvement of a particular subject. The working definition of involvement used in Zaichkowsky's study (1985) was "a person's perceived relevance of the object based on inherent needs, values, and interests" (p. 343). Zaichkowsky suggested that this definition is applicable to advertisements, products, or purchase decisions. Few studies are

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available relating general concepts of involvement to usage of facilities. Therefore, for the purposes of this study, the concept of a purchase decision will be considered to be comparable to the decision to use a facility.

Satisfaction studies of student-owned campus facilities such as college unions are important for a number of reasons. The emphases in higher education on accountability and on regarding students as consumers of an educational product or service (Swagler, 1978) have increased the need for marketing higher education institutions themselves. Of all of the buildings on university and college campuses, the college union is traditionally the one in which the students themselves have the most ownership, both emotional and legal (Harris, 1984). Funding for college unions is derived usually from student fees and is thus not subject to the vicissitudes of public or private funding. In addition, the buildings must be remodelled or replaced relatively frequently due to heavy use and changing student needs. Therefore developing building and remodeling plans based on user (owner) input is a necessity for administrators of college union buildings. Satisfaction/dissatisfaction studies will aid administrators in utilizing and interpreting such input.

Cadotte and Turgeon (1988) reported results of two surveys of guest satisfaction, one of members of the National Restaurant Association and the other of members of the American Hotel & Motel Association, to determine the frequency of complaints and compliments in the hospitality industry. The findings of the two studies indicated that some attributes of these facilities have a potential of eliciting more complaints and dissatisfaction and some elicit more compliments and other indications of satisfaction. As is the case in many satisfaction studies, this instrument included questions about services and products, as well as facilities. A finding of the restaurant survey was that complaints about facilities such as traffic congestion in the establishment, noise level, spaciousness, and neatness ranked high on the complaint scale, but not on the compliment scale.

Bodur and Osdiken's (1981) study of students' satisfaction with educational services in a university in Turkey touched upon satisfaction with elements of the built environment such as the

library, the canteen, and other facilities; but students were not asked to use specific criteria to express their perceptions of and satisfaction with the facilities.

Sources for case studies of remodels of college union dining facilities are to be found in papers presented to the annual conferences of the Association of College Unions-International (Blaesing, Johnston, Elsinger & Long, 1991; Dorsey, Potts, Scott & Yates, 1992; and Trathen, 1991). These case studies, though site-specific as many studies in perceptions of interiors are, offer insights collectively as to what elements of interiors are perceived by users to be significant, either negatively or positively.

The purpose of the present study was to examine the effect of involvement on satisfaction with a student-owned dining facility. The preliminary proposition explored was that subjects' level of involvement with a student-owned dining facility would be related to their satisfaction with the facility as a whole. The overall goal of this study about the relationship of involvement and satisfaction was to contribute to the understanding of the determinants of satisfaction with interior spaces.

## METHOD

A survey instrument was administered to a convenience sample of 121 undergraduate students enrolled in a human development course. Subjects were asked whether they ever entered a student-owned dining facility in the student union building. Five subjects who responded that they had never used the facility were eliminated from the sample, leaving 116 subjects. Subjects were asked to indicate their overall satisfaction with the facility on a five point Likert scale (1 = not satisfied and 5 = very satisfied). They were also asked to indicate their satisfaction with nineteen individual components of the interior environment as part of a larger study (in review).

The survey instrument included several measures of the subjects' level of involvement with the facility. These measures were suggested by results of previous focus group research in the same facility (Johnson, 1992) and by approach behaviors identified in marketing studies such as those by Donovan and Rossiter (1982) and Bitner

(1992). The five measures included the amount of money spent per visit (under \$1.00, \$1.00-\$3.00, \$3.01-\$5.00, over \$5.00), the amount of time spent there per week (less than 1 hour a week, 1-3 hours a week, 4-6 hours a week, more than 6 hours a week), and whether or not the subjects eat, socialize and study there.

Demographic data were collected including subjects' age, sex, ethnic identity, major, class standing, and living arrangement. Descriptive statistics were used to provide a profile of the sample.

The involvement data were analyzed in relation to subjects' responses about their satisfaction with the dining facility as a whole using stepwise multiple regression. A correlation matrix was calculated to assess potential multicollinearity. Whether or not subjects eat at the facility was eliminated from further analysis because it was highly correlated with the amount of money spent per visit ( $r = .40$ ,  $p < .001$ ). It was decided to retain the variable money spent because the expenditure data were measured on an interval scale. No other correlations were .40 or higher.

Because the responses to the items regarding whether or not subjects socialize and study at the facility were measured on a nominal scale (i.e. yes/no), dummy variables were created for entering into the subsequent regression analysis. A stepwise regression was used to assess the influence of the four independent variables on overall satisfaction with the facility.

## RESULTS

### Sample Description

Subjects' ages ranged from 18 to 46 years, with the mean age of 20.67 years. Subjects' majors represented nine of the ten colleges of the university. Fifty-nine percent of the subjects were women. Eighty-three percent were Caucasian, with the remainder comprised of several ethnic/minority groups. Class ranks were: 34% freshmen, 22% sophomores, 12% juniors, and 32% seniors.

### Regression Analysis

Stepwise multiple regression analysis was used

to examine the ability of the four independent variables to predict overall satisfaction with the facility. Amount of money spent, time spent, whether or not the subjects studied there, and whether or not subjects socialized there were the independent variables. Overall satisfaction with the student owned dining facility was the dependent variable. Table 1 presents the results of the regression analysis.

**Table 1**  
Stepwise Multiple Regression of Involvement on Overall Satisfaction

Variable in Model	Coefficient	Standard Error	t	Significance Level	F Enter
Whether or Not Study	-0.51	0.15	-3.30	.001	10.89
Note. R Squared = 0.0825					
Analysis of Variance					
	Sum of Squares	df	Mean Square		
Model	7.12	1	7.12		
Error	71.27	109	0.65		
Variables Not in Model			P Corr	F Enter	
Whether or not Socialize			0.06	0.34	
Time			0.17	3.15	
Money			0.04	0.14	

Table 1 reveals that the final model included only one variable, whether subjects studied at the facility [ $F = 10.89$  (1,109),  $p < .001$ ]. Whether or not subjects studied at the facility ( $t = -3.30$ ,  $p < .001$ ) was found to be the only significant predictor of overall satisfaction. That is, students who reported that they studied at the facility reported higher overall satisfaction with the facility ( $m = 3.05$ ) than those who did not ( $m = 2.54$ ). However, the  $R^2$  value (.0825) reveals that whether students studied at the facility explained 8% of the total satisfaction variance. The other three indicators of involvement (whether or not students socialized there, time spent at the facility, and money spent) were not useful predictors of satisfaction.

## DISCUSSION AND CONCLUSIONS

The purpose of the study was to examine the effect of involvement on satisfaction with a student-owned dining facility. The preliminary proposition that subjects' level of involvement with this dining facility would be related to their satisfaction with the facility as a whole appears to have been partially supported. Only one of the four measures of involvement was a useful predictor of overall satisfaction with the facility. Although the regression equation was significant, the  $R^2$  was only .08, indicating that many other predictors of satisfaction potentially exist.

One predictor of satisfaction might be measures of performance, which were not examined in this study. Satisfaction with nineteen individual attributes of the interior was examined, however. But the contribution of individual attributes to overall satisfaction has not proved useful in predicting overall satisfaction. Satisfaction with these attributes has been analyzed in another manuscript (Caughey, Francis & Nafis, in review).

Limitations of the study include the fact that the data were based on recall. If subjects had completed the surveys on site, their responses might have reflected more accurately their involvement in and satisfaction with the facility. In addition, other locations for studying and for dining exist on and near the campus; but this dining facility is the only student union dining facility on the campus. Perhaps, therefore, the responses reflected "captive audience" attitudes.

Although previous research on the effect of involvement on satisfaction/dissatisfaction has focused on products and services and not on facilities, the results of the present study indicate that involvement may have an effect on satisfaction with facilities similar to the effect it has on satisfaction with products and services. As subjects' level of involvement with a product increases, their satisfaction has been shown to increase as well, although Richins and Bloch (1991) found that enduring involvement (EI) and situational involvement (SI) differed in levels of satisfaction as time passed. The passage of time is probably not a useful variable for studies of satisfaction with a facility, unless users could be surveyed several times during a single usage of

that facility. Differentiating between EI and SI in facilities usage may be worthy of future study, however.

Implications of this study for food service marketers on and near college campuses might include the need to provide food which is easy to eat while studying, a variety of snack foods and beverages, and large tables to facilitate studying.

More studies of category use in perceptions of interiors such as the Burns and Caughey (1992) study could provide some suggestions as to the components of interiors which are important to their users. Level of involvement with products or services could be compared to that with facilities. Level of involvement with residential interiors could be compared to that with commercial, office, institutional, healthcare, hospitality, or other interiors.

Satisfaction/dissatisfaction with facilities has received little attention by researchers. Therefore many assumptions have been made for the purposes of this exploratory study. One such assumption is that it is possible to become involved with a public facility. Designing studies to explore such assumptions would provide much needed information for those interested in environmental design.

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Send correspondence regarding this article to:

Carol C. Caughey

Oregon State University

Dept. of Apparel, Interiors, Housing, & Merchandising

Milam 224

Corvallis, OR 97331-5101 USA