Relationships Between Involvement and Attitudinal Loyalty Constructs in Adult Fitness Programs

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The primary intent of the present study was to investigate the relationships among the participants' attitudinal loyalty profiles and involvement profiles. Data for this investigation were derived from participants of an adult fitness program ($n = 208$). A canonical correlation analysis indicated that there are significant and strong associations between attitudinal loyalty profiles and involvement profiles ($p < .05$). A participant who scores high on importance, self-expression, and risk consequence would have a higher score on affective loyalty, investment loyalty, and normative loyalty. Results of the hierarchical multiple regression analyses suggest that involvement has a good predictive power in short term usage of the program, while attitudinal loyalty is effective in assessing long term usage of the program. Theoretical implications and suggestions for future research are discussed.

KEYWORDS: *Attitudinal loyalty, behavioral loyalty, involvement, market segmentation, marketing strategy*

Introduction

Research has repeatedly shown that one of the best marketing strategies is to maintain and increase participants' level of involvement and loyalty to the respective service. Participants' loyalty and involvement can be nurtured effectively by differentiated marketing strategies with compatible market segmentation (Backman & Crompton, 1991a, 1991b; Havitz, Dimanche, & Bogle, 1994; O'Sullivan, 1991a, 1991b; Pritchard, 1992; Selin, 1987). That is, participants with different degrees and types of loyalty and involvement may require differentiated program, pricing, promotion, and distribution.

However, a lack of precision and redundant conceptualizations and definitions in relation to loyalty and involvement in the field of sport and leisure have led to confusion in operationalization and measurement of the two constructs. The primary purpose of this research is to identify the relationships between involvement and attitudinal loyalty by viewing the constructs from multidimensional perspective. The analysis attempted to avoid some limitations of past research by employing multivariate analytical procedures.

Conceptualization of Involvement and Loyalty

Involvement, loyalty, and commitment are distinct constructs (Pritchard, 1992; Shamir, 1988; Siegenthaler & Lam, 1992; Traylor, 1983). Further, it has been suggested that high involvement is a precondition to some types of loyalty (Assael, 1984; Backman & Crompton, 1991a, 1991b; Beatty, Kahle, & Homer, 1988; Crosby & Taylor, 1983; Selin, 1987). Pritchard (1992) explained the distinction between the two constructs by stating "involvement is seen to result when important values of the person's self image are engaged or made salient by a decision situation, whereas, commitment results when these values, self-images, or important attitudes become cognitively linked to a particular stand or choice alternative" (p. 38). Similarly, Shamir (1988) argued that an individual may be highly involved in an activity without being committed to it.

Involvement as a Multidimensional Construct

Several researchers have proposed the multidimensional nature of the involvement construct (Arora, 1993; Havitz, Dimanche, & Howard, 1993; Houston & Rothschild, 1978; Laurent & Kapferer, 1985; Reid & Crompton, 1993; Schuett, 1993). Viewing involvement as a unidimensional construct (e.g., Backman & Crompton, 1991a, 1991b; Zaichkowsky, 1985) hampers understanding of involvement construct and its behavioral consequences. Each dimension of involvement describes specific behaviors and all dimensions should be taken into account in predicting consumers' behaviors. Arora (1993) and Laurent and Kapferer (1985) emphasized that consumers' involvement may not be satisfactorily measured through a single dimension of involvement, suggesting instead that researchers develop involvement profiles.

According to Houston and Rothschild (1978), situational involvement is a transitory feeling of involvement, while enduring involvement is a relatively permanent phenomenon in nature. A man, for instance, who is purchasing a golf club for a birthday gift to his fiance may show high situational involvement although he possesses low enduring involvement with golf, golf clubs, or both.

Many scholars view perceived importance as the essential characteristic of involvement (Arora, 1993; Bloch, Black, & Lichtenstein, 1989; Celsi & Olson, 1988; Zaichkowsky, 1985). Pleasure has also been identified as an important dimension in leisure pursuits (Dimanche, Havitz, & Howard, 1991; Holbrook, Chestnut, Oliva, & Greenleaf, 1984; Podilchak, 1991; Pucely, Mizerski, & Perrewe, 1988). Several researchers (Dimanche et al., 1991; Havitz et al., 1993; McIntyre, 1989) found that the importance and pleasure dimensions of involvement merge in leisure contexts, suggesting that the importance and pleasure dimensions should be considered as a single component.

Perceived risk has also been identified as a subdimension of the involvement construct (Arora, 1993; Dimanche et al., 1991; Havitz & Dimanche,

1990; Havitz et al., 1993; Kapferer & Laurent, 1985: Laurent & Kapferer, 1985). Laurent and Kapferer (1985) identified the subcomponents of risk dimension: the perceived possibility of making such a mistake (risk probability) and the perceived failure consequences resulting from poor choice (risk consequence). Havitz et al. (1994) found that most participants in the group with the lowest risk scores participated much more frequently than participants with the highest risk scores.

It has been noted that self-expression is important in leisure contexts (Bloch, 1982; Dimanche et al., 1991; Dimanche & Samdahl, 1994; Havitz et al., 1994; Samdahl, 1988). Haggard and Williams (1992) proposed that re-creationists may engage in specific leisure activities to symbolize their ideal selves to others. Similarly, an individual may purchase recreational equipment to communicate symbolic meaning to others (Assael, 1984; Bloch et al., 1989; Sirgy, 1982; Zaltman & Wallendorf, 1983).

Although Laurent and Kapferer (1985) did not include centrality in their original 15 items, it has been widely used in leisure research (e.g., McIntyre, 1989; Watkins, 1987). Bryan's (1979) specialization theory implies that a highly specialized recreationist in a given leisure pursuit will consider the activity as central to his/her life. In a study of beach campers' involvement, McIntyre (1989) noted that the centrality of camping to lifestyle was the strongest predictor of beach campers' choice of campgrounds. However, centrality items were not added to the Involvement Profile scale in this research. According to Havitz et al. (1994), the importance, pleasure, and centrality dimensions merge in leisure contexts, implying that the importance, pleasure, and centrality components of involvement construct should be considered a single component referring to the attractive nature of leisure participation.

Attitudinal Loyalty as a Multi-dimensional Construct

Many leisure investigators (Backman & Crompton, 1991a, 1991b; Howard, Edginton, & Selin, 1988; Pritchard, Howard, & Havitz, 1992; Yair, 1990) have proposed that both behavioral and attitudinal dimensions should be considered in measuring loyalty. Behavioral loyalty is considered as consistent behavior, whereas attitudinal loyalty refers to the degree to which an individual demonstrates a psychological attachment.

No consensus has been reached on how loyalty should be conceptualized and empirically measured. Backman and Crompton (1991) defined loyalty to recreation services as a two-dimensional concept, comprised of both psychological and behavioral dimensions. This conceptualization proposes a loyalty matrix into which leisure program participants can be classified: high, spurious, latent, and low loyalty. It should be noted that sensitivity is lost when the categorical nature of matrix classification is employed by arbitrarily assigning consumers to a four-cell paradigm (Muncy, 1984). More recently, Pritchard (1992) conceptualized attitudinal loyalty as a multi-dimensional construct having three distinct subcomponents: resistance to

change, volition, and cognitive complexity. It appears that Pritchard's model
of attitudinal loyalty lacks a well-specified conceptualization and definitional
theory in scale construction in leisure and sport contexts.

Allen and Meyer's (1990) three-component conceptualization of orga-
nizational commitment is suggested as a basis for better operationalizing the
attitudinal dimension of program loyalty. Even though participants' program
loyalty and employees' organizational commitment are not the same, they
are same in terms of psychological attachment to a particular object. Al-
though several conceptualizations of attitudinal loyalty have appeared in the
leisure and sport literature, three distinct themes in the definition of atti-
tudinal loyalty are identified: investment, normative pressure, and affective
attachment. It is postulated that each component of attitudinal loyalty differs
in its impact on participants' behaviors.

Investment loyalty is based on Becker's (1960) side bets or investments
theory, proposing that lack of alternative activities and accumulation of in-
vestments in a particular program reflect investment loyalty. That is, an in-
dividual's loyalty or commitment is influenced by investment or side bets
(Allen & Meyer, 1990; Buchanan, 1985; Farrell & Rusbutt, 1981; Hrebiniak
& Alutto, 1972; Meyer, Allen, & Smith, 1993; Yair, 1990). According to Buch-
anan (1985), side bets or investments encouraging consistent recreation be-
haviors include emotional attachment, experience, and effort as well as a
behavioral component. Snyder (1981) and Stebbins (1977) argued that some
amateurs are serious about their leisure, thus making substantial investments
in terms of time and money to improve their performance in a chosen ac-
tivity. Thus, it can be postulated that as a participant increases side bets or
investments in participating in an adult fitness program, he/she is more
likely to stay with the activity not to lose associated benefits.

Normative loyalty is characterized by a participant's awareness of social
expectation or normative pressure from significant or relevant others. It has
been suggested that increased social expectation or normative pressure from
significant others produces a high level of commitment (Carpenter, Scanlan,
Simon, & Lobel, 1993; Pritchard et al., 1992; Scanlan, Carpenter, Schmidt,
Simons, & Keeler, 1993). It is assumed that pressure to continue participation
is determined by the perception of negative sanctions from significant others.

Affective loyalty can be described in terms of a participant's internali-
zation of a particular program. That is, affective loyalty can be defined as a
psychological attachment caused by an individual's desire to continue a par-
ticular program through affective attachment to and identification with the
program. Yair (1990) examined the antecedent variables of commitment to
predict long distance runners' levels of training and competitive participa-
tion and found that identification with running is predictive of a long dis-
tance runner's levels of commitment. Similarly, Murrell and Dietz (1992)
found that individuals continue participation and possess positive attitudes
toward a particular sport team when their group identity is high.

It would be important to relate the findings of psychological concepts
to sociodemographic variables which can be easily measurable and applica-
ble. Many studies have shown sociodemographic variables useful for char-

acterizing those who are loyal, involved, or both in recreational activities (Howard et al., 1988; Madrigal, Havitz, & Howard, 1992; Siegenthaler & Lam, 1992; Slama & Tashchian, 1985). For example, it has been found that older participants tend to show higher levels of loyalty, involvement, or both in recreational activities (Backman & Veldkamp, 1995; Madrigal et al., 1992; Selin et al., 1988).

Based on the literature reviewed concerning loyalty and involvement, it was hypothesized that attitudinal loyalty profiles will be positively and significantly correlated with involvement profiles. In addition to the hypothesis, a research question developed for this study was: Attitudinal loyalty and involvement contribute independently to the prediction of different measures of behavioral loyalty.

Method

Sample

A total of 338 participants in weight training and aerobic dance programs were asked to participate in this study, of whom 329 (97%) agreed to serve as respondents in the survey, yielding a refusal rate of less than three percent. Two hundred and fourteen respondents completed and returned the first and second survey questionnaire, providing a 65 percent overall response rate. After matching and editing, a usable sample of 208 responses were retained for analysis. The ages of the respondents ranged from 18 to 75 years, with the mean age of 31.01 years ($SD = 11.31$). Coincidentally, exactly half of the usable sample were male ($n = 104$) and half of the sample were students ($n = 104$).

Procedure

Data were collected from a fitness center located at a medium-sized eastern city in the United States during the spring of 1994. Data were collected throughout the day on both weekdays and weekends to reduce the sampling bias. Two separate administrations of questionnaires were conducted to avoid the influence of the method variance problem and response consistency effects (Kemery & Dunlap, 1986; Podsakoff & Organ, 1986), which occurs if the researcher collects multiple measures with a single measurement format at the same place and time. This study utilized a purposive sampling technique. Potential respondents (18 years and older) were intercepted on site as they arrived at the center. They were requested to complete the attitudinal loyalty questionnaire on site and the involvement questionnaire at home. To check the nonrandom error, sample characteristics were compared to population characteristics available through the agency and found to correspond well to the agency profiles of participants.

Instrumentation

Attitudinal loyalty profiles were measured by using the modified version of Allen and Meyer's (1990) twenty-four-item organizational commitment

scales, which substituted the word "program" wherever the word "organization" occurred in the original version of the scales. Also, wording of several questions was revised to reflect the loyalty to a particular adult fitness program. Cronbach's alphas were calculated after 5 items were discarded due to low item-total correlations. The Cronbach's alphas for the attitudinal loyalty scales in this study were .79 for affective loyalty (8 items), .75 for normative loyalty (4 items), and .73 for investment loyalty (7 items).

The scales administered to measure involvement construct were drawn from Laurent and Kapferer's (1985) 15 item Likert scale, each of which was written to assess importance, pleasure, self-expression, risk consequence, and risk probability. The scales have been found to have satisfactory construct validity and psychometric properties of the scales, with lower reliability for risk than other components (Dimanche et al., 1991; Havitz et al., 1993; Laurent & Kapferer, 1985). Items were adapted to reflect an adult fitness program rather than a product. The Cronbach's alpha for each scale with the number of items for the involvement profiles was as follow: self-expression, .83 (3 items); importance-pleasure, .83 (6 items); risk consequence, .47 (3 items); risk probability, .65 (3 items). The lower reliability for risk may be attributable to the lack of delineation of all aspects of the domain, ambiguous scale content, and/or the biased sample of subjects (Churchill, Jr., 1979). It has also been indicated that larger item pools tend to achieve higher reliability (Churchill, Jr., 1979; Havitz et al., 1993). According to Spearman-Brown formular (Thorndike, 1961), risk consequence and risk probability need 14 and 6 items, respectively, to achieve the reliability coefficient of .80. Examples of attitudinal loyalty and involvement subdimensions are illustrated in Table 1.

TABLE 1
Representative Items from Each Subdimension of Attitudinal Loyalty
and Involvement

Subdimension	Examples of Items
Affective Loyalty	I feel as if this program's problems are my own.
Normative Loyalty	I do not believe that a person must always be loyal to his / her program.
Investment Loyalty	It would be too costly for me to discontinue this program now.
Self-Expression	This program gives a glimpse of the type of person I am.
Importance-Pleasure	I can say that this program interests a lot.
Risk-Consequence	When I choose this kind of program, it is not a big deal if I make a mistake.
Risk-Probability	It is rather complicated to choose this kind of program.

Results

A canonical correlation was performed to examine the relationships between the set of variables measuring involvement and the set of variables assessing attitudinal loyalty. Canonical correlation was selected because it is appropriate to the task of computing two sets of variables simultaneously without inflating the studywise error rate. This technique reduces the chances of Type 1 error when compared with using univariate analysis to assess these relationships (Tabachnick & Fidell, 1989).

Only one canonical variate with statistical significance at the .05 level or better was extracted from the solution and kept for further analysis. The canonical correlation for the first variate (R_c = .58) indicates that 34% of the variance was shared between the canonical composites. Correlations between variables and variates in excess of .30 are interpretable (Tabachnick & Fidell, 1989). The variables in the involvement set that were correlated with the first canonical variate were: importance-pleasure (.95), self-expression (.66), and risk consequence (.31). The first canonical variate in the attitudinal loyalty set was composed of: affective loyalty (.96), investment loyalty (.54), and normative loyalty (.39). The standardized coefficients and standardized canonical correlations for the first canonical solution are presented in Table 2. As is indicated by Table 2, an examination of the structural coefficients, which are simply the correlations of the dimensions with the canonical variates, provided a method of interpreting the nature of the ca-

TABLE 2
Canonical Variate Analysis

	Standardized Coefficient	Correlation with	
		Own Set Canonical Score	Other Set Canonical Score
Involvement Set			
Self-expression	.29	.66	.38
Importance-Pleasure	.80	.95	.55
Risk Consequence	.16	.31	.18
Risk Probability	−.05	−.11	−.07
Proportion of Variance	.36		
Redundancy	.12		
Attitudinal Loyalty Set			
Affective Loyalty	.90	.96	.56
Normative Loyalty	−.06	.39	.31
Investment Loyalty	.28	.54	.23
Proportion of Variance	.45		
Redundancy	.15		
Canonical Correlation	.58		

Note. The squared canonical correlation is .34 for the first variate.

nonical variate. The correlation of the dimension with the other canonical score indicates the redundancy. The results of the canonical correlation analysis indicated that there is some reliable relationship between attitudinal loyalty profiles and involvement profiles, thus supporting hypothesis 1.

Hierarchical multiple regression analyses were performed to determine which construct, attitudinal loyalty or involvement, is a better predictor of behavioral loyalty. The demographic variables, attitudinal loyalty, and involvement were the independent variables. Behavioral loyalty was the dependent variable, measured by participants' duration, frequency, and intensity of participation in the program provided by the center. Low internal reliability (Cronbach's coefficient alpha = .24) was obtained for these three behavioral loyalty measures in this study. Therefore, three behavioral measures were separately computed as the dependent variables. Table 3 presents the means, standard deviations, reliabilities, and intercorrelations among study variables used in hierarchical multiple regression analyses.

To measure duration of participation, respondents were asked: "Approximately how many months have you been working out at this center?" Intensity of participation was assessed by the amount of hours spent per week in the respective program. Frequency of participation was obtained by asking how frequently they participated in the program provided by the center during the last one month.

Behavioral Loyalty Measured by Duration

In the first set of hierarchical multiple regression, demographic variables were entered first, followed by the attitudinal loyalty and involvement. Table 4 displays a summary table of the findings of these steps. The ordering was somewhat difficult due to the inconclusive nature of the variables' relative importance. Thus, independent variables were entered into the regression equation on the basis of theoretical importance determined by the researcher.

The multiple R for these demographic variables was .47, which accounted for 22% of the variance in participants' duration of participation ($p < .01$). Among the demographic variables, only age was found to be significantly related to duration of participation in the program ($p < .01$). No significant interactions among age, gender, and occupation (student or non-student) were found. The attitudinal loyalty and involvement were then added to the equation in steps 2 and 3, respectively. These analyses indicated that attitudinal loyalty accounted for significant variance in duration of participation above and beyond the variance that could be accounted for by the demographic variables, yielding a change in R^2 of .024 ($p < .05$). Whereas adding involvement did not significantly contribute to the prediction of the duration of participation, controlling for the contributions made by the demographic variables and attitudinal loyalty already entered into the regression equation.

TABLE 3
Means, Standard Deviations, and Intercorrelations of Study Variables

Variable	1	2	3	4	5	6	7	8
1. Duration	—	−.14	−.10	.46**	−.06	.38**	.12	.04
2. Intensity		—	.53**	−.31**	−.02	−.29**	.13	.21**
3. Frequency			—	−.15*	−.01	−.11	.14	.29**
4. Age				—	−.15*	.69**	−.07	−.09
5. Gender					—	−.07	.15*	.06
6. Student or Non-student						—	−.08	−.09
7. Attitudinal Loyalty Profiles							—	.42**
8. Involvement Profiles								—
Mean	21.41	6.13	7.24	30.40	.49	.48	3.97	4.32
Standard Deviation	22.73	3.10	.94	10.69	.50	.50	.84	.67

Note. (Original $n = 218$; Listwise deletion $n = 182$). *$p < .05$. **$p < .01$.

TABLE 4
Summary Table for Hierarchical Multiple Regression (Dependent Variable: Duration of Participation)

Variable	df	Multiple R	R^2	R^2_{change}	$SS_{regression}$	$SS_{increase}$	F_{change}	P
Demographics	3	.4670631	.218148	.218148	20405.560	20405.560	16.55	.0001**
Attitudinal Loyalty	1	.4923535	.242412	.0242635	22675.170	2269.61	5.67	.0183*
Involvement	1	.4926053	.242660	.0002489	22698.439	23.269	.06	.8103

Note. SS_{total} = 93539.912 (Listwise deletion n = 182; Original n = 218).

Behavioral Loyalty Measured by Intensity

The second set of hierarchical multiple regression analyses was similar to the first, except that the behavioral loyalty was assessed by the intensity of participation. Table 5 presents summary statistics and the analysis of variance table for these steps in building the regression model.

The first step of the regression equation was to enter the demographic data. The multiple R for these demographic variables was .33, which explained 11% of the variance in the intensity of participation ($p < .01$). Age was the only demographic variable shown to be significantly related to the dependent variable ($p < .05$). The next step in building the regression model was to add attitudinal loyalty and to test for its unique contribution in predicting the dependent variable, controlling for the effects of demographic variables. Attitudinal loyalty did not significantly contribute to the prediction of the dependent variable. Entering involvement into the equation while controlling for the effects of demographic variables and attitudinal loyalty produced a significant contribution to the prediction of intensity of participation ($p < .05$), yielding an additional .022 of the variance.

Behavioral Loyalty Measured by Frequency

The researcher first entered the demographic variables into the equation to account for their contribution in predicting the frequency of participation. Demographic variables were not significantly related to frequency of participation. A summary table of the findings of these steps are presented in Table 6.

In the second step of the regression equation, attitudinal loyalty did not account for a significant increment in R^2 after accounting for demographic predictors at the significance level of .05. Next, the involvement was then added in the equation while controlling for the effects of demographic variables and attitudinal loyalty profiles already entered into the regression equation. Involvement profiles did account for a significant increment in frequency of participation, yielding a change in R^2 of .063 ($p < .01$).

To determine any possible mediational relationship between involvement and attitudinal loyalty, as they affect the dependent variables, the order of the variables were reversed. If a mediational relationship exists, changing the sequence of entering variables would lower one block of variables' contribution to the overall model, while increasing the contribution of the other block of variables. Comparing the aforementioned results with results from reversed ones in sequence, it indicated that the entry of the variables in different sequences had no appreciable effect on the contribution of sub-scales to the prediction of behavioral loyalty measures.

Discussion

Results of the canonical correlation analyses suggest that a participant who perceives the importance of and pleasure in the program, desires to

TABLE 5
Summary Table for Hierarchical Multiple Regression (Dependent Variable: Intensity of Participation)

Variable	df	Multiple R	R^2	R^2_{change}	$SS_{regression}$	$SS_{increase}$	F_{change}	P
Demographics	3	.3315735	.109941	.109941	190.95023	190.95023	7.33	.0001**
Attitudinal Loyalty	1	.3507406	.123019	.0130771	213.66307	22.71284	2.64	.1060
Involvement	1	.3805916	.144850	.0218318	251.58139	37.91832	4.49	.0354*

Note. SS_{total} = 1736.83516 (Listwise deletion n = 182; Original n = 218).

TABLE 6
Summary Table for Hierarchical Multiple Regression (Dependent Variable: Frequency of Participation)

Variable	df	Multiple R	R^2	R^2_{change}	$SS_{regression}$	$SS_{increase}$	F_{change}	P
Demographics	3	.1523942	.023224	.023224	3.7353757	3.7353757	1.41	.2412
Attitudinal Loyalty	1	.2048536	.041965	.0187405	6.7496101	3.0142344	3.46	.0644
Involvement	1	.3235846	.104707	.0627427	16.841195	10.091585	12.33	.0006**

Note. $SS_{total} = 160.8406593$
(Listwise deletion $n = 182$; Original $n = 218$).

express him/herself through the program, and perceives failure conse-
quences derived from poor choice of a program also tends to continue par-
ticipation due to emotional attachment to and identification with the pro-
gram, normative pressure from significant others, and investment. This study
confirms the conclusion that involvement and attitudinal loyalty are distinct
but highly intercorrelated (Assael, 1984; Backman & Crompton, 1991a,
1991b; Shamir, 1988). Marketers need to clearly understand that attitudinally
loyal consumers are also likely to be more involved consumers. However, it
should be noted that in the past studies the relationships between involve-
ment and attitudinal loyalty have not been examined in multidimensional
terms.

        Results of the hierarchical multiple regression analyses do support that
attitudinal loyalty and involvement contribute independently to the predic-
tion of different measures of behavioral loyalty. Therefore, behavioral loyalty
should be assessed by appropriate behavioral measures by considering spe-
cific information to be achieved. Caution should be exercised in using only
frequency or intensity of participation as measure of behavioral loyalty (e.g.,
Backman & Crompton, 1991a, 1991b; Backman & Veldkamp, 1995). The
results suggest that marketers can utilize consumers' involvement in devel-
oping communication strategies to have consumers become involved in short
term usage. On the other hand, the attitudinal loyalty concept should be
utilized for attracting long term membership of the program. This perspec-
tive is consistent with the argument that high involvement is a precondition
to loyalty and only measuring a consumer's involvement would not help in
predicting what the consumer will do in the future. Marketers need to know
how to influence and manipulate involvement profiles to achieve greater
loyalty. In addition, it should be noted that the relationship between involve-
ment and loyalty may be more complex than originally supposed. Involve-
ment with a particular program can be high while attitudinal loyalty to the
program is low. In contrast, involvement with a program can be low when
attitudinal loyalty to the program is high. It is also possible that the relative
importance of the subdimensions in involvement and attitudinal loyalty vary
across programs or activities.

        The author recognizes that a summative index would not explain the
contribution of each dimension of involvement and attitudinal loyalty con-
structs. However, in the research question composite scores were used to
mainly identify the contribution of involvement and attitudinal loyalty to the
prediction of different measures of behavioral loyalty. Also, in the hierarchi-
cal multiple regression analyses, a large proportion of the variance was ex-
plained by factors not considered in this research. The regression model
tested did not represent a "good" model in terms of its predictive power and
its fit to the data in this research. It should be noted that the F test was
significant ($p < .01$), indicating that the selected variables were significant
contributors in predicting behavioral loyalty dimensions.

        Other variables need to be incorporated in explaining the variance in
behavioral loyalty dimensions in future research. The potentially important

variables may include constraints (Kay & Jackson, 1991), self-efficacy (Garcia & King, 1991), fitness (Cato & Kunstler, 1988), service quality (Backman & Veldkamp, 1995), customer satisfaction (Selin, 1987), and other marketing variables such as price sensitivity (Backman & Crompton, 1991a, 1991b). Future studies may benefit by taking the participants' other socio-demographic variables (e.g., marital status, the number of dependents, and income) into consideration. The relationship between loyalty and involvement dimensions and these suggested variables would be a fruitful line of research.

Despite some potentially important implications of this study, there are some limitations. First, similar to other constructs in leisure behavior and marketing research, loyalty and involvement are complex constructs. Research efforts should be made to measure the dimensions of involvement and attitudinal loyalty constructs more reliably and validly in order to more accurately explain participants' behaviors. Second, participants' loyalty to an adult fitness program is not an accurate measure of their loyalty to the respective organization. For instance, a participant may not be loyal to an organization, although he/she is loyal to the program itself provided by the organization. Third, because of the correlational nature of this study, the presumed causal role of these variables remains untested. Fourth, respondents were atypical. The composition of the chosen samples limit generalizability of this study to other populations because half of the respondents were students. Fifth, the cross-sectional design of the present study precludes examination of changes in participants' program loyalty. Future research will benefit from the use of longitudinal designs with a larger sample.

In sum, findings of this research provides information for the researchers and managers to better examine and manage the experiences of their participants. Segmenting the adult fitness market using involvement profiles, attitudinal loyalty profiles, and behavioral loyalty profiles may provide a unique market analysis on which to base marketing strategies. However, the measurement of involvement and loyalty is still in the exploratory stages and is in need of continued conceptual development and refinement within leisure and sport settings.

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