Exploring the Relationship between Perceptions of Quality in Basic Instruction Programs and Repeat Participation

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Abstract

Current information indicates colleges and universities are experiencing decreased enrollments in basic instruction programs for physical activity. One factor responsible for this phenomenon is many universities' decision to eliminate required participation in physical education courses in order to graduate with a college degree. Another factor may be the potential for the students' perceptions of the quality of the program to affect participant retention. At a large Midwestern university, a sample of 300 students enrolled in a basic instruction program for physical activity was surveyed to determine perceptions of program quality and to determine whether different student segments responded differently to various aspects of the service experience. Findings from this study indicate perceived quality is a strong predictor of satisfaction and that satisfied students are likely to return to the program for additional courses. Course content was the most important predictor of satisfaction followed by instructor quality. Quality perceptions differed according to gender and motive for taking the course. Male students were more critical of the course and instructor. Female students were easier to please when it came to course content and the instructor, but more critical of the facility. Students indicating they were taking the course for each of the three motives—skill acquisition, health improvement, and social opportunities—rated one or more of the targets of quality higher than those students who were less motivated to take the course for any of the three aforementioned reasons.

In order to meet the changing needs of students, basic instruction programs (BIPs) at American colleges and universities have evolved to cover fitness activities, lifetime sports, and outdoor exploratory activities (Lumpkin & Jenkins, 1993). However, current research into BIPs across American college campuses suggests an overall enrollment decline upon elimination of physical education requirements for graduation. Whereas nearly 90 percent of institutions required some form of physical education in the 1960s, this number had dropped to 63% in 1998 as many institutions have chosen to eliminate requirements as part of reductions in overall general education requirements (Hensley, 2000). This trend is troubling considering the role BIP courses have in promoting healthy lifestyles through physical activity (Leenders, Sherman, & Ward, 2003; Mondello, Fleming, & Focht, 2000; Sparling, 2003).

In light of declining enrollments, there is a need to understand methods to increase participation in these programs (Sparling, 2003). Typically, campuses have allowed these physical activity programs to promote themselves by depending on word of mouth advertising to arouse student interest. At most, programs will distribute brochures, hang up posters, and place advertisements in student publications to improve the

image of the activity program (Evaul & Hilsendager, 1993). These activities may or may not be effective in attracting new students to increase enrollment, but much less is known about how to increase enrollments by retaining existing students and increasing the frequency in which they take courses.

Therefore, the overall purpose of this study is to determine how students' perceptions of the quality of basic instruction programs influence repeat participation. Specifically, this study seeks to understand how students perceive the quality of various aspects in basic instruction programs, and how those perceptions of quality influence overall satisfaction and behavioral intentions. In other words, do students' perceptions of the quality of the course predict whether students will take additional courses and refer others to take courses? Further, this study seeks to determine how different student segments evaluate quality in BIPs. Considering universities feature diverse populations with students who choose to take classes for many different reasons, it is reasonable to assume various groups of students may evaluate quality differently. This type of assessment should benefit the ability of the university to provide better activity options, assist in recognizing the needs and wants of the student body, and identify whether or not BIPs are serving different segments of students taking these classes.

Targets of Quality

One possible way to evaluate students' perceptions of quality in BIPs is through a framework presented by Chelladurai and Chang (2000), who integrate services literature with the unique aspects of sport and physical activity. They posit customers evaluate four targets of quality in sport services: the core service, the context, client-employee interaction, and inter-client interaction. The core service relates directly to the course content and the delivery of the course within BIPs. A way to frame the idea of the core service is to identify it as providing definable excellence of instruction in an enjoyable atmosphere as a priority of the service (Mondello et al., 2000). The context integrates the facility, equipment, location, and accessibility where the service (i.e., the class) is provided. In the context of this study, client-employee interactions refer to the relationship between the student and the instructor. Inter-client interactions refer to interactions with other students and are particularly relevant to this study in that other students taking the course may play a role in either enhancing or detracting from the student's experience.

Positive evaluations of quality have been found to predict customer satisfaction in recreational settings (Howat, Murray, & Crilley, 1999; Lentell, 2000; Murray & Howat, 2002; Triado, Aparicio, & Rimbau, 1999) and in spectator sport contexts (Greenwell, Fink, & Pastore, 2002; Theodorakis, Dambitsis, Laios, & Koustelios, 2001), but this relationship has received much less attention in settings such as BIPs. This gap is troubling as customer satisfaction has been found to influence customers' repeat intentions (Brady & Robertson, 2001; Cronin, Brady, & Hult, 2000; Murray & Howatt, 2002). Repeat intentions directly benefit BIPs by increasing enrollment through students taking multiple courses over their college careers. Repeat intentions also benefit BIPs as it is easier to retain existing customers than it is to recruit new ones (Reichheld, 1994). Further, satisfied customers are more willing to refer other customers (Heskett, Sasser, & Schlesinger, 1997; Howat et al., 1999) which provides a source of free advertising as positive word-of-mouth drives others to utilize the service. This source is often the best advertising as peers tend to be a trustworthy source and their referrals are more credible than communications from administrators.

Student Segments

While some students are required to take BIP courses, other students may be motivated to enroll in a course for health and fitness related reasons, to learn or practice a sport skill, or to take

advantage of social opportunities offered in an activity course (Armstrong, O'Bryant, & Costa, 2002; Engstrom, 1999; Leenders et al., 2003; Soudan & Everett, 1981; Yoh, 2001). Further, the literature on BIPs has revealed men and women take classes for different reasons. Armstrong et al. (2002) and Savage (1998) found that males' primary motives include obtaining regular exercise, competition, achieving a good grade, and obtaining lifelong activity skills. For female students, primary motives ranged from maintaining a desirable weight or body composition, having fun, and developing social opportunities.

Method

The sample consisted of students participating in activity courses selected from the physical activity program offered at a large Midwestern public university. BIP courses at this university are designed to promote physical activity and lifetime fitness and wellness skills, to establish peer relationships, and to aid in stress management. Over 1,500 students are enrolled each semester in over 60 sections covering 36 different activities in three general areas: individual fitness training, individual sports or activities, and team sports.

Using a cluster sampling method, students in 19 of the 63 courses offered at the institution were selected to participate in the study. Instructors in each of the 19 courses administered and collected the questionnaire on the last day of student participation in the activity course. The questionnaire was administered to willing participants who had been informed of their right to decline participation. Students completed 310 questionnaires. Ten of the returned surveys were deemed unusable, resulting in a final sample of 300.

Instrument

The questionnaire included 35 questions assessing students' perceptions of four targets of quality and their motives for taking the course. Since instructor quality and facility quality in basic instruction programs and recreation programs share many similarities, items to measure perceptions of the quality of the instructors and facility were derived from Howat et al. (1999) and Triado et al. (1999), who studied quality in recreation centers. Given the core service (course content) is significantly different than that of the recreational sport segment, seven new items were developed to address the uniqueness of the core service in Basic Instruction Programs. Similarly, few studies address inter-client interactions; therefore, four new items were developed. These items were worded to address how other students either added or detracted from their participation or learning experience. Students answered questions using a 7-point Likert-type scale anchored by "Strongly Disagree" and "Strongly Agree". Existing scales were used to measure both customer satisfaction (Madrigal, 1995) and behavioral intentions (Cronin et al., 2000). To identify motives for taking courses items were selected from Soudan and Everett's list of objectives (1981), Quarterman, Harris, and Chew's (1996) values of basic physical education, and Armstrong et al.'s (2002) motives scale. Students answered questions using a 7-point Likert-type scale anchored by "Strongly Disagree" and "Strongly Agree". The instrument exhibited construct validity as overall indices of absolute and comparative fit indicated an acceptable fit of the data to the model (RMSEA = .10; NFI = .90; NNFI = .91; CFI = .92) based on the recommendations provided by Kelloway (1998). Further, the questionnaire covered demographic information pertaining to age, gender, ethnicity, and previous experience taking BIP courses.

A field test was administered to a sample of students in one course to identify and correct any misunderstandings or ambiguities. To address the reliability of the measures, a pilot study was conducted with 56 students in three BIP courses. In the pilot study, each variable was found to be reliable with Cronbach's alpha coefficients ranging from .70 to .85.

Analysis

Hierarchical regression was utilized to determine whether students' perceptions of the four targets of quality predicted customer satisfaction and behavioral intentions. SPSS 13.0 MANOVA was used to analyze whether or not there were variances in the means of the four targets of quality attributable to the motive for taking the course. A second MANOVA was utilized to determine whether the means of the four targets of quality varied by gender.

Results

The sample included more female students (53.4%) than male students (46.6%). The majority of students were white (77.5%) with African-Americans comprising the next largest group (14.9%). The average age of students in the study was 21.9 years with a range of 18 to 68. A third of the students (34.7%) were taking their first activity course. Overall, subjects in this study gave the highest rating to the quality of the instructors (6.46 ± 0.84) followed by course content (6.25 ± 0.75), facilities (5.98 ± 1.16), and inter-client interaction (5.61 ± 1.55). Subjects in the study were satisfied (6.31 ± 0.95) with their experience and their behavioral intentions towards taking another course (5.93 ± 0.95) were high.

The first purpose of the study concerned the relationship between students' perceptions of the four targets of quality and customer satisfaction and behavioral intentions. Students' perceptions of the four targets of quality accounted for 52.1% of the variance in customer satisfaction (R^2 = .527, adjusted R^2 =.521, F (4,295) = 82.218, p < .001). In terms of the individual targets of quality, course content (p < .001) and the instructor (p = .014), each significantly influenced customer satisfaction. Neither the quality of the facility (p = .095) nor the inter-client interactions predicted customer satisfaction (p = .538). Customer satisfaction and students' perceptions of the four targets of quality accounted for 36.8% of the variance in behavioral intentions (R^2 = .379, adjusted R^2 =.368, F (5,292) = 34.260, p < .001). Results of both regressions are presented in Table 1. In sum, the results from these two equations suggest perceptions of quality service leads to satisfied customers, and satisfied customers are more likely to take additional classes and refer others to take classes.

MANOVA was utilized to address whether students' reasons for taking the course influenced how they assessed the four targets of quality. Students taking the class to learn skills (p < .001) had higher evaluations of both the instructor and their inter-client interactions (p = .014). Students taking the class to improve their health had higher evaluations of the course content (p < .001) and their inter-client interactions (p = .029). Students who took the course for social reasons had higher evaluations of the course content (p = .007), the instructor (p = .016) and the facility (p < .001). MANOVA was also utilized to address whether the student's gender influenced how he or she assessed the four targets of quality. Male students were more critical of the course (p = .032), instructor (p = .016), and inter-client interactions (p = .027), while female students were more critical of the facility (p = .040). Means and standard deviations are presented in Table 2.

Discussion and Implications

The premise for this study was that BIP offerings at colleges and universities have an unclear future unless administrators find ways to promote higher enrollments. The findings from this study suggest that administrators willing to meet students' expectations regarding course content and the instructors will see results in the form of increased satisfaction, positive word-of-mouth, and intentions to return. Specifically, findings imply students evaluate multiple targets of quality and those evaluations influence their satisfaction with the BIP course. Moreover, satisfied students were more likely to take additional courses and refer others. Further, results of this study indicate that not all students evaluate quality equally.

Table 1

Regression Analyses of Customer Satisfaction and Behavioral Intentions

Variable	R^2	*B*	*SE B*	β
Satisfaction				
Course content	0.527	-0.747	0.075	-0.589**
Instructor		-0.156	0.063	-0.137**
Facility		-0.058	0.035	-0.071
Inter-client		-0.016	0.026	-0.026
Behavioral intentions	0.354			
Satisfaction		-0.614	0.085	-0.486**
Course content		-0.336	0.125	-0.210*
Instructor		-0.007	0.093	-0.005
Facility		-0.041	0.051	-0.040
Inter-client		-0.077	0.038	-0.100

* $p < 0.05$
** $p < 0.01$

Table 2

Cell Means of Targets of Quality Based on Motives and Gender

	Course		Instructor		Facility		Inter-Client	
Independent Variable	M	SD	M	SD	M	SD	M	SD
Skill Motive								
High	6.70	0.39	6.73	0.66	6.29	1.08	6.05	1.59
Low	5.85	0.76	6.22	0.90	5.72	1.17	5.74	1.50
Health Motive								
High	6.58	0.49	6.68	0.66	6.22	1.13	6.22	1.42
Low	5.95	0.82	6.25	0.93	5.76	1.14	5.58	1.59
Social Motive								
High	6.56	0.52	6.71	0.50	6.35	0.94	6.03	1.56
Low	5.94	0.81	6.20	1.01	5.61	1.24	5.74	1.53
Gender								
Male	6.15	0.84	6.33	0.94	6.13	1.01	5.67	1.72
Female	6.34	0.65	6.56	0.73	5.85	1.27	6.07	1.36

Results of this study imply students who perceived high quality in their BIP course will be satisfied with their experience taking the course as students' perceptions of the four targets of quality predicted 52.7% of the variance in customer satisfaction. More importantly, results of this study suggest satisfied students are more likely to intend to return and recommend others.

Practically, this finding stresses the idea that quality service is a key marketing tool for BIP administrators. Administrators who are able to provide quality programs should see results in the form of students taking additional courses and new students taking courses based on referrals from their peers.

In terms of the individual targets of quality, the most important predictor, as expected, was course content. This finding implies courses designed to maximize participation and learning have the greatest impact on whether or not the student is satisfied. Therefore, administrators need to work diligently to make sure the course content meets the needs of the students in order to satisfy the students taking courses. Continued review of course evaluations and active consideration of student requests for courses and course content should provide administrators with the means to more proactively tailor these courses.

To a lesser extent, the instructor directly affected whether or not students were satisfied with their experience. In terms of instructors, results revealed qualified, knowledgeable, and responsive instructors positively influenced students' satisfaction. This finding provides a challenge for numerous universities as many rely on graduate assistants or part-time instructors to teach courses. Mondello et al. (2000) addressed this challenge, noting programs hiring graduate teaching assistants to cover the requests and needs of the student population need to focus on finding qualified graduate students who can excel in teaching, as unskilled teachers may diminish the value of the product being delivered. They suggest that once good instructors have been hired, student evaluations and feedback should be utilized to improve their teaching methods and to provide a model for future instructors.

Students' perceptions of facility quality were not significantly related to students' overall satisfaction. This result is contrary to many studies of spectator sports (e.g. Greenwell, et al., 2002) and recreational sports (Lentell, 2000; Triado, et al., 1999) where the facility significantly predicted customer satisfaction. As opposed to spectator sport where the facility is part of the entertainment, and recreation centers where the facility is the key to the delivery of the service, students in this study tended to focus on other elements of the experience rather than the facility. This finding is intriguing as many universities have outdated and/or sub-standard facilities for their BIP courses, however, the lack of good facilities does not detract from the student's experience. One reason for this might be that the student already recognizes the quality of the facility going into the class due to prior contact with the institution's recreational facilities from participation in other activity classes or other intramural offerings; therefore, they are not negatively affected by any perceived lack of quality. Another potential reason why the facility was not a significant factor is the possibility of perceived comparison to other facilities the student has used at a different institution (i.e., his or her high school gymnasium or local recreation center).

Similarly, students' perceptions of inter-client interactions was not significantly related to their overall satisfaction. This finding seems to indicate, similar to the findings regarding the facility, students' prior experience with others may lessen the effect of these interactions. Specifically, students taking BIP classes are most likely to have experience interacting with other students in other classes. Therefore, they know what to expect from other students in the class, and others' behavior is not likely to deviate from their expectations.

The next part of the study addressed whether students evaluated quality differently depending on their motive for taking the course. Students indicating they were taking the course for each of the three motives—skill acquisition, health improvement, and social opportunitie—rated one or more of the targets of quality higher than those students who were less motivated to take the course for any of the three aforementioned reasons. On one hand, this result implies students motivated by skill acquisition, health improve-

ment, or social opportunities are more likely to perceive high quality service. On the other hand, these findings imply students who are not driven by one of the aforementioned motives to take the course may be more critical of the service they are receiving. Therefore, there may exist a segment of students motivated by other factors (competition, meeting major requirements, needing additional hours, getting a good grade, etc.) that may not be receiving service that meets their needs. Thus, activity programs should expand their focus beyond the three primary motives to identify and meet needs of students taking classes for other reasons.

Students' gender also played a role in the way they evaluated the quality of the program. Male students were more critical of the course and instructor. Female students were easier to please when it came to course content and the instructor, but more critical of the facility. Similar to the prior finding, this result indicates administrators cannot treat all students the same. Administrators must be able to understand how to serve students with different backgrounds, motives, needs, and interests for participation in physical activity classes, and be sensitive to the needs of different groups when designing their programs.

Limitations and future research

One of the limitations of this study is it only investigated the three primary motives for taking a physical activity course. However, the findings of this study indicate there is a segment of students taking courses for alternative reasons. Therefore, additional research should be conducted to explore additional motives, focusing on identifying the needs of these students and finding ways to improve service delivery to them.

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