

The Influence of Campus Recreation Beyond the Gym

Alexandra Henchy

Increasing student retention is an important issue on college campuses. Researchers have found that nonacademic aspects of campus such as campus recreation can positively influence students' lives (Belch, Gebel, & Maas, 2001; Lindsey & Sessoms, 2006). The purpose of this study was to examine some ways in which participation in campus recreation positively influenced students' lives. After receiving IRB approval, students were randomly selected to complete the campus recreation survey. The survey was based on the NIRSA/Student Voice Campus Recreation Impact Study survey. Of the students who answered the demographic questions, 45% were graduate/professional/continuing education students and 55% were undergraduate students; 43% were male, 56% were female, and < 1% transgender; and the majority of the sample was White (78%). The results showed that students reported a variety of benefits including health and social benefits from their participation in campus recreation facilities and programs.

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Increasing student retention is currently an important issue on college campuses across the United States (U.S.). College faculty, administrators, and researchers examine the classroom to seek ways to promote student success and retention; however, researchers have found that nonacademic aspects of campus, such as campus recreation can positively influence student success. Lindsey and Sessoms (2006) stated that "recreational sports has received increased attention on college campuses across the U.S., and issues of recruitment, retention, and student satisfaction have emerged as institutional priorities" (p. 30).

Astin's (1984) theory of involvement contended that participating in extracurricular activities contributes to the success of students. According to the theory, as the amount of student involvement in a university increases, the amount of student learning that takes place will also increase. Both campus recreation activities and intramural sports provide opportunities for students to be involved at a university. According to Astin (1993), student participation in intramural sports is related to students' overall satisfaction with college. Participation in intercollegiate athletics and intramural sports facilitates student-student interaction and these are forms of

The author is a doctoral candidate at the University of Kentucky in Educational Psychology and is with the Division of Student Affairs, University of Kentucky, Lexington, KY.

student involvement with the university. In addition, participation in intercollegiate athletics and intramural sports is related to students' satisfaction with campus life (Astin, 1993).

Tinto (1993) created a model of retention that emphasized the importance of nonacademic environment in student retention. Tinto (1993) proposed that colleges are made up of both academic and social systems. The social system of the college focuses on the daily life of students; it consists of the recurring interactions among students that take place primarily outside the formal academic areas of the college. Students' involvement with their peers both inside and outside the classroom is positively related to learning and persistence, as students are more likely to devote additional effort to learning when they function as active members of the college community. In addition, a lack of integration into the social system of the college may lead to low commitment to that social system and may increase the probability that students will decide to leave the college to pursue other activities (Tinto, 1975). There is a growing body of literature that indicates campus recreation programs play an important role in involving and integrating students in campus life (Artinger et al., 2006; Bryant, Banta, & Bradley, 1995)

Students' participation in extracurricular activities (e.g., campus recreation) often leads to friendships that continue beyond the initial formal social activities. Interactions among students in the college system are seen as crucial to the development of the social bonds that integrate the student within the social communities of the college (Tinto, 1993). Students who better integrate their social lives at an institution are more likely to remain at school (Tinto, 1975). Students' use of campus recreation facilities and programs can facilitate their integration into the social aspects of campus.

Dalgarn (2001) noted that campus recreation centers can play critical roles in creating a sense of community for students. In particular, Dalgarn noted that the Student Recreation Center "aids in the development of the whole person by providing opportunities to recreate, relax, relieve stress and renew perspective" (p. 68). Campus recreation facilities offer more than just a place to exercise; they create opportunities for students to enhance their social relationships with others. Campus recreation centers are community facilities that function as a place for people to meet friends and spend time by providing a variety of activities that attract students, faculty and staff (Dalgarn, 2001).

Artinger et al. (2006) examined the social benefits of intramural sports in five different areas: personal social benefits (e.g., improving self-confidence), cultural social benefits (e.g., increasing understanding and tolerance of different cultures), social group bonding (e.g., decreasing social alienation), university integration (e.g., improving students' sense of belonging at the university), and reliable alliance benefits (e.g., increasing trust in peers). The results of the study conducted by Artinger et al. (2006) showed that students gained the most in the areas of personal social benefits and social group bonding. However, the results of a correlation matrix of the theoretically separate five subcategories of social benefits showed all five areas as significantly related; thus, the theoretical subcomponents may not measure different areas.

Other benefits of campus recreation have also been examined. Bryant et al. (1995) designed a survey to assess student involvement and satisfaction with campus recreation programs and facilities as well as their relationship to both

recruitment and retention. The results showed that 95% of students engaged in some form of recreational activity several times a week. Students reported a variety of benefits from participating in campus recreation programs including feelings of physical well-being, stress reduction, respect for others, friendships, and self-confidence.

Researchers have also examined the influence of campus recreation activities on student recruitment and retention. Bryant et al. (1995) reported 30% of students responded that campus recreation programs and facilities were important factors in their decision to attend and continue to attend their university. In a study conducted by Lindsey and Sessoms (2006), 31% of students reported that the availability of recreational sports was important or very important in deciding to attend the college, and 37% responded that recreational sports was important or very important in deciding to continue at the college. In addition, Belch et al. (2001) designed a study to examine the persistence at the university of first-time freshman. The results showed that persistence rates for users of the Student Recreation Complex (SRC) for both one semester (92%) and one year (71%) were higher than students who did not use the SRC (86% and 64% respectively).

Purpose

The purpose of this study was to examine some ways in which campus recreation facilities and programs positively influences students' lives. Specifically, the study was designed to examine the influence of campus recreation on recruitment and retention as well as the social and health benefits for students of campus recreation activity participation.

Methods

Instrumentation

The campus recreation survey was based upon the National Intramural Recreational Sports Association/Student Voice Campus Recreation Impact Study survey. The survey included questions that addressed a variety of areas such as recruitment, retention, satisfaction, involvement, and benefits students have received from participating in campus recreation facilities and programs. The survey consisted of both multiple-choice items and open-ended items where students gave written feedback about the campus recreation facilities and programs. The response scales varied depending upon the question; for example, some questions asked students to rate their level of agreement with a statement (*strongly agree, agree, disagree, or strongly disagree*) and other questions asked students to rate their level of satisfaction (*very satisfied, satisfied, dissatisfied, or very dissatisfied*) with a campus recreation facility or program.

The entire survey included 109 items and took students approximately 10 to 20 minutes to complete. When completing the survey online, students were able to stop taking the survey, save it and continue later. The survey incorporated an initial routing question that queried whether the respondent had ever used the campus recreation facilities or programs; if they had never used the facilities or programs,

the student completed a shortened version of the survey (23 items) that omitted questions that involved rating campus recreation facilities and programs.

Participants

Before administering the surveys, approval was obtained from the university's Institutional Review Board (IRB). After receiving IRB approval, 2,500 students at a southeastern university were randomly selected to complete the campus recreation survey. The students were sent an e-mail which included a link to the survey, and were informed that participation was voluntary and confidential. The students were also apprised that the purpose of the survey was to obtain students' opinions about the campus recreation programs and services for future improvement. In addition to the original e-mail, students were sent up to three reminder e-mails with a link to the survey if they had not yet taken the survey.

Although 316 students began the survey, only 237 students completed the survey. A cross-tabulation was run to determine whether students who completed the survey included both users and nonusers of the campus recreation facilities and programs. The results of the cross-tabulation showed that 74% of students who began the survey had previously used the campus recreation facilities or programs completed the survey, and 84% of students who began the survey had never used the campus recreation facilities and programs completed the survey.

Of the students who answered the demographic questions, 45% were graduate/ professional/continuing education students and 55% were undergraduate students (13% freshmen, 12% sophomores, 17% juniors, 13% seniors). In the sample, 43% of students were male, 56% were female and < 1% were transgender. The majority of the sample was White (78%); however, the sample also included < 1% Native American, 10% Asian/Pacific Islander, 3% Black, < 1% Latino, 2% multiracial, and 2% other; 3% of students preferred not to report their race or ethnicity. The responding students ranged in age from 18 to 66. Overall, the demographics of the students who completed the survey were comparable to the population at the institution where the survey was given, but the student population of the university had more undergraduate students when compared with those who completed the survey.

Analyses

A series of analyses were run between the question "have you ever used campus recreation facilities" and various student demographic characteristics to examine differences between certain demographic groups. In addition, some of the benefits from participating in campus recreation facilities and programs were also examined. The statistical program SPSS version 18 was used for the statistical analyses.

Two statistical tests were used to examine the data: chi-square and Cramer's V. The chi-square test is used with nominal data to determine whether two variables are independent or related (Pagano, 2004). Cramer's V is an index of association that indicates whether there is a relationship between categorical variables (Warner, 2008). When examining statistical significance, the data were analyzed using an alpha level of .05.

Results

Facility Users

A correlation was used to investigate the relationship between the use of campus recreation and students' class status (Cramer's $V = 2.22, p < .05$). This relationship is statistically significant, but there is only a small relationship between these two variables. A chi-square analysis was run to further investigate the relationship between the use of campus recreation and students' class status. The undergraduate students (freshmen, sophomores, juniors, and seniors) were compared with the graduate/professional/continuing education students [$\chi^2(1) = 7.26, p < .01$]. This analysis indicated there were statistically significant differences between undergraduate and graduate/professional/continuing education students. Graduate/professional/continuing education students had the most students respond they had not used any of the campus recreation facilities or programs (31%), whereas 3% of freshmen, 26% of sophomores, 8% of juniors, and 15% of seniors responded they had not used any of the campus recreation facilities or programs.

The results of chi-square analysis showed there was not a statistically significant relationship between use of campus recreation facilities and students' gender [$\chi^2(1) = 3.64, p = .056$]. In this sample, female students (25%) were more likely to respond they never used any campus recreation facilities or programs when compared with male students (12%). Furthermore, chi-square analysis revealed a significant difference [$\chi^2(1) = 7.27, p < .01$] between students' living accommodations and use of the campus recreation facilities; 5% of on-campus students versus 25% of off-campus students reported they never used the campus recreation facilities.

Recruitment/Retention

The results showed that campus recreation facilities and programs influenced some students' decisions to attend and continue to attend the university. When deciding to attend the university, 28% of all survey participants responded that the recreational facilities and programs had a strong or moderate influence on their decision. In addition, when deciding to continue at the university, 31% of all survey participants responded that the recreational facilities and programs had a strong or moderate influence on their decision.

Benefits From Participating in Campus Recreation Facilities and Programs

The results of the survey showed that students perceived a variety of benefits derived from participating in campus recreation facilities and programs. The majority of all survey participants (65%) responded that they currently participated in some type of physical extracurricular activities, and 85% of students reported they had previously used the campus recreation facilities and programs. The bulk of facility users responded they enjoyed participating in campus recreation facilities and programs (93% of students strongly agreed or agreed). The majority of facility users (96%) strongly agreed or agreed that campus recreation facilities and programs improved the quality of student life at the university.

Facility users reported a variety of benefits from participation in campus recreation facilities and programs. For example, 86% of students agreed or strongly agreed that participating in campus recreation activities and programs has expanded their interest in staying fit. The results of the survey showed that 57% of students felt their overall health had strongly or moderately improved from their participation in campus recreation activities. Furthermore, 59% of students felt their fitness level strongly or moderately improved from participating in campus recreation activities. The results also showed that 51% of students felt their feelings of well-being had strongly or moderately improved from participating in campus recreation activities. Finally, 48% of students felt their stress management has strongly or moderately improved from participating in campus recreation activities.

Social Benefits of Campus Recreation

Facility users also reported a variety of social benefits from participation in campus recreation facilities and programs. The results showed 81% of students agreed that participating in recreation activities has helped them to feel more at home at the university. Furthermore, when students were asked how they most often used the campus recreation facilities, 48% of students used campus recreation facilities alone, 38% of students used campus recreation facilities with a partner, and 14% of students used campus recreation facilities with two or more people. Thirty-four percent of students felt their sense of belonging/association strongly or moderately improved from participating in campus recreation activities. In addition, 33% of students felt their opportunity to develop friendships had strongly or moderately improved from participating in campus recreation activities.

Factors Impeding Students' Use of Campus Recreation Facilities and Programs

All survey participants were asked to report factors that impeded their use of campus recreation facilities and programs. In the open response question asking students what changes could be made that would increase their likelihood of using the campus recreation facilities, parking was the most common response (11 of 54 student comments). Whenever students were asked to rank a list of factors that impeded their use of campus recreation facilities, programs or services (with one being the factor that impeded their use the most), 86% of students ranked parking as one of the top three factors, with 42% of students ranking it as the number one factor.

If students selected "other" when asked what factors impeded their use of campus recreation facilities, they were asked to specify which factors impeded their use of the facilities. The most frequent response that students living on- and off-campus reported was that the campus recreation facilities were not conveniently located (10 of 26 student comments). On an individual basis, students listed a variety of factors that impeded their use of campus recreation facilities such as having a busy schedule, lacking the motivation to work out or using other facilities.

Discussion

This study was designed to examine the influence of campus recreation programs and facilities on a variety of student outcomes. The results of the survey demonstrated that campus recreation facilities can positively influence students' decision to attend and continue to attend the university. The positive influence of campus recreation on student recruitment and retention has also been demonstrated in prior research (e.g., Bryant et al., 1995). In addition, participating in campus recreation facilities and programs positively influenced a variety of areas of students' lives, including their overall health, interest in staying fit, fitness level, well-being, and stress management. I contend that these results show that participating in campus recreation facilities and programs helps students to lead healthier lives.

Participating in campus recreation facilities and programs also had social benefits for facility users. I believe that this shows the influence of campus recreation beyond the initial participation in the programs or facilities. For example, students responded they felt their sense of belonging/association strongly or moderately improved from participating in campus recreation activities which supports Dalgarn's (2001) contention that campus recreation facilities can help build a sense of community for students. Taking part in campus recreation facilities and programs helped students to develop friendships. These results indicate that being involved in campus recreation facilities and programs helps students to integrate within the social aspects of the university. Social integration contributes to student success as students who better integrate their social lives at a university are more likely to remain at the university (Tinto, 1975). Colleges may want to consider employing strategies to increase awareness among both students and staff of the relationship between social integration and student success (Huesman, Brown, Lee, Kellogg, & Radcliffe, 2009).

Factors that hindered students' use of the campus recreation facilities and programs included parking and the location of campus recreation facilities. However, parking facilities are not under the control of those who oversee the campus recreation facilities and programs, and it is difficult to make the location of the facilities easily accessible for students who live in a variety of locations both on- and off-campus. Additionally, Huesman et al. (2009) argued that institutional planners may want to consider developing student housing close to campus recreation facilities, as the closeness of student housing to campus recreation facilities influences whether students use campus recreation facilities. One limitation of this study was almost half of the students who completed the survey were graduate students, which is not representative of the college campus where the survey was distributed. The responses of graduate students and undergraduate students might differ, which may limit the generalizability of the results to other institutions. This study had a cross-sectional design and comparisons across class years do not necessarily reflect how an individual's usage of the facilities would change over time. Another limitation of the survey was that although 316 students began the survey, 79 students failed to fully complete the survey. When completing the survey online, students were able to stop taking the survey, save it and continue later, but many students never returned to complete the survey. In addition, although the survey was sent to 2,500 students, only 316 students began the survey, which is a response rate of 13%. Future researchers should consider additional ways to encourage students to complete the survey, such as offering students an incentive for completion.

This study provides additional support that campus recreation facilities and programs positively influence students' lives in a variety of ways. However, more studies are needed to further investigate the role of campus recreation facilities and programs in student success as well as test the replication value of these results.

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