FIRST-YEAR STUDENT PERCEPTION OF CAMPUS RECREATION PARTICIPATION

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FIRST-YEAR STUDENT PERCEPTION OF CAMPUS RECREATION PARTICIPATION

A Thesis

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Abstract

of

FIRST-YEAR STUDENT PERCEPTION OF CAMPUS RECREATION PARTICIPATION

by

Bradley Alan Trimble

Brief Literature Review

Researchers agree that first-year university students are the campus population at greatest risk for institutional departure. Since institutional effectiveness is primarily tied to retaining and graduating students, administrators are constantly under pressure to maximize the number of students who persist to graduation. Additionally, it is essential that administrators identify programs that enhance student satisfaction and academic persistence.

Statement of Problem

The purpose of this study was to analyze perceptions related to access, satisfaction, and academic persistence from first-year students actively engaged in Campus Recreation (CR) programming. Areas of interest focused on institutional student services, CR service areas, and facilities as they related to student satisfaction and academic persistence. This information can be used by Campus Recreation Administrators (CRA) to help justify funding for CR programming and facilities in an era plagued by diminished budgets and elevated stakeholder scrutiny.
Methodology

Research data was collected by utilizing the Quality and Importance of Recreational Services (QIRS) developed by the National Intramural-Recreational Sports Association (NIRSA). Only first-year students actively engaged in CR programming at a large, commuter-based university were asked to participate in the study.

Conclusions and Recommendations

The research presented in this study indicated the importance of CR within higher education. First-year students who participated in CR at the university overwhelmingly reported high levels of institutional and academic satisfaction. Additionally, the entire department of CR received very high satisfaction ratings. This information must be disseminated to upper-level management and decision-makers at the university to demonstrate the importance of CR in assisting with retention of at-risk student groups on campus.

________________________________________, Committee Chair
Geni Cowan, Ph.D.

________________________________________
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DEDICATION

This thesis is dedicated to my beautiful wife, Allison. Allison’s love, support, and motivating words helped me push through this thesis and all the course work to complete my masters. Without her, I know that this thesis would not be a reality. She is the most amazing woman I know and I feel so tremendously lucky to have her by my side.
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Chapter 1
INTRODUCTION

Background

Higher education institutions are constantly under pressure to maximize student satisfaction and retention (Wever, 2003). Student retention remains one of the primary challenges facing higher education (Braxton, Hirschy, & McClendon, 2004). Accreditation committees, politicians, and the communities served by universities expect overall student satisfaction and high graduation rates. Research demonstrates that Campus Recreation (CR) programming such as intramural sports, informal recreation, special events, and sport clubs play a vital role in student satisfaction, social integration, and academic persistence. One of the most consistent findings in recreational research is that student satisfaction is highly correlated to extracurricular involvement, specifically in intramural and recreational sports (National Intramural-Recreational Sports Association [NIRSA], 2004).

The purpose of this study was to evaluate first-year freshman student perceptions related to access to and involvement and satisfaction with CR participation at California State University, Sacramento. First-year freshman students were selected for this survey because retention among this group is best predicted by perceptions of campus climate, access to student services, and overall satisfaction (Schreiner, 2009). The focus of this study was to examine CR perceptions of satisfaction and determine whether or not the
results correlated to academic persistence and satisfaction. First-year CR participants were surveyed while engaged in intramural sports, informal recreation, special events, and sport club activities. Student perception research conducted by Haines and Fortman (2008) and Wang and Shiveley (2009) indicated a direct correlation between academic persistence and active involvement in extracurricular activities such as CR.

Inadequate facilities affect campus perception and student participation in collegiate recreational sports programming (Gibson, 2004). Additionally, Gibson (2004) contended that CR facility space has been limited and neglected at many public higher education institutions due to budgetary constraints. Crumbling, inaccessible facilities have an adverse effect on student satisfaction, which ultimately affects academic persistence. Tinto (2000) agreed that students who feel disconnected from their universities are more likely to drop out than those who feel a connection. The measurement of first-year freshman perceptions related to recreational sports in the areas of access and satisfaction is vital to determine the positive or negative effects this programming has on campus-wide retention efforts.

Statement of the Problem

The objective of this study was to investigate student perceptions as they related to the importance of CR programming within higher education. Institutional support for CR must be actively maintained since CR budgets tend to be large when compared to other student support services (Wever, 2002). Unfortunately, public higher education
faces an era plagued with systematic budget reductions such that many student support programs have been downsized or eliminated. It has created an environment in which CRA must advocate for departmental longevity or become irrelevant and expendable.

The focus of the research related to students actively participating in intramural sports, informal recreation, special events, and sport clubs. Survey questions related to program and facility access, utilization, satisfaction, and academic persistence. The information can be used as a tool to help justify the importance of CR program development and facility expansion.

The general question this study answered was: Did a first-year student’s participation in CR contribute to collegiate satisfaction, academic persistence, and justification for CR programming. The general question included several related questions:

1. How important is CR programming and services in the lives of first-year students?

2. Why does student satisfaction with CR programming relate to academic and institutional satisfaction?

3. What is the relationship between CR participation and academic persistence?
Limitations

Research was conducted at the university selected due to the availability of rich research data. A potential limitation in this study is that only one large West Coast commuter campus was studied over a one-year period. Another possible limitation of this analysis is that it took place at a commuter-based, public land grant institution. Private universities with limited student populations or institutions with substantial resident populations could potentially yield dissimilar research results. Additionally, CR at the university is experiencing major changes and program expansion due to the construction of a new 153,000 square foot campus recreation center. Institutions with established modern recreation facilities might produce separate conclusions.

Definition of Terms

Campus Recreation (CR)
The collegiate department responsible for providing leisure programming and facility space to meet the recreational needs of the campus community. These programs and leisure services include intramural sports, fitness, informal recreation, outdoor activities, and sport clubs.

Campus Recreation Administrators (CRA)
Collegiate student services management personnel responsible for daily operation and supervision of the CR Department. Personnel are commonly referred to as
director, associate director, assistant director, and coordinator within the collegiate recreational services field.

Intramural Sports

Sport matches or contests between students that occur on a college campus and are managed by CR Staff.

Informal Recreation

Unstructured, voluntary use of CR facility space and programming by students at a collegiate institution.

National Intramural Recreational Sports Association (NIRSA)

This national non-profit professional association is dedicated to the advancement of recreation within higher education. The association provides continuing education and professional development for recreational sports administrators.

Sport Club

Student organization registered with the university and formed by individual students who share a common interest in a sport or recreational activity. These entities exist to promote and develop interest within a defined scope. Sport Clubs are categorized by their purpose for existing. Functions include Competitive Sport Clubs, Recreational Clubs, or Instructional Clubs.
Organization of the Thesis

This study is organized into five chapters, which include an introduction, review of related literature, methodology, data analysis, and conclusions and recommendations. Chapter 1 covers the budgetary problems present at public higher education institutions throughout America and explains how they can negatively impact CR. The basis of the study is explained and major research questions are introduced. Chapter 2 presents the review of related literature, which includes the importance of first-year student access to CR, satisfaction rates among CR participants, and relevant studies that examined the relationship between CR participation and academic persistence. Chapter 3 addresses the methodology for this study and provides a detailed explanation of the rationale behind the research design. Chapter 4 includes analysis of the survey data in order to answer the three major research questions of the study. Chapter 5 covers the conclusions reached in the study and offers recommendations for future research related to the topic.
Chapter 2

REVIEW OF RELATED LITERATURE

Introduction

The purpose of this study was to examine first-year student perceptions related to Campus Recreation (CR) participation and examine potential connections between student satisfaction and academic persistence. This chapter reviews the literature regarding collegiate student persistence and recreation. The topics include the importance of access to CR, student satisfaction, and academic persistence.

The Importance of CR

It is no secret that active involvement in sports and fitness is of vital importance to anyone seeking long lasting health and longevity. Reed (2007) and Hickerson and Beggs (2007) argued that college students are at risk for a variety of negative health behaviors and are in a position to begin to learn how to control their lifestyle. Unfortunately most are inactive and have not learned to develop healthy behaviors (Hickerson & Beggs, 2007; Reed, 2007).

Researchers agreed that approximately half of all university students demonstrate inadequate physical activity levels (Sabourin & Irwin, 2008). To help combat this epidemic and prevent students from developing unhealthy lifestyle habits, it is imperative they have access to modern recreation facilities and programming. Sabourin and Irwin
(2008) and Andrijasevic, Pausic, Bavcevic, and Ciliga (2005) agreed that physical activity has a positive effect on one’s well-being. Nguyen-Michel, Unger, Hamilton, and Spruijt-Metz (2005) attested that physical activity helps protect mental health by reducing stress levels. The authors pointed to a dramatic increase in both anxiety and depression amongst college students during the past few decades. Student populations who suffer from stress, anxiety, and depression are much less likely to persist and graduate than students lacking these ailments (Andersson, Johnsson, Berglund, & Öjehagen, 2009). Dropout from a university during the first year is typically preceded by feelings of isolation, stress, poor mental health, and/or substance abuse (Andersson et al., 2009).

Nguyen-Michel et al. (2006), Sabourin and Irwin (2008), and Sivan (2003) agree that recreational activities that promote physical activity effectively reduce stress levels, feelings of isolation, and anxiety. Therefore, facilities that promote physical activity are of the upmost importance to help retain first-year students. At the same time, research indicates that most colleges and universities have failed to renovate or expand physical education facilities (Gibson, 2004). The phenomenon is likely due to decreased enrollment in basic physical activity instructional programs (Crawford, Greenwell, & Andrew, 2007).

Unfortunately, physical education is no longer a priority at American higher education institutions since it is not required coursework at most universities (Crawford et al., 2007). Less demand for physical education coursework eventually leads to reduced infrastructure investment and facility access for students seeking physical activity.
Failure to provide modern, accessible facilities to promote physical activity can negatively affect a university’s ability to attract prospective students and retain them (Reisburg, 2001). As a result, CR is compelled to fill the accessibility void created by the reduced physical education instruction (Gibson, 2004). Kennedy (2007) noted changing student expectations and competition from other educational institutions additionally force universities to construct new accessible CR centers. Surveyed student populations at major universities throughout the United States demonstrated campuses that lack modern, accessible recreation amenities have a much more difficult time both recruiting and retaining students (Kennedy, 2007). In an attempt to help solve these recruitment and retention issues American colleges and universities have spent a total of $7.12 billion for new construction and renovation of recreational facilities since the year 2000 (NIRSA, 2004).

Universities that seek to bolster student recruitment, satisfaction, and academic persistence must take accessibility into consideration when erecting facilities (Tinto, 2000). CR facilities must be centrally accessible and located to promote utilization (NIRSA, 2004; Reed, 2007). Recreation centers built on campus peripheries or those constructed at substantial distance from residence halls and other communal areas fail to promote accessibility (Tinto, 2000). Additionally, Bonfiglio (2004) contended that institutions without modern, accessible recreation and fitness facilities are much more likely to have an unhealthy, less physically active student population. Institutions that fail to provide adequate, accessible facilities that support healthy lifestyle choices run a risk
of developing unhealthy and unsatisfied student populations who fail to persist (Bonfiglio, 2004; NIRSA, 2004; Tinto, 2000).

NIRSA (2004) argued that CRA must design recreation facilities to promote participation across all diverse student groups present at the university. Hale and Kivel (2004) said higher education administrators need to fight for equal opportunity, full access, and inclusion of all student groups. Male student groups might desire competitive intramural team sports such as flag football and basketball, while students with disabilities might need aquatic facilities and programming, which provide low impact forms of exercise. Facilities that only provide limited or traditional recreation opportunities such as competitive intramural sports could be discriminating against many of the diverse student groups present on campus. Li, Absher, Graefe, and Hsu (2008) agreed that cultural and national subgroups should be recognized when attempting to promote recreation utilization. Limited recreational options that fail to meet the needs of the entire campus community might create privilege for certain student groups and isolate others. Students who do not have any interests or needs served by CR are likely less interested in participating. Walker, Jackson, and Deng (2008) confirmed that recreation and leisure constraints vary dramatically between diverse ethnic and cultural groups. Failure to include diverse student groups in CR presents a problem since some student groups miss valuable opportunities to socialize with peers, alleviate stress, and develop healthy lifestyle habits. Students not served by CR could be less likely to persist and graduate from the university.
Responsibility requires listening to marginalized student groups while acknowledging majority privilege, resources, and access (Hale & Kirwan, 2004). Only then can administrators make vital changes that promote access to at-risk student groups on the periphery (Hale & Kirwan, 2004). Identification of all student groups present on campus should be the priority of CRA before any recreational program or facility expansion occurs. Cohen, Sehgal, Williamson, Marsh, Golinelli, and McKenzie (2009) conducted a study on recreational facility expansion and renovation. They examined policy and programming implications associated with the improvements. The authors concluded that improving recreational facilities can positively improve patron usage rates. However, improvements do not always increase utilization (Cohen et al., 2009). Factors unassociated with physical improvements, such as programming, staffing, fees, hours, marketing, outreach, and other human factors, have a dramatic effect on customer utilization (Cohen et al., 2009). Therefore, it is imperative that CRA understand the diverse student populations they serve. Failure to perform adequate student perception research and recognize student needs in advance could render costly recreation center expansion useless. Li et al. (2008) recommended research of multiple populations and backgrounds in addition to cross-sectional surveys and venues to adequately recognize potential users of recreational services. They argued that such research will result in a diverse, satisfied customer base who will return to use services rendered.

Hale and Kirwan (2004) contended that the growth rate of students of color is the primary reason why racial diversity must be effectively implemented in higher education.
Roberts, Outley, and Estes (2002) argued that there is a lack of diversity present in most recreation departments throughout the country. Roberts et al. (2002) contended that failure to recruit diverse staff eventually strips organizational innovation, competitive advantage, and the ability to satisfy customer needs. Enhanced recruitment, retention, and accountability standards must be implemented within the recreation field to create staff more representative of ethnically and culturally diverse student populations (Roberts et al., 2002). Therefore, CRA should seek to promote and recruit individuals of diverse racial, ethnic, sexual, and religious backgrounds to help fully comprehend the unique needs of all student groups present at the university.

Studies of organizational diversity have demonstrated that exposure to diverse colleagues helps managers make better decisions and cultivate fresh ideas by drawing upon larger pools of information (Allen & Montgomery, 2001). Li et al. (2008) and Roberts et al. (2002) argued that major organizational changes must take place in order to maximize recreational programming participation. Allen and Montgomery (2001) created a three-stage system to develop organizational diversity. The first stage is labeled “unfreezing,” which is essential to initiate a change in organizational diversity (Allen & Montgomery, 2001). Unfreezing is deemed to begin once managerial commitment, allotment of adequate resources, and or a major occurrence necessitating change occurs. For example, research data collected from CR participants that shows limited racial or sexual student representation should motivate CRA to unfreeze and search for solutions to include all student groups at the university.
The second stage Allen and Montgomery (2001) prescribed is “moving.” Moving is accomplished by the implementation of practices such as recruiting, outreach programs, co-op and internships, mentoring, career development initiatives, training, and educational programs. CRA might need to implement recruitment and outreach goals to staff the program with qualified candidates from backgrounds that match those of student groups present at the university but not currently participating in CR. Refreezing is the final process and begins having existing policies and procedures reviewed to ensure they support rather than conflict with the new culture of diversity (Allen & Montgomery, 2001). CRA should reflect on any changes made that seek to incorporate diverse student group utilization of CR and ensure that the new initiatives match existing policy and protocol. Failure to provide seamless integration of new diversity standards across all areas of the program could make critical changes in an area like recruitment useless if all departments are not on board. Recruitment initiatives mandated by upper level management but not respected or understood by the rest of the organization are likely to alienate diverse colleagues and make them at risk of departure (Roberts et al., 2002).

Once organizational priorities include commitment to diversity development, true understanding and effective outreach is ready to take root. Walker et al. (2008) said ethnic and cultural leisure constraints can be overcome if administrators make student participation a priority by offering diverse programming options.
CR Participation and Student Satisfaction

CRA committed to student participation and satisfaction and those who research and report connections between CR and institutional satisfaction among students are those most likely to maintain funding during periods of economic uncertainty. It is insufficient for a recreational service agency to demonstrate that it satisfies customers; it has to demonstrate that the services contribute to the community’s general welfare (Crompton, 2008). It is likely due to the substantial expenses associated with providing comprehensive access to recreation. Hall (2005) contended that CR programs are likely to be one of the most expensive student support programs. Schuh and Upcraft (2001) pointed to the need for research and assessment within campus recreational programs due to high levels of scrutiny directed toward their broad programs, large budgets, and investment costs. Unfortunately, there has been a lack of commitment from CRA to investigate student perceptions and publish connections between CR participation and institutional satisfaction (Wever, 2003). Failure to perform this research may result in diminished departmental resources, reduced program offerings, less infrastructure investment, and eventually unsatisfied students at risk of departing from the university.

To avoid unconstructive outcomes such as student departure, CRA should invest in effective marketing and outreach initiatives to promote student participation. In particular, at-risk, first-year students are a student population least likely to be aware of CR opportunities. CR departments with established, successful outreach programs have students who are aware of all program offerings and participate with greater frequency
Researchers (Crompton, 2008; Reed, 2007; Robinson & Gladden, 2003) agreed that marketing is a very valuable tool to increase student participation.

Establishing student recognition of CR has a particularly positive effect on participation rates among first-year student populations (NIRSA, 2004). Students new to college or those yet to establish peer-to-peer social support networks can be influenced to participate in CR programming if the department utilizes effective marketing and has establish brand equity (Robinson & Gladden, 2003). Simply stated, first-year students are less aware of recreational programming and facilities available on campus than upperclassmen (Reed, 2007). Reed (2007) also declared CR marketing of fundamental importance in order to ensure first-year student participation.

Crompton (2008) claimed most recreational agencies demonstrate inadequate and unsuccessful marketing tactics. To help combat the issue, he established the Benefits Evolution Pyramid (see Figure 1) that traces the evolution of recreation and leisure services marketing in America. According to Crompton, most recreation agencies and professionals are operating at the two lowest levels of the pyramid, which include the base, or “Activity/Custodial Focus,” and the second stage of “Promotion/Selling Focus.” Unfortunately, the two levels were firmly supplanted by the “User Benefits Focus” in the 1970s (Crompton, 2008). The “Activity/Custodial Focus” is the simple existence of recreational services without any outreach or marketing. The strategy is based on the assumption that users will seek out recreation if it is available. The “Promotion/Selling
Focus” is the subsequent era plagued by abundance of underutilized recreational offerings and administration’s attempt to promote and sell current offerings at any cost.

Figure 1 Crompton’s Benefits Evolution Pyramid

![Crompton’s Benefits Evolution Pyramid](image)

(Crompton, 2008, p. 182)

The major issue with these two base levels in the evolution of recreational marketing is they fail to focus on meeting the needs of the end user. The “User Benefits Focus” evolved in the 1950s and embraced three major principles.

1. *Open System Model* - Flexible organizational structure that allows the department to respond quickly to environmental demands.

2. *Voluntary Exchange* - The department produces services that deliver benefits for which consumers pay in the form of fees and taxes.
3. **Self-Interest Motivation** - Concept that maintains that if CR gives the consumer what they want (recreational opportunities), the consumer will give CR what it wants (participation and remuneration).

The fourth stage of progression in the Crompton’s Benefits Evolution Pyramid is the “Community Benefits Focus.” This stage rejects all three principles of the “User Benefits Focus” arguing they are inconsistent with the environment in which recreational departments operate. The fifth and pinnacle stage of the Benefits Evolution Pyramid is the “Repositioning Focus.” The stage is a strategy in which the recreational department orchestrates a shift in its strategic direction by utilizing a relevant subset of community benefits to sustain or acquire additional budget allotments (Crompton, 2008). CRA should operate at the pinnacle of the Benefits Evolution Pyramid in order for CR to remain a priority among university administrators. To maintain relevance of CR within higher education, CRA must identify paramount institutional community concerns and respond with recreational programming that addresses the issues. Crompton (2008) contended that positive stakeholder perception changes typically only occurs in the highest two tiers of the Benefits Evolution Pyramid. Once recreational services are perceived to hold societal merit, community awareness takes place and additional funding leads to satisfied community members and programming longevity (Robinson & Gladden, 2003).

The National Intramural-Recreational Sports Association (NIRSA) study on the impact of student involvement in CR programs and discovered key relationships between
student participation and academic and personal success factors (NIRSA, 2004). The study demonstrated that active student participation in CR activities correlated with higher overall college satisfaction and success. Among all students surveyed, CR programs and activities ranked higher than internships, cultural activities, part-time or full-time work, student clubs and organizations, shopping, entertainment, restaurant options in the community, chances to study abroad, community service opportunities, watching varsity sports, participating in varsity sports, and sororities/fraternities as determinants of college satisfaction and success (NIRSA, 2004). Additionally, NIRSA (2004) determined that research results did not vary among undergraduate versus graduate students or private versus public institutions.

Becker, Cooper, Atkins, and Martin (2009) and Hall (2005) argued that students who actively participate in CR are more active on campus, in better mental and physical health, and are satisfied with their collegiate experience. Since student satisfaction can be directly linked to CR participation, it is imperative that CRA assess first-year student perceptions related to CR participation. Rhodes and Nevill (2004) contended that on-campus student experiences either deeply satisfying or dissatisfying have the potential to impact morale, motivation, and persistence. Since first-year students are the campus population least likely to persist (Schreiner, 2009; Tinto, 2000), CRA must to determine whether these students are experiencing deep satisfaction or dissatisfaction while participating in CR programming. The study of this information can lead to identification
of valuable reasoning behind first-year student decisions to persist or exit the university (Rhodes & Nevill, 2004).

Hickerson and Beggs (2007) examined the impact of boredom on leisure of college students in relation to gender, level of education, and activity choice. Their research found that students with developed leisure skills were satisfied and active in their leisure choice and activity. Students with undeveloped leisure skills chose passive activities that lacked positive mental stimulation and psychological reward. The authors claimed the college years are an important leisure development period where lifetime leisure pursuits are built. Hickerson and Beggs (2007) concluded that CR programs play a critical role in student leisure skill development when they offer a wide range of quality leisure opportunities.

Student demand for modern recreational facilities has grown considerably, with 69% of high school seniors indicating they plan to use the university’s recreation or intramural program upon arrival at the school (Intercollegiate Athletes, 2000). In addition, contemporary student populations want access to diverse recreational programming opportunities outside the traditional arena of competitive sports such as intramural flag football, basketball, and softball (Tsai, 2005).

Universities that fail to provide students with access to modern, diverse recreational facilities run the risk of developing unhealthy, at-risk student populations (NIRSA, 2004). Crumbling, overused recreation facilities with outdated fitness equipment typically fail to motivate students to engage in physical activity (Gibson,
Additionally, light and nonusers of CR facilities are typically less satisfied with college life than heavy users (NIRSA, 2004). Students who report satisfaction are likely to continue their involvement with CR. It is important to note that satisfaction and service quality can be judged differently by diverse student populations. Li et al. (2008) studied cultural values within diverse groups to identify opinions of service quality related to recreation. The authors found that ethnic groups should not be assumed to be homogeneous in service quality perception. Therefore, CRA should constantly look for opportunities to improve student satisfaction levels across all student groups and help ensure as many students as possible become heavy CR users. In addition, continuous program evaluation by CRA may help ensure students remain satisfied with CR programming.

Analysis of first-year student perception research can serve multiple purposes. As mentioned earlier, student perception research will provide CRA with the valuable information they need to tailor programming to meet student needs, therefore, maximizing satisfaction and participation. In addition, documentation of student perception research that demonstrates student satisfaction associated with CR participation can help protect vital departmental funding. The politics of higher education require CRA to constantly prove departmental worth or face budget reductions (Wever, 2003). Therefore, failure to perform adequate first-year student CR perception research can lead to dissatisfied students and no documentation to prove departmental worth.
CR Participation and Academic Persistence

Since student persistence has become an increasingly serious problem for American universities, the institutions have adopted a range of response strategies. The most common response is for universities to assign student services professionals the responsibility of out-of-class retention program development (Barefoot, 2004). Literally, thousands of retention programs designed especially for first-year students have emerged in recent years, which include various clubs and organizations, residential programs, expanded campus orientations, convocations, community service, and events that build school spirit (Barefoot, 2004). Retention programs tend to be grounded in historic campus traditions, but are also enlightened by modern research related to correlation between student persistence and involvement, formation of peer relationships, and group affiliation (Astin, 1999).

According to Hall (2005), students who participate in CR are socially integrated and deeply connected to other student participants, faculty, and staff. The informal, social interaction opportunities CR participation presents should not be overlooked. Pascarella and Terenzini (2005) suggested out-of-class interaction between students and faculty members appears to consistently promote student persistence, educational aspirations, and degree completion, even when other factors are taken into account. In addition, student perception of faculty availability and interest may be enough to promote academic persistence (Pascarella & Terenzini, 2005). CR participation can offer an important informal medium where students, faculty, and staff are free to express their
true feelings. When students are outside the confines of formal, autocratic classroom settings, they may feel much more open to sharing true feelings and engaging in rich information exchange. Students can gain a unique sense of belonging at the university due to the socialization opportunities CR provides. Student involvement in CR activities appeared to assist in the development of positive self-concept and, thus, promote the integration process (Windschitl, 2008).

Wang and Shiveley (2009) agreed that universities need to invest more resources in attracting and recruiting students to participate in extracurricular activities to enhance their on-campus engagement. They claimed students heavily engaged in on-campus extracurricular activities have better academic performance than those who are not actively engaged. Astin’s (1999) theory of student involvement provided a solid theoretical foundation to explain the reasons for this phenomenon. According to this theory, learning outcomes required investment of both physical and psychological energy. The more engaged a student is with extracurricular activities such as CR, the more opportunities there were for learning to occur (Astin, 1999).

Haines and Fortman (2008) performed similar research by measuring out-of-classroom learning outcomes of CR participants to measure the impact of CR on student learning. Participants demonstrated tremendous amounts of quantifiable learning across a broad range of areas including, but not limited to, time management, leadership, critical thinking, appreciation of diversity, and social integration (Haines & Fortman, 2008). Information of this nature can be critical for CRA since again, it demonstrates valuable
learning outcomes directly associated with CR participation. The study can be used to help justify the existence of CR programs, facilities, and services (Haines & Fortman, 2008). Connecting CR participation with learning outcomes and academic persistence should please accreditation committees and university administrators alike.

Another study by Belch, Gebel, and Maas (2001) focused on academic persistence of CR users. The authors examined the relationship between first-year student participation at a university recreation center and academic persistence rates. The results revealed that first-year students who used the recreation center persisted at a higher rate than their peers who did not utilize the recreation center. Belch et al. (2001) found persistence rates for recreation center users for one semester (92%) and one year (71%) clearly outpaced that of their nonuser counterparts (86% and 64%, respectively). Additionally, recreation center users earned slightly higher GPAs and also earned more credit hours at the end of the first year (Belch et al., 2001).

The association of student participation in CR with learning outcomes and academic persistence is likely due to the social integration and peer-to-peer interactions that occur. CR programs, particularly intramural sports, provide a powerful channel for student interaction (NIRSA, 2004). This interaction may provide first-year students with the opportunity to informally develop support groups, find study partners, and seek advice from other students regarding the best classes or faculty (Windschitl, 2008). Faculty and staff are also a highly visible component of the membership of CR facilities, which may provide ample opportunity for informal interaction with students (Windschitl,
A recreational facility with diverse programmatic offerings based on student, faculty, and staff needs can serve as a dynamic community, and in so doing, can establish an expectation of engagement and belonging by students (Belch et al., 2001). Such an activity is symbolic of the individual student’s ability to connect to others in the environment and to the university community itself (Belch et al., 2001).

Hausmann, Ye, Schofield, and Woods (2009) argued that students who become integrated into the social and academic systems of the university develop a psychological sense of belonging to the university community, which is an important precursor to desirable outcomes such as increased commitment and persistence. They conducted a study to measure student perceptions related to campus assimilation and determined whether students’ sense of belonging affected academic persistence. Results demonstrated that students who felt integrated also felt institutional commitment and desire to persist (Hausmann et al., 2009).

Elkins, Braxton, and James (2000) took the above concept a step further and examined persistence rates among full-time, four-year university students between their first and second semesters. They attempted to identify how core factors affect student dropout decisions. In particular, the authors focused on the primary stage of a student’s college transition, labeled “separation.” A large sample of students was studied to determine the effects of outside support and student rejection of past attitudes and values on their decision to stay in school. Support from friends was found to be critical in supporting student persistence (Elkins et al., 2000).
Summary

This chapter examined the importance of CR in first-year student life, tactics for maximizing student participation and the significance of satisfaction in relation to academic persistence. CR can be a valuable tool in assisting first-year students to develop and maintain healthy lifestyles that assist stress management and coping with integration into college life. Participation in CR can offer first-year students critical opportunities to develop relationships and support groups among peers. First-year students with the greatest CR participation rates appear to be those who experience the most out-of-class learning outcomes and report the highest levels of institutional and CR satisfaction. CRA should monitor satisfaction rates among first-year student populations since connections exist between CR satisfaction, repeat CR participation, institutional commitment, and decisions to persist beyond the first-year.
Chapter 3

METHODOLOGY

Research Design

The methodology for this study was quantitative in design. This particular design was employed since it provided the researcher an ability to analyze questions related to the significance of CR among first-year higher education students. Quantitative research leads to a theory and helps explain why phenomena exist (Schuh & Upcraft, 2001). The research was designed with strong validity and reliability controls in mind. Longitudinal trend study was utilized since the survey population of first-year campus recreation participants was studied over the course of a full school year. This strategy was implemented since it helps determine whether response trends or patterns exist within the population (Cowan, 2004).

This quantitative, longitudinal study provided depth and insight into the research data. Qualitative analysis would not have provided the same level of acuity. The study was explanatory and thorough in order to link research topics. Quantitative response data can be condensed into themes, patterns, and trends, which can be reported (Schuh & Upcraft, 2001). As a result, data analysis indicated how CR contributed to issues of student satisfaction, academic persistence, and justification of programs and services.
Research Questions

The general question this study answered was: Did first-year student participation in CR contribute to collegiate satisfaction, academic persistence, and, therefore, justify CR programming. The general question included several related questions:

1. How important is CR programming and services in the lives of first-year students?
2. How is student satisfaction with CR programming connected to academic and institutional satisfaction?
3. What is the relationship between CR participation and academic persistence?

Setting of the Study

This survey was administered to first-year college students actively participating in CR programming at the university. The institution was a large, commuter-based, land grant, four-year university with a diverse student population of approximately 29,241. For the purpose of this study, first-year students only included those who had not previously attended a higher education institution. Transfer students were not considered first-year students for the purpose of this study. However, nontraditional students were encouraged to participate.
Population and Sample

The population for this study was 3,076 first-year students enrolled at the university during the fall 2009 semester. State budget reductions and economic adversity forced the university to eliminate all new enrollments during the spring 2010 semester, which limited the sample size. The sample was also limited to first-year students actively participating in CR programming on campus. One hundred twenty-five questionnaires (see Appendix A) were hand-delivered to first-year students actively engaged in CR programming. One hundred twenty-two were completed by the subjects and returned.

Design of the Study

The research was designed with strong validity and reliability controls in mind. The QIRS survey tool administered in the study was developed by NIRSA, a highly credible source recognized internationally amongst higher education CRA as the leading authority in the field. The QIRS was utilized due to NIRSA’s credibility and vast implementation of the survey tool by CR researchers. The QIRS has been employed by numerous researchers studying CR access, student satisfaction, recruitment, academic persistence, and retention. The QIRS is a tested and proven survey tool that allowed the researcher to ensure credibility before reporting survey results.
Instrumentation

The study is a narrative presentation of frequency counts from data collected through the Quality and Importance of Recreational Services (QIRS) survey developed by the National Intramural-Recreational Sports Association. The QIRS was utilized due to NIRSA’s credibility and vast implementation of the survey tool by CR researchers. The QIRS has been employed by numerous researchers studying CR access, student satisfaction, recruitment, academic persistence, and retention. The QIRS is a tested and proven survey tool that allowed the researcher to ensure credibility before reporting survey results. The survey was administered by the researcher and CR Attendants at the university from 2009 to 2010.

Data Collection

Data collection for this study was implemented by hand-delivery of the QIRS survey to students preparing to engage in CR programming or those who had just finished utilizing CR facilities. Cowan (2004) stated that it is the researcher’s responsibility to design a study that is practical and applicable to real life settings. As a result, the survey tool was hand-delivered to students actively participating in CR programming. Utilization of an online research tool would likely not have produced the number of responses necessary or ensured accuracy among the sample. Each participant was asked to sign a consent form (see Appendix B) that explained the survey and ensured anonymity and confidentiality.
Validity was controlled with utilization of both internal and external accuracy. External validity was ensured by the utilization of one measurement instrument and a random selection of subjects. Data collection was performed by the researcher and four CR Student Attendants of separate racial and ethnic backgrounds, ensuring no bias was present during sample selection.

Internal validity was solidified by controlling when students were delivered the survey. Psychological state of mind was also considered before selecting student participants. Students were provided with the opportunity to complete the survey before or after participating in CR programming or facilities. Students were selected based on their time availability and ability to focus on the survey tool. Consequently, students who lacked focus on the survey or those who appeared preoccupied prior to engaging in CR activities were asked to complete the survey subsequent to CR participation. Additionally, subjects who appeared hurried in their departure from CR facilities were not surveyed until circumstances were ideal for rich data collection. Students unable to complete the survey were repeatedly asked to participate until data was collected.

Students were ensured that all research data collected was strictly confidential and would not be disseminated to outside sources. The researcher did not provide any inducements in order to collect the research data from students.
Data Analysis Procedures

The procedure for analyzing data collected from the quantitative study was to examine survey questions as they pertained to the three central research questions. Appendix C contains the compiled responses from the sample population. Frequency counts were utilized for examination purposes. A descriptive approach was applied to the numerical analysis. The researcher examined the data to recognize and establish connections between first-year student participation in CR and perceptions related to satisfaction and academic persistence. Connections indicated to CRA and university administrators the role CR programming has in promoting institutional satisfaction and academic persistence among first-year student participants.

Summary

This chapter presented detailed background information related to the methodology of this study. The information presented in this chapter explained how the study measured, collected, and interpreted data as it related to collegiate satisfaction and academic persistence of first-year students at the university. The purpose for the methodology was to validate the importance of CR in the lives of first-year students and strengthen institutional support for CR programming.
Chapter 4

DATA ANALYSIS AND FINDINGS

Introduction

In this chapter, the researcher analyzed the data collected with the QIRS at the university. The information explained, in narrative form, how CR affected the first-year student population at the university. In particular, did first-year student participation in CR contribute to collegiate satisfaction, academic persistence, and justification for the importance CR programming? This information was expressed by investigating the following specific research questions:

1. How important is CR programming and services in the lives of first-year students?

2. How is student satisfaction with CR programming connected to academic and institutional satisfaction?

3. What is the relationship between CR participation and academic persistence?

Importance of Access to Campus Recreation

The majority of students surveyed felt access to CR was important in their decision to attend the university. However, more than half (56%) attested that access to CR was only “somewhat important” or “not important” in their decision to attend (see Appendix C). This data initially indicated that access to CR programming at the
university was only of marginal importance to prospective first-year students. Further analysis and cross tabulation of the data produced a different interpretation.

After first-year students enrolled at the university and became exposed to recreational programming and activities, the data proved CR held more than marginal importance to the sample population. The majority of first-year students surveyed (38.5%) had engaged in recreational pursuits on or off campus four to six times per week. The next prominent response (34.4%) was on to three times per week. Only 6% of respondents indicated they did not participate in recreational pursuits. It is significant since 93.4% of first-year student participants indicated that they engaged in recreational activities at least 1-10 times per week.

When the sample was questioned about how many times per week they desired to participate in active recreational pursuits, the majority (34.7%) indicated they wished to engage seven to nine times per week. The second most prevalent response (33.9%) indicated a desire to participate four to six times per week. While 59% of first-year students surveyed participated in recreation 4-10 times per week, 78.5% aspired to be involved in recreation 4-10 times per week. The gap between actual participation and desire for additional recreational activity revealed the importance of CR programming and activities in the lives of first-year students. CRA should be aware that students want more opportunities to participate in recreational pursuits and place value in CR activities. Additionally, it is important for CRA to communicate this unsatisfied desire for more
recreational activity to university administrators and stakeholders to secure funding for CR expansion.

More evidence demonstrated the importance of CR in the lives of first-year students when students were asked how important recreation and fitness would be after graduation. Almost all subjects surveyed (98%) felt recreation programming and activities would be an important part of their life after graduation. “Very important” was the predominant response provided by 42% of students. It clearly indicates that recreational services provided by CR are not just important to first-year students attending college, but also important to them after graduation.

Cross tabulation of the responses from the sample who indicated “somewhat important” and “not important” in reference to the availability of CR in their decision to attend the university with responses related to the importance of recreation after graduation led to additional evidence which again pointed to the importance of CR in the lives of first-year students (see Table 1).
Table 1

Decision to Attend and Importance of Recreation After Graduation

<table>
<thead>
<tr>
<th>How important will recreation, sports, and fitness be after you graduate from the university?</th>
<th>Was availability of recreational sports important in your decision to attend the university?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Very Important</strong></td>
<td>Somewhat Important</td>
</tr>
<tr>
<td></td>
<td>29.5%</td>
</tr>
<tr>
<td></td>
<td>(13)</td>
</tr>
<tr>
<td><strong>Important</strong></td>
<td>Somewhat Important</td>
</tr>
<tr>
<td></td>
<td>52.3%</td>
</tr>
<tr>
<td></td>
<td>(23)</td>
</tr>
<tr>
<td><strong>Somewhat Important</strong></td>
<td>Somewhat Important</td>
</tr>
<tr>
<td></td>
<td>18.2%</td>
</tr>
<tr>
<td></td>
<td>(8)</td>
</tr>
<tr>
<td><strong>Not Important</strong></td>
<td>Somewhat Important</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
</tr>
</tbody>
</table>

The majority of first-year students (71%) who did not place value in CR before attending the university and participating in the program felt recreation, sports, and fitness would be “important” or “very important” to them after graduation. This data suggests that CR participation had positive effects on leisure skill development and a desire for first-year students to become more physically active.

The importance of CR was tested again with additional cross tabulation of data of students’ desires to participate in CR with respondents who considered the availability of
CR to be “somewhat important” or “not important” in their decision to attend the university (see Table 2). The large majority (74%) indicated their desire to participate in active recreational pursuits four or more times per week. The result of this analysis is important since it demonstrates how important CR became for first-year student participants who had little or no interest in CR prior to enrollment at the institution.

Table 2

Decision to Attend and Desire to Participate in CR

<table>
<thead>
<tr>
<th>How many times per week would you like to participate in active recreational pursuits?</th>
<th>Was availability of recreational sports important in your decision to attend the university?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Somewhat Important</td>
</tr>
<tr>
<td>None</td>
<td>9.1%</td>
</tr>
<tr>
<td></td>
<td>(4)</td>
</tr>
<tr>
<td>1 – 3</td>
<td>18.2%</td>
</tr>
<tr>
<td></td>
<td>(8)</td>
</tr>
<tr>
<td>4 – 6</td>
<td>38.6%</td>
</tr>
<tr>
<td></td>
<td>(17)</td>
</tr>
<tr>
<td>7 – 9</td>
<td>34.1%</td>
</tr>
<tr>
<td></td>
<td>(15)</td>
</tr>
<tr>
<td>10+</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
</tr>
</tbody>
</table>
Satisfaction

Remarkably, 93% of first-year students reported satisfaction with CR programming and activities and none reported levels of dissatisfaction. In addition, 94% of students reporting satisfaction with CR also reported satisfaction with their academic experience at the university. It is important to note that none of the students who reported satisfaction with CR claimed dissatisfaction with their academic experience (see Table 3), clearly indicating a strong connection between CR satisfaction and academic satisfaction at the university.

Table 3

CR Satisfaction and Academic Satisfaction

<table>
<thead>
<tr>
<th>Rate your overall academic experience.</th>
<th>Rate your experiences participating in recreational programs and activities.</th>
<th>Response Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Satisfied</td>
<td>73.2%</td>
<td>37.4%</td>
</tr>
<tr>
<td></td>
<td>(30)</td>
<td>(40)</td>
</tr>
<tr>
<td>Satisfied</td>
<td>22.0%</td>
<td>57.0%</td>
</tr>
<tr>
<td></td>
<td>(9)</td>
<td>(61)</td>
</tr>
<tr>
<td>Neither Satisfied Nor Dissatisfied</td>
<td>4.9%</td>
<td>5.6%</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td>(6)</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(0)</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(0)</td>
</tr>
</tbody>
</table>
When data was compared between students reporting satisfaction with CR and the satisfaction ratings for other services and activities on campus, once again a connection existed (see Table 4). Eighty-eight percent of first-year students who reported satisfaction with CR also reported satisfaction with other services and activities at the university. It is also significant to note that of all students who reported satisfaction with CR, none claimed dissatisfaction with other services and activities on campus. It is significant because it creates a strong connection between CR satisfaction and overall institutional satisfaction for first-year students. CRA should present information of this nature to university administrators to help both justify the existence of CR and acquire considerable funding required for maintaining comprehensive recreational opportunities.
Table 4

CR Satisfaction and Satisfaction with Other Student Services

Rate your overall experience with other student services, programs, or activities.

Rate your experiences participating in recreational programs and activities.

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Response Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Satisfied</td>
<td>75.6%</td>
<td>15.2%</td>
<td>38.3%</td>
</tr>
<tr>
<td></td>
<td>(31)</td>
<td>(10)</td>
<td>(41)</td>
</tr>
<tr>
<td>Satisfied</td>
<td>22.0%</td>
<td>66.7%</td>
<td>49.5%</td>
</tr>
<tr>
<td></td>
<td>(9)</td>
<td>(44)</td>
<td>(53)</td>
</tr>
<tr>
<td>Neither Satisfied Nor Dissatisfied</td>
<td>2.4%</td>
<td>18.2%</td>
<td>12.1%</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(12)</td>
<td>(13)</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

The data suggests a strong connection between first-year student satisfaction with CR and overall academic and student services satisfaction. To test this theory, first-year student usage data was analyzed to determine if heavy levels of CR participation correlated to stronger levels of academic and institutional satisfaction. Cross tabulation of satisfaction data from students who utilized CR programming and facilities four or more times per week were again compared with academic and institutional satisfaction.
rankings (see Table 5). The data shows a strong relationship between heavy participation in CR and higher satisfaction rates. The heaviest users of CR reported the highest academic satisfaction ratings. This information must be shared among CRA and university administrators, since it proves that active CR participation results in higher levels of academic satisfaction for first-year students at the university.

Table 5

Heavy CR Participation and Academic Satisfaction

| Roughly how many times per week do you participate in active recreational pursuits? | Rate your overall academic experience. |
|---|---|---|---|---|---|
| | Very Satisfied | Neither Satisfied | Dissatisfied | Very Dissatisfied |
| Satisfied | Nor Dissatisfied | |
| 4 - 6 | 29.8% | 61.7% | 8.5% | 0% | 0% |
| | (14) | (29) | (4) | (0) | (0) |
| 7 - 9 | 47.1% | 29.4% | 23.5% | 0% | 0% |
| | (8) | (5) | (4) | (0) | (0) |
| 10+ | 62.5% | 37.5% | 0% | 0% | 0% |
| | (5) | (3) | (0) | (0) | (0) |

To determine whether heavy CR participation correlated to increased satisfaction with other student services on campus, satisfaction rates among first-year students who participated four or more times per week were analyzed (see Table 6). Again, a relationship existed between heavy CR users and higher satisfaction ratings for other
student services, programming, and activities at the university. The data suggests that the first-year students utilizing CR the most appear to be the most satisfied with their experiences outside CR on campus and, therefore, the population most likely to integrate successfully into university life. This data is of tremendous importance to CRA and university administrators alike. CRA must disseminate information of this nature to administrators at the university and throughout the industry. First-year students who report institutional satisfaction are much more likely to persist and graduate than those who report indifference or dissatisfaction with their collegiate experience.

Table 6

Heavy CR Participation and Satisfaction with Other Student Services

<table>
<thead>
<tr>
<th>Roughly how many times per week do you participate in active recreational pursuits?</th>
<th>Rate your overall experience with other student services, programs or activities.</th>
<th>Very Satisfied</th>
<th>Neither Satisfied Nor Dissatisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Satisfied</td>
<td>Neither Satisfied</td>
<td>Dissatisfied</td>
<td>Very Dissatisfied</td>
<td></td>
</tr>
<tr>
<td>4 - 6</td>
<td>46.8%</td>
<td>42.6%</td>
<td>10.6%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(22)</td>
<td>(20)</td>
<td>(5)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
<tr>
<td>7 - 9</td>
<td>35.3%</td>
<td>52.9%</td>
<td>11.8%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(6)</td>
<td>(9)</td>
<td>(2)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
<tr>
<td>10+</td>
<td>62.5%</td>
<td>37.5%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(5)</td>
<td>(3)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
</tbody>
</table>
CR Participation and Academic Persistence

Remarkably, 100% of the survey sample indicated that CR had some level of importance in first-year students’ decision to continue their education at the university. The majority of students (46.7%) indicated the availability of CR programming was “very important” in their decision to continue. The second most prevalent response was “important” (32.0%) while “somewhat important” (21.3%) was least common. The data demonstrates that first-year student participation in CR clearly has a positive impact on first-year student persistence at the university.

In addition, CR proved to have a positive effect on first-year student persistence among survey respondents who placed little to no importance on the availability of CR before enrolling at the university. First-year students who reported CR was only “somewhat important” or “not important” in their decision to attend the university felt it was much more important in their decision to persist after utilizing programming and facilities (see Table 7). The majority of respondents from this group (63%) indicated that the availability of CR was “important” or “very important” in their decision to persist at the university. It is critical that CRA disseminate these findings to university administrators and stakeholders, since the data clearly demonstrated evidence that CR did play a significant role in the academic persistence of first-year student participants.
Table 7

Decision to Attend and Decision to Persist

While deciding to continue your education at the university, how important was the availability of recreational facilities and programming?

Was availability of recreational sports important in your decision to attend the university?

<table>
<thead>
<tr>
<th></th>
<th>Somewhat Important</th>
<th>Not Important</th>
<th>Response Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Important</td>
<td>20.5%</td>
<td>37.5%</td>
<td>26.5%</td>
</tr>
<tr>
<td></td>
<td>(9)</td>
<td>(9)</td>
<td>(18)</td>
</tr>
<tr>
<td>Important</td>
<td>43.2%</td>
<td>37.5%</td>
<td>41.2%</td>
</tr>
<tr>
<td></td>
<td>(19)</td>
<td>(9)</td>
<td>(28)</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>36.4%</td>
<td>25.0%</td>
<td>32.4%</td>
</tr>
<tr>
<td></td>
<td>(16)</td>
<td>(6)</td>
<td>(22)</td>
</tr>
<tr>
<td>Not Important</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Summary

This chapter analyzed the data collected from the sample population of first-year students who participated in CR at the university. The purpose was to interpret the data in a manner that accurately measured and demonstrated the importance of CR in the lives of first-year student participants. The data was crosstabulated to examine connections between responses and explore relationships present among CR participation, utilization rates, satisfaction, and academic persistence at the university. The data analysis demonstrated a relationship between heavy CR participation, high levels of institutional
satisfaction, and the importance of CR in first-years student decisions to persist. The data effectively justified the importance of CR in the lives of first-year student populations at the university.
Chapter 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The research presented in this study indicated the importance of CR within higher education. First-year students who participated in CR at the university overwhelmingly reported high levels of institutional and academic satisfaction. Additionally, the entire department of CR received very high satisfaction ratings. This information is of tremendous importance to CRA in an era plagued by dwindling budgets and the need to demonstrate fiscal responsibility. Universities continue to embrace business model approaches, which increasingly require program justification. Since institutional effectiveness can commonly be attributed to high persistence and graduation rates, CRA is responsible for collecting and conveying data of this nature to institutional leaders. Tinto (2000) claimed that approximately three-fourths of all college dropouts occur amongst first-year students. Student services such as CR, which make sizeable contributions to academic persistence, must continue to be supported and expanded.

Conclusions

The aforementioned information must be disseminated to upper level management and decision-makers at the university to demonstrate the importance of CR in assisting with retention of first-year students at the university. Diminished resources at
the university have resulted in budget reductions across all departments. Unfortunately this problem is currently an epidemic occurring at most public higher education institutions throughout the United States. CRA should use research data of this nature to defend funding and advocate for additional financial support.

Administration of the QIRS within CR departments is an appropriate manner for CRA to obtain the vital research information they need to justify and expand both programs and facilities. The QIRS is specific to the field of collegiate recreational services and was developed by NIRSA which is widely viewed among CRA as the leading authority within CR. University administrators should not overlook the importance of CR and the influence these programs have on the satisfaction and persistence of at-risk populations such as first-year students. Comprehensive CR program opportunities and facilities should be expanded to reach diverse student groups. As the data suggested in this study, preservation of access to CR is vital since the program helps ensure institutional satisfaction among at-risk, first-year student populations. Such students clearly consider recreation an important facet of their lives during their college years and as well as long after they have graduated from the university.

Recommendations

Supplementary and more comprehensive research within higher education indicating the impact of CR on student satisfaction and persistence can serve multiple purposes. CRA should express the strong feelings students hold toward availability of
recreational opportunities. University administrators and decision-makers must be aware of the diverse student groups CR serves. In addition, further research should seek to determine whether CR can be expanded to potentially reach any underserved student groups. The impact of gender participation within CR can indicate whether there are significant differences between male and female participant opportunities. If results indicate gender privilege in program offerings, CRA may need to expand programming, facilities, and services to accommodate the underrepresented group.

Further research can also explore the relationship between CR participation as related to race and ethnicity. Does CR adequately serve students from all races and ethnicities who attend other universities? Does CR participation have the same positive effects on overall student satisfaction and persistence across all diverse student populations? If CR is found to adequately serve the entire university population, and it supports student satisfaction and persistence across all student groups, the results would be of immense importance to CRA.
APPENDICES
APPENDIX A

Quality and Importance of Recreational Services (QIRS) Survey

QUALITY AND IMPORTANCE OF RECREATIONAL SERVICES

California State University, Sacramento (CSUS) wants your feedback to help improve recreational sports.
We are surveying students in order to evaluate the importance and quality of recreational sports facilities and programming. Please take your time to complete this survey and circle the appropriate responses to the following questions. Note: Certain questions will require multiple answers. Thank you for taking the time to help improve CSUS Recreational Sports.

1. Was availability of recreational sports important in your decision to attend CSUS?
   - A Very Important
   - B Important
   - C Somewhat Important
   - D Not Important

2. While deciding to continue your education at CSUS, how important was the availability of recreational facilities and programming?
   - A Very Important
   - B Important
   - C Somewhat Important
   - D Not Important

3. How important will recreation, sports, and fitness be after you graduate from CSUS?
   - A Very Important
   - B Important
   - C Somewhat Important
   - D Not Important

4. Roughly how many times per week do you participate in recreational activities on or off campus?
   - None
   - 1-3
   - 4-6
   - 7-9
   - 10-More

5. How many times per week would you like to participate in active recreational pursuits?
   - None
   - 1-3
   - 4-6
   - 7-9
   - 10-More

Section II. How satisfied are you with each of the following activities at CSUS?

6. Outdoor Pool
   - A Very Satisfied
   - B Satisfied
   - C Neither Satisfied nor Dissatisfied
   - D Dissatisfied
   - E Very Dissatisfied
   - F Don’t Know

7. Student Fitness Center
   - A Very Satisfied
   - B Satisfied
   - C Neither Satisfied nor Dissatisfied
   - D Dissatisfied
   - E Very Dissatisfied
   - F Don’t Know

8. Fees for funding of recreation activities
   - A Very Satisfied
   - B Satisfied
   - C Neither Satisfied nor Dissatisfied
   - D Dissatisfied
   - E Very Dissatisfied
   - F Don’t Know

9. Professional recreation staff
   - A Very Satisfied
   - B Satisfied
   - C Neither Satisfied nor Dissatisfied
   - D Dissatisfied
   - E Very Dissatisfied
   - F Don’t Know

10. Locker room facilities
    - A Very Satisfied
    - B Satisfied
    - C Neither Satisfied nor Dissatisfied
    - D Dissatisfied
    - E Very Dissatisfied
    - F Don’t Know

11. Availability of information about outdoor recreation facilities
    - A Very Satisfied
    - B Satisfied
    - C Neither Satisfied nor Dissatisfied
    - D Dissatisfied
    - E Very Dissatisfied
    - F Don’t Know

12. Equipment for recreational activities
    - A Very Satisfied
    - B Satisfied
    - C Neither Satisfied nor Dissatisfied
    - D Dissatisfied
    - E Very Dissatisfied
    - F Don’t Know

13. Hours of operation for recreation facilities
    - A Very Satisfied
    - B Satisfied
    - C Neither Satisfied nor Dissatisfied
    - D Dissatisfied
    - E Very Dissatisfied
    - F Don’t Know

14. Recreation staff
    - A Very Satisfied
    - B Satisfied
    - C Neither Satisfied nor Dissatisfied
    - D Dissatisfied
    - E Very Dissatisfied
    - F Don’t Know
15. Availability of space for recreational sport activities  A  B  C  D  E  F
16. Campus outdoor trails  A  B  C  D  E  F

17. Have you used or participated in any of the following recreational sports programs or activities?  
(Circle the letter next to all that apply)

A. Intramural sports  F. Informal recreation free play activity areas  K. Wellness programs
B. Group exercise classes  G. Weight training conditioning equipment  L. Equipment rental
C. Sport clubs  H. University sponsored recreational trips  M. Jogging/Track
D. Instructional classes  I. Alcohol and drug awareness programs  N. Outdoor trails
E. Aquatic facilities or programs J. Equipment checkout  O. Other __________

18. In which of the following activities have you been involved at CSUS?  (Circle all that apply)

A. Student Government  G. Residence hall activities
B. Honor programs  H. Social fraternity/sorority
C. Club or professional organization in major  I. Student union facility programs
D. Cultural activities on campus  J. Upper East Side Loft activities
E. Intramural sports programs  K. Intramural sports programs
F. Varsity athletics  L. Other __________________________

Please indicate your degree of satisfaction.

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neither Satisfied</th>
<th>Nor Dissatisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Your overall academic experience</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>20. Your experiences participating in recreational programs and activities</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>21. Your overall experience with other student services, programs or activities</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>

22. If you have not participated in campus intramural sports activities while attending CSUS, or if you have not participated as much as you would have liked, what are the reasons?  (Circle all that apply)

A. Unaware of what programs are offered  B. Lack of time to do course work
C. Programs not offered at a good time  D. Add tennis courts
E. Too competitive  F. Parking problems
G. Job conflicts  H. Add sand volleyball courts

23. What is the most important change in recreational sports facilities at CSUS you would like to make?  (Circle one)

A. Add basketball/volleyball courts for informal recreation.  B. Add indoor running track
C. Add weight equipment  D. Add recreational pool facility
E. Add racquetball courts  F. Add sand volleyball courts
G. Add ball fields/open space
H. Personal conflicts
I. Not interested
J. No friends participating
K. Other ______________________________
L. Programs that interest you are not offered, please list ___________________________

24. What is the most important change in recreational sports programs at CSUS you would like to make? (Circle one)
   A. More recreational sports
   B. More outdoor recreation opportunities
   C. More women’s recreational sports
   D. More Sport Club opportunities
   E. More State Hornet coverage of rec sports
   F. Extended facility hours
   G. More instructional skills & conditioning classes
   H. More special events
   I. More recreational swimming time
   J. More fitness classes
   K. More individual recognition for participation
   L. More wellness programs
   M. Other _________________________________

25. Will you use or participate in any of the following wellness programs or services? (Circle all that apply)
   A. Fitness profile
   B. Personal trainers
   C. Wellness profile
   D. Alcohol and drug awareness programs & events
   E. Program injury consultation
   F. Wellness educational programs
   G. Nutrition profile
   H. Weight room orientation
   I. Personal relationship classes
   J. Special events (dodgeball, kickball, etc.)
   K. Other _________________________________

Demographic Information

Gender: _____ Male _____ Female

Employment: _____ None _____ On-Campus _____ Off-Campus

Grade: _____ Freshman _____ Sophomore _____ Junior
        _____ Senior _____ Other

Ethnic Group: _____ African-American _____ Asian/Pacific Islander
_____ Caucasian       _____ Hispanic
_____ Native American  _____ Other

Residence:        _____ Residence Hall       _____ Live at Home (family)
                _____ Off-Campus Housing     _____ Upper East Side Lofts

Thank you for your assistance. Your responses are important and enable us to better provide quality services
APPENDIX B

Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

You are being asked to participate in research which will be conducted by Brad Trimble, a graduate student in the Higher Education Masters Degree Program at California State University, Sacramento (CSUS).

The study will be an assessment of CSUS Recreational Sports for his master’s thesis. If you are at least 18 years old and a student participant in CSUS Recreational Sports, you are eligible to participate in the survey.

You will be asked to complete a survey about your experiences related to your participation with CSUS Recreational Sports programming. The survey may require up to fifteen minutes of your time.

Some of the items in the survey may seem personal, but you do not have to answer any question if you don’t want to.

You may gain additional insight into the services available to you as a student here at CSUS, or you may not personally benefit from participating in this research. It is hoped that the results of the study will be beneficial for Recreational Sports programming and services designed for students here at CSUS.

Your responses on the survey will be anonymous and you will not receive any compensation for participating in this study.

If you have any questions about this research, you may contact Brad Trimble at (916) 716-5782 or by e-mail at sac51309@saclink.csus.edu.

Your participation in this research is entirely voluntary. Your signature below indicates that you have read this page and agree to participate in the research.

________________________________  ____________________
Signature of Participant    Date
APPENDIX C

Quality and Importance of Recreational Services (QIRS) Survey Results

QUALITY AND IMPORTANCE OF RECREATIONAL SERVICES

California State University, Sacramento (CSUS) wants your feedback to help improve recreational sports. We are surveying students in order to evaluate the importance and quality of recreational sports facilities and programming. Please take your time to complete this survey and circle the appropriate responses to the following questions. Note: Certain questions will require multiple answers. Thank you for taking the time to help improve CSUS Recreational Sports.

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Important</th>
<th>Important</th>
<th>Somewhat Important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was availability of recreational sports important in your decision to attend CSUS?</td>
<td>27.0%</td>
<td>17.2%</td>
<td>36.1%</td>
<td>20.7%</td>
</tr>
<tr>
<td>2. While deciding to continue your education at CSUS, how important was the availability of recreational facilities and programming?</td>
<td>46.7%</td>
<td>32.0%</td>
<td>21.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>3. How important will recreation, sports, and fitness be after you graduate from CSUS?</td>
<td>41.8%</td>
<td>38.5%</td>
<td>18.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>4. Roughly how many times per week do you participate in recreational activities on or off campus?</td>
<td>None</td>
<td>1-3</td>
<td>4-6</td>
<td>7-9</td>
</tr>
<tr>
<td>5. How many times per week would you like to participate in active recreational pursuits?</td>
<td>None</td>
<td>1-3</td>
<td>4-6</td>
<td>7-9</td>
</tr>
</tbody>
</table>

Section II. How satisfied are you with each of the following activities at CSUS?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neither Satisfied Nor Dissatisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Outdoor Pool</td>
<td>25.6%</td>
<td>18.8%</td>
<td>29.1%</td>
<td>4.3%</td>
<td>4.3%</td>
<td>17.9%</td>
</tr>
<tr>
<td>7. Student Fitness Center</td>
<td>14.5%</td>
<td>41.9%</td>
<td>12.0%</td>
<td>18.8%</td>
<td>1.7%</td>
<td>11.1%</td>
</tr>
<tr>
<td>8. Fees for funding of recreation activities</td>
<td>26.5%</td>
<td>22.2%</td>
<td>21.4%</td>
<td>11.1%</td>
<td>5.1%</td>
<td>13.7%</td>
</tr>
<tr>
<td>9. Professional recreation staff</td>
<td>38.5%</td>
<td>42.7%</td>
<td>11.1%</td>
<td>1.7%</td>
<td>0.9%</td>
<td>5.1%</td>
</tr>
<tr>
<td>10. Locker room facilities</td>
<td>21.4%</td>
<td>29.9%</td>
<td>23.9%</td>
<td>7.7%</td>
<td>1.7%</td>
<td>15.4%</td>
</tr>
<tr>
<td>11. Availability of information about outdoor recreation facilities</td>
<td>35.9%</td>
<td>35.0%</td>
<td>10.3%</td>
<td>5.1%</td>
<td>3.4%</td>
<td>10.3%</td>
</tr>
<tr>
<td>12. Equipment for recreational activities</td>
<td>29.1%</td>
<td>38.5%</td>
<td>16.2%</td>
<td>6.8%</td>
<td>3.4%</td>
<td>6.0%</td>
</tr>
<tr>
<td>13. Hours of operation for recreation facilities</td>
<td>28.2%</td>
<td>29.1%</td>
<td>7.7%</td>
<td>26.5%</td>
<td>6.8%</td>
<td>1.7%</td>
</tr>
<tr>
<td>14. Recreation staff</td>
<td>48.7%</td>
<td>39.3%</td>
<td>10.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
15. Availability of space for recreational sport activities

16. Campus outdoor trails

17. Have you used or participated in any of the following recreational sports programs or activities? (Circle the letter next to all that apply)

- F. Intramural sports 24.1%
- G. Group exercise classes 4.1%
- H. Sport clubs 8.6%
- I. Instructional classes 2.7%
- J. Aquatic facilities or programs 4.5%
- K. Informal Recreation free play activity areas 5.8%
- L. Weight training conditioning equipment 15.8%
- M. University sponsored recreation trips 1.7%
- N. Alcohol and drug awareness programs 4.1%
- O. Equipment checkout 2.4%
- P. Wellness programs 5.2%
- Q. Equipment rental 2.1%
- R. Jogging/Track 9.6%
- S. Outdoor trails 7.6%
- T. Other 2.1%

18. In which of the following activities have you been involved at CSUS? (Circle all that apply)

- G. Student Government 1.2%
- H. Honor programs 4.2%
- I. Club or professional organization in major 12.0%
- J. Cultural activities on campus 3.0%
- K. Intramural sports programs 16.8%
- L. Varsity athletics 3.0%
- M. Residence hall activities 30.5%
- N. Social fraternity/sorority 6.6%
- O. Student union facility programs 7.8%
- P. Student media (e.g. The State Hornet) 2.4%
- Q. Upper East Side Loft activities 3.6%
- R. Other 9.0%

Please indicate your degree of satisfaction.

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Neither Satisfied Nor Dissatisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Your overall academic experience</td>
<td>34.4%</td>
<td>9.8%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>20. Your experiences participating in recreational programs and activities</td>
<td>33.6%</td>
<td>10.7%</td>
<td>0.8%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>
21. Your overall experience with other student services, programs or activities

22. If you have not participated in campus intramural sports activities while attending CSUS, or if you have not participated as much as you would have liked, what are the reasons? (Circle all that apply)

- A. Unaware of what programs are offered 12.4%
- B. Lack of time to do course work 22.9%
- C. Programs not offered at a good time 11.4%
- D. Child care not available 2.9%
- E. Too competitive 6.7%
- F. Parking problems 1.9%
- G. Job conflicts 5.7%
- H. Personal conflicts 8.6%
- I. Not interested 9.5%
- J. No friends participating 9.5%
- K. Other 4.8%
- L. Programs that interest you are not offered 3.8%

23. What is the most important change in recreational sports facilities at CSUS you would like to make? (Circle one)

- A. Add basketball/volleyball courts for informal recreation 11.3%
- B. Add indoor running track 7.6%
- C. Add weight equipment 17.5%
- D. Add tennis courts 1.0%
- E. Add recreational pool facility 6.3%
- F. Add racquetball courts 2.3%
- G. Add sand volleyball courts 3.3%
- H. Add ball fields/open space 4.6%
- I. Add all day lockers 4.3%
- J. Add child care facilities 2.3%
- K. Add cardio equipment 6.6%
- L. Add hot tub 14.9%
- M. Add climbing wall 7.3%
- N. Add lights on ball fields 7.6%
- O. Add outdoor basketball courts 3.0%
24. What is the most important change in recreational sports programs at CSUS you would like to make? 
(Circle one)
A. More recreational sports  20.3% 
B. More outdoor recreation opportunities  6.5% 
C. More women’s recreational sports  5.6% 
D. More Sport Club opportunities  8.6% 
E. More State Hornet coverage of rec sports  6.9% 
F. Extended facility hours  12.1% 
G. More instructional skills & conditioning classes  6.9% 
H. More special events  8.6% 
I. More recreational swimming time  4.3% 
J. More fitness classes  9.5% 
K. More individual recognition for participation  3.9% 
L. More wellness programs  3.9% 
M. Other  3.0%

25. Will you use or participate in any of the following wellness programs or services? (Circle all that apply)
A. Fitness profile  18.0% 
B. Personal trainers  17.0% 
C. Wellness profile  8.5% 
D. Alcohol and drug awareness programs & events  1.0% 
E. Program injury consultation  3.5% 
F. Wellness educational programs  1.0% 
G. Nutrition profile  10.0% 
H. Weight room orientation  13.0% 
I. Personal relationship classes  2.5% 
J. Special events (dodgeball, kickball, etc.)  21.0% 
K. Other  4.5%

Demographic Information

Gender:
Male  77.5%  Female  22.5%

Employment:
None  63.3%  On-Campus  23.3%  Off-Campus  13.3%

Grade:
Freshman  100.0%  Sophomore  Junior  Senior  Other
<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>24.2%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>5.0%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>41.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>25.8%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residence Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence Hall</td>
<td>71.7%</td>
</tr>
<tr>
<td>Live at Home (family)</td>
<td>8.3%</td>
</tr>
<tr>
<td>Off-Campus Housing</td>
<td>16.7%</td>
</tr>
<tr>
<td>Upper East Side Lofts</td>
<td>3.3%</td>
</tr>
</tbody>
</table>
REFERENCES


