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CREATING COMMUNITY AT A LARGE IVY LEAGUE INSTITUTION: THE
BENEFITS OF IMPROVING RECREATION FACILITIES

By
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A DISSERTATION IN PRACTICE

Submitted to the faculty of the Graduate School of Creighton University in Partial
Fulfillment of the Requirements for the degree of Doctor of Education in
Interdisciplinary Leadership

Omaha, NE
September 9, 2016
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Abstract

Recreation departments have progressed immensely over the last 20 years, and students are craving more fitness and recreation opportunities at their institutions. The purpose of this quantitative study was to evaluate how well a large, east coast Ivy League institution is supporting the well-being of its students through recreation services. Additionally, a review was conducted to compare the research site to other institutions nationwide that participated in the 2015-2016 NASPA Consortium Survey. The aim of this study is to provide evidence-based recommendations to improve indoor recreation for students that can be presented to the administration based on students’ needs and wants. The 2015-2016 NASPA Campus Recreation Consortium was used to survey 5,000 students chosen at random. Of the 5,000 students, 1,176 students completed the survey and the results showed that students are content with their current recreation facilities and programs, but they could be better. Furthermore, only 29% of students at the research institution strongly agree that their recreation needs are being met with the current facilities and programs. Additionally, only 19% of students at the research site are satisfied with the amount of indoor recreation space. The solution proposed is for more research to be conducted with non-users of recreation space and more in-depth research with current users. Because this is the first research related to recreation at the university, more research needs to be completed with a larger sample to better understand the needs and wants of students.

Keywords: recreation, well-being, fitness, community, institution, facility
Dedication

I dedicate this dissertation to Corey, Greg, and Gambino. Thank you for the continuous support and reminder to get to work. The next round is on me.
Acknowledgements

I would like to thank my family, friends, and committee for all the support and help through my journey. To mom and dad for being there since day one and supporting all the crazy things I do. This one is probably one of the craziest. Dave and Leah: thank you for the time spent editing and mentoring me through this process. Thank you to William for helping me with all the stats and giving me a better understanding of stats.

To my friends: Corey, April, JBT, Jess T, Greg, Gambino, and everyone else that listened to me and helped me through the good times and challenges during the last three years. Thank you to Cisco for all the love, support and wine during my journey. Finally, I would like to thank Snowman for his help, editing, and understanding that sometimes my brain was fried.
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CHAPTER ONE: INTRODUCTION

Introduction and Statement of the Problem

In the last five years, student and academic services staff at a large, east coast Ivy League university have made mental health awareness a priority at the institution. Before the Vice President for Student and Academic Services retired in May of 2015, she made it a priority for the division of Student and Academic Services to increase the number and scope of the mental health awareness and recreation programs that the university offered (Murphy, personal communication, November 4, 2014). In 2013, mental health committees were formed, doctors hired, the academic calendar was changed, a new mental health facility is currently in the late stages of construction, staff have been given training to recognize students in distress, and new programs have been created to help students deal with stress and anxiety (Murphy, personal communication, November 4, 2014). Furthermore, the Athletic Alumni Affairs Fundraising Department has been tasked with raising the funds to assist in expanding recreation facilities (Noel, personal communication, September 13, 2015). During fitness-center information-gathering sessions, students have reported that the lack of adequate indoor recreation space—and the consequent over-packed fitness centers and full group fitness classes—occasionally prevents the students from working out when they want and, in turn, contributes to the anxiety that they feel (Adams, personal communication, February 26, 2016). Because many students are overcommitted (Snow, personal communication, May 4, 2016), they do not have a lot of spare time to work out—and to adjust their already tight schedules to fit the limited times when work-out opportunities may be readily available.
Most students at the institution over-program themselves and have an extraordinary number of academic commitments. The Perceptions of Undergraduate Life and Student Experience (PULSE) Survey (2013 and 2015) at the research institution indicates that most students feel that they get enough sleep only 2 – 3 nights per week during the traditional academic term. Furthermore, Tinto’s (1975) research shows that, for a new student, finding a community is an important part of their acclimation to campus. Not all students at the research site feel they have a place where they truly belong: i.e. a community of peers with similar needs and interests. The PULSE Survey (2013 and 2015) reports that over 26% of students on the campus studied do not feel a sense of community on campus. In 2013, 14% of those students also answered that they do not feel they have a community where they belong on campus. In 2015, the percentage of students who do not feel they have a community on campus rose to over 19%. In his 1975 research, Tinto also asserts that students who integrate into an institution’s academic and social system are more likely to continue and complete their degree. Blumenthal (2009) builds on Tinto’s theory of student retention and suggests that recreational sports programs, in particular, are key components of student recruitment, retention, success, and satisfaction. Forrester’s (2014) research similarly reports that 74% of students say that if they have quality recreation programs that they feel a part of, they are more likely to stay at their institution.

NIRSA (formerly the National Intramural-Recreational Sports Association) serves as the governing body in the field of collegiate recreation and, as such, develops leaders in collegiate recreation and supports campus recreation departments with research, conferences, and education for its members (NIRSA, 2016). As part of its work, NIRSA
provides guidelines concerning facilities, risk management, and program implementation in the field of collegiate recreation. Based on NIRSA space standards, the research institution currently has an inadequate amount of recreation space on campus: only half of the recommended indoors space that, per NIRSA recommendations, would be suitable for a university of its size: 22,500 students, along with an additional 9,000 faculty and staff members. Fortunately, the university administrators have recognized that the campus is lacking in recreation space and it has become a priority with the new Vice President of Student and Campus Life (Lombardi, personal communication, June 6 2016). Unfortunately, however, until recently, recreation space has not been a financial priority for the university administrators (Dutcher, personal communication, March 20, 2014).

A convergence of forces has made this a propitious time for the university to devote resources to expanding the recreation facilities and programs available on campus. University administrators recognize that the institution has outgrown its facilities and is in need of updated spaces and expanded spaces. Furthermore, Recreation is not a high priority at a highly academic institution and recreation projects tend to be cut over academic facilities (Dutcher, personal communication, March 20, 2014).

**Purpose of the Study**

The purpose of this quantitative study was to evaluate how well a large, east coast Ivy League institution is supporting the well-being of its students through recreation services and how it compares to other institutions nationwide that participated in the 2015-2016 NASPA Consortium Survey.
Aim of the Study

The aim of this study is to provide evidence-based recommendations to improve indoor recreation needs of students that can be presented to the administration so students are provided recreation based on their needs and wants.

Prompt for the Study

Today’s college students are faced with a variety of challenges, perhaps most notable among them the rigor of academics, the rising cost of tuition, and the social and emotional challenge of adapting to college life. For these reasons, today’s students would benefit from a place on campus where they feel they not only have a community where they belong but also a place where they can maintain and improve their physical health and mental well-being. Recreation facilities and programs are vital for healthy and happy college students across the nation (Forrester, 2014). Over the last two decades, nationwide billions of dollars have been spent to build recreation-related facilities and give students a place on campus where they feel welcome and a part of the campus community (Newlon, 2014). For example, in 1995, institutions across the United States spent $6.1 billion on construction of recreation facilities. In 2006, construction costs reached an all-time high at $15 billion. Perhaps due to the recession, institutions spent much less in the next seven years. However, in 2013, costs peaked at $10.9 billion. Newlon points out that while some of the construction was needed for upgrading facilities and enlarging facilities based on increased enrollment, much of it was designed to make institutions more competitive in recruiting students. Newlon suggests that rock walls, swimming pools, bowling alleys, and movie theaters attract students.
This study took place at a large Ivy League university located in central New York, an institution where many college students confront stress and mental-health issues (Eels, Marchell, Corson-Rikert, & Dittman, 2012). One resource that helps students battle mental health issues is the recreation department on campus. The recreation department at the university plays an essential role in helping college students find community, growth, physical and mental release, and leadership within the university setting. While the prompt for this study was students’ mental health and wellness needs, the purpose of the study was to better understand the recreation needs and satisfaction of students at the institution so the institution can explore an informed plan of action to better serve the students’ mental health and wellness overall. Throughout campus, the university currently has five small individual fitness center locations that help comprise the recreation department. This multi-unit design of five small recreation centers appears to be limited in two key ways. First, it contrasts with what appears to be the trend at other campuses, where, institutions have one all-inclusive recreation facility so students do not have to visit various locations across campus to participate in recreation programs (Rubin, 2014). Second, the university’s facilities no longer meet the needs of a changing student body: including more students on campus, students using the fitness centers more often (Tipping, 2014), and the rise of faculty and staff participation in recreation programs (McKinney, personal communication, April 8, 2016).

Because of these limitations, the university’s central administrators have recognized that they need to make changes in facilities in order to meet student needs (Murphy, personal communication, November 4, 2014). To that end, this study has two purposes: first, to evaluate the current recreation facilities for students at the university;
second, to analyze the university’s facility needs, assess how they can best support students’ overall well-being, and determine what changes to recommend based on empirical analysis of the study.

As a whole, the population size of the university under study has grown tremendously in the last 15 years. Specifically, the full-time undergraduate and graduate student population of the university has grown from 18,000 students in 1998 to 22,500 students in 2013 (Cornell University, 2013). The university also employs over 9,000 faculty and staff, a number that has not appreciably changed since 1998. At present, the university has about 90,000 square feet dedicated to indoor recreation for students, faculty, and staff. The most recent NIRSA Space Planning Guidelines for Campus Recreational Sports Facilities (2009) recommends 9,866 square feet per 1,000 students. Based on this guideline, the university should be offering students almost 200,000 square feet of indoor recreation space.

Students’ recreation needs and interests have changed over the last 20 years (Adams, personal communication, February 20, 2016), and students are focusing on recreation activities as a lifelong commitment. Specifically, 68% of students reported in the 2012 – 2013 NASPA Consortium Survey that campus recreation facilities had an influence on their decision on which institution to attend (Forrester, 2014). In his NIRSA-sponsored report *The Benefits of Campus Recreation*, Forrester shows that students are most interested in cardiovascular training, weight training, and pick-up basketball, soccer and volleyball. Additionally, Forrester found that 90% of the students surveyed reported that campus recreation-type activities, such as lifting weights, cardiovascular fitness, and swimming, would be important to them after graduation.
Forrester also identified the top attribute that students say they derive from participation in campus recreation programs and facilities: a feeling of overall wellbeing and health. Over 5.5 million college students participate in recreation sports each year (NIRSA, 2011). Additionally, studies have shown that collegiate recreational sports programs play a fundamental role in student success during and after college (Forrester, 2014; NIRSA, 2011). These skills include time management, respect, multi-tasking, relationship development, cooperation, communication, and problem solving.

**Significance of the Study**

The dissertation study is significant in three key ways. First, the dissertation provides university administrators (at the research university and at other institutions) with empirical data about college students’ opinions concerning the need for recreation opportunities and improved well-being. Furthermore, the NASPA Consortium Survey provides the same audiences with a look at how the host institution’s students rank its recreation facilities in comparison to other institutions nationwide that participated in the study. Third, it provides useful information for other Ivy League institutions facing similar student wellness issues as noted at the 2013 Ivy Meetings (Leach, 2013).

Moreover, this research provides an opportunity to present novel findings at recreation conferences, workshops, and Ivy Meetings. All three areas look for research related to improving collegiate recreation departments. Additionally, students will be informed about new opportunities for them to develop and maintain their physical and mental well-being on campus.
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Research Questions

The research focuses on the indoor recreation needs of students at a growing Ivy League institution in central New York. At this institution, the cold weather does not allow students to address their fitness needs outdoors year round: i.e., during the late autumn, winter, and early spring (months that cover most of the traditional academic year. Moreover, the usage of the indoor recreation facilities appears to be increasing. In February 2016, according to the university’s reporting system, Brio, the fitness centers had 10,000 more swipes into the fitness facilities than in February 2015. By the end of the 2015-2016 school year, the fitness facilities had over 60,900 additional swipes than the 2014-2015 school year. Because all 22,000+ students should have access to indoor fitness space, it is imperative the university understands the needs of the current student population. The following research questions guided this quantitative study:

1. How satisfied are students with the current recreation facilities?

2. How well do the existing campus recreation facilities meet the recreational needs of students?

3. How do the university’s students rank their recreation facilities compared to students at other institutions that participated in the NASPA Consortium?

Methodology Overview

This dissertation reports the results of a quantitative survey that includes information from current students at a large east coast Ivy League university. Specifically, The NASPA (Student Affairs Professional in Higher Education) Consortium: Campus Recreation 2015 – 2016 Survey was used to research 1,176 current undergraduate and graduate students at the university. Students were asked to complete a
137-question survey, but students were not required to answer all questions that investigated student utilization of, satisfaction with, and expectations concerning the university’s recreational facilities, programs, and activities—as well as the health-related outcomes that students captured from utilizing these facilities.

**Delimitations and Limitations**

Three factors limit the relevance of the research findings beyond the specific subjects of this study: the data in this paper was focused at one institution, the research was only completed with students, and the survey was 137 questions.

First, although the NASPA Consortium is open to all institutions in the country, the data in this study focuses exclusively on one institution, where the university administrators are committed to improving that institution’s recreation department. While the results of this study may be generalizable to other related institutions, this study was designed to explore in depth the needs of one institution. Second, the study focused on one particular set of stakeholders on campus—i.e., students, rather than faculty and staff. Faculty and staff constitute roughly 30% of the campus population and make up 25% of the campus’ fitness center membership, but the study focuses on students because the facilities and programs offered are designed for students: faculty and staff can choose to participate. Third, the 137-question survey was very long and some students might have chosen not to complete it because of the time that it might take them to do so. Because the survey was the NASPA Consortium, a practiced survey, all questions that could be deleted that did not pertain to this study’s focus were deleted.

The three limitations to the research include: prior research, participation in the survey and the time of year the survey was released. First, this is the first research done
at the university related to recreation. The study’s findings are a platform to springboard additional research about the institution’s recreation needs as well as students’ and stakeholders’ satisfaction with the institution’s current facilities and programs. Second, the survey was sent to 5,000 current students chosen randomly at the university. There is no way to require students to complete the survey and due to the length, students were less likely to complete all questions. As a result, 1,172 students took the survey and those survey participants did not have to answer all questions and they had the option to choose “no basis to judge” as a survey response for several questions. Therefore, the survey was primarily based on responses from users and several questions had a low response rate. Some questions response rate was as low as 92 responses and that is likely too small of a response rate to generalize to the entire institution. The sample missing from this study, and important to study in future research, is non-users, or those who have important information to share about why they are not using current recreation facilities. Furthermore, the survey was sent at the end of the fall semester, during winter break, and it was left open for two weeks, which led through the first week of spring semester. This is a time when students are on vacation and busy preparing for the next semester. This timeline was chosen because there was no other research from the institution going to students at that time.

**Definition of Relevant Terms**

The following terms are used throughout the ensuing discussion:

Group fitness: fitness-related classes that are offered to students, faculty, and staff free with fitness center membership
Higher education: education provided by a community college, college, or university

Intramural sports: organized sports leagues open to all students within an institution

Mental health: “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (World Health Organization, 2014, p. 1)

NIRSA: Formerly the acronym for National Intermural Recreation Association, NIRSA is the leading association in collegiate recreation

Open Recreation: the sub-department (within the Recreational Services Department) that oversees the fitness centers, gymnasiums, and all open spaces within all of the university’s recreation facilities

Professional: a full-time employee within a Recreational Services department

Recreation: any activity that students, faculty, and/or staff participate in for the purpose of leisure

Student retention: “when a student enrolls each semester until graduation, studies full-time, and graduates in about four years” (Unknown, 2001)
Recreational Services: recreation departments within higher educational institutions that have recreation facilities and programs offered to students.

Recreation facilities: a gymnasium, fitness center, climbing wall, lounge space, dance studio, pool, and locker rooms. At these facilities, students can usually participate in programs that frequently include group fitness, intramural sports, open recreation, aquatics programs, outdoor adventure programs, and club sports.

Semester: semesters refer to the 15-week period during which students attend class. Two semesters make up one college year.

Senior administration: the senior administration comprises the highest-level administrators at a university (NYU, 2016).

Well-being: “the state of being happy, healthy, or successful” (Merriam-Webster, 2016).

**Leader’s Role and Responsibility in Relation to the Problem**

The researcher has recently become the director of the physical education and recreation department and started working with the institution’s senior administrators to explore and remediate the facility concerns. It is appropriate for the issue to be viewed through a leadership lens for two reasons: leadership is created within the recreation facility, and leadership is needed to advocate for students to have quality recreation facilities.
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A transformational leader is needed within the institution to use his or her leadership skills to help develop a program that meets student needs. Transformational leadership is defined as a “style of leadership in which the leader identifies the needed change, creates a vision to guide the change through inspiration, and executes the change with the commitment of the members of the group” (Business Dictionary, 2016, p. 1). Transformational leadership is necessary because the recreation department needs a leader who is willing to work hard to pull a team together, create a vision to improve the department, demonstrate integrity, and show commitment to the institution.

Students come to recreation facilities to find a sense of community and to have a balanced life. Furthermore, both qualities are important in leadership. Without a place for all students to create a healthy lifestyle, they may not have a balanced enough life to become successful leaders themselves.

**Summary**

In summary, the university under study faces a challenge involving a lack of recreational space, and the administration has made it a priority to improve the situation, but several other financial priorities have, until recently, taken higher precedence. Therefore, the current study will help the university’s administrators to better understand what students want and need on campus with respect to recreation, as well as how the students rank their recreation facilities compared to how other students across the country rank their own recreation facilities. The university’s recreation staff is willing to make the upgrades necessary, but not all university administrators recognize the value that a more robust recreation department and facility can bring to students. This quantitative
study will provide an evidence-based solution to enable the higher administrators to better understand the recreation needs for students.

Looking forward, this dissertation in practice will review the current relevant research to date, provide an overview of the methodology, review the new research findings, present evidence-based conclusions, and make recommendations.
CHAPTER TWO: LITERATURE REVIEW

Introduction

Over the last 20 years, recreation departments in higher education have changed tremendously, but little empirical research related to campus recreation programs has been conducted to explore these changes and to drive further change (Hall, personal communication, April 1, 2016). The modest amount of research that has been conducted primarily explores the benefits students receive from participating in recreation activities. Furthermore, little published empirical research has explored grade point average, health benefits, and countless other topics likely to be of interest to university administrators.

In response to the modest amount of empirical research conducted to that date, a major development unfolded beginning in 2013. During that year, the NIRSA Assembly, the think tank of the association, sent the NIRSA Board of Directors a proposal in which they recommended that a group of researchers, in the field of campus recreation, be called upon to review existing research and propose next steps to generate more research to explore the value that recreation departments bring to the collegiate setting (Cabellon, personal communication, June 30, 2013). After the NIRSA Board of Directors approved the proposal, a research committee was formed and charged with developing more research as well as finding or creating additional grants to provide financial support to researchers.

Although reasons may vary in explaining why only a limited amount of empirical research has explored the value of recreation facilities and programs, Cabellon suggests that research is lacking because recreation professionals have focused more on developing their recreation department facilities and programming than in conducting or
supporting research. [Recreation science, in effect, may well remain a young field of inquiry.] During the past 10 years, recreation departments at higher education institutions have grown in a host of ways: new facilities, higher numbers of fulltime staff, larger budgets, and more programs (Milton, 2008). The growth in collegiate recreation departments has occurred not only within institutions but also within NIRSA. This growth is an example of how recreation professionals have excelled as leaders on campus and provided the leadership necessary to guide expanding programs and facilities. In 2010, NIRSA changed its standards for institutional members with the Council for the Advancement of Standards in Higher Education (Council for the Advancement of Standards in Higher Education [CAS], 2010). CAS sets industry standards for departments within higher education that provide services to students such as campus activities, counseling programs, and academic advising. As a member of CAS, NIRSA is a partner in meeting the CAS goals: to help students live in a healthy, productive learning environment. Furthermore, NIRSA institutions comply with these standards by meeting the following six domains CAS put in place: knowledge acquisition, integration, construction, and application; cognitive complexity; intrapersonal development, interpersonal competence; humanitarianism and civic engagement; and practical competency. The partnership between CAS and NIRSA demonstrates university recreation’s commitment to supporting students’ success as they work towards their degrees.

Additionally, the growth in campus recreation at institutions has stimulated more research that reveals positive personal outcomes from students who participate in recreation activities on campus. Forrester’s (2015) research compiles expansive research
where a variety of areas show a positive correlation with student participation in recreation programs: academic persistence (Bryant & Bradley, 1993; Hall, 2006; Huesman, Brown, Lee, Kellogg, & Radcliffe, 2009; Light, 1990; Christie & Dinham, 1991; NIRSA, 2004; Smith & Thomas, 1989; Ragheb & McKinney, 1993); physical and psychological health (Corbin & Lindsey, 2005; Colditz & Mariani, 2000; Haines, 2001); social integration (Bryant, Bradley & Milborne, 1994; Christie & Dinham, 1991); self-esteem (Astin, 1993; Kanters & Forester, 1997; Collins, Valerius, King, & Graham, 2001); institutional satisfaction (Forrester, 2006; NIRSA, 2004); retention (Hall, 2006; Bryant, Bradley, and Milborne, 1994; Lindsey, Sessoms, & Willis, 2009; Huseman, Brown, Lee, Kellogg, and Radcliffe, 2007); and stress management (Kanters, 2000; Ragheb & McKinney, 1993).

Forrester (2014) examined the responses from all 38 institutions that participated in the 2013 Campus Recreation NASPA Consortium. Forrester identified the five benefits that students most frequently reported deriving from participating in campus recreation activities: meeting new people, stress reduction, physical fitness, fun and enjoyment, and trying new things.

The following literature review addresses the limitations in the existing research, leadership within campus recreation, and five areas that research indicates recreation facilities can influence students: personal health, academics and retention, involvement in campus community, community within recreation programs, community within recreation facilities, and alumni affinity. Finally, an introduction into the research site is presented to have a lens into the current structure and statistics at the institution.
Limitations of Existing Research

The research to date in the field of recreation is limited in two main ways. First, little empirical research has been conducted in the field of campus recreation. Second, the development of the field of campus recreation over the last 20 years has led the way for more research.

The first limitation is the lack of empirical research that has been conducted related to the field of collegiate recreation. Miller (2011) points out that various studies have been completed involving research in individual areas of recreation—aquatics, fitness, intramural sports, club sports, and student development—but few studies have investigated the benefits of recreation departments on campuses. Miller adds that the lack of research is a challenge for recreation directors because they do not have sufficient evidence to show the impact their department has on campus and the social belonging recreation departments create on the campus. For example, one of the earliest studies was completed from 1993-1995 (Belch, Gebel, & Maas, 2001).

Belch et al. (2001) discuss the lack of research in the field and the challenges that recreation professionals face when they need to present to administration the value that recreation departments have on campus. As noted earlier, in 2013, a recommendation was submitted to the NIRSA Board of Directors that suggested compiling all recreation research with data that presents the value collegiate recreation departments brings students. This recommendation was made so the NIRSA Research Committee could identify the areas where recreation research is needed. Currently, NIRSA members are asking for more research related to the value they present on campus so they can submit it to the higher administration (Bingham, personal communication, April 2, 2016).
Danbert, Pivarnik, McNeil, and Washington (2014) make two relevant points about the lack of research in recreation. First, there are few longitudinal studies related to retention, academic achievement, and recreation facilities. Second, administrators on campus understand the importance of recreation on campus, but recreation comes second to academic success. Therefore, many recreation departments are underfunded.

Along with the lack of empirical research in the field of recreation, the second limitation is that the changes that have unfolded within campus recreation programs during the past 20 years. As recreation facilities have evolved—from, for instance basketball courts and fitness centers in facilities run by athletic departments to stand-alone recreation facilities—student participation has improved, and research transformed in relation to a recreation department’s impact on students as recreation facilities have become a place on campus where students find community (Hall, personal communication, April 2, 2016). Hall’s comments indicate that research 20 years ago may not show the correlation between academic success and usage of the recreation facilities and programs. However, as programs develop, more recreation studies are showing the correlation between recreation usage and academic success and retention (Danbert et al., 2014). Additionally, leadership is a large part of developing students and staff in recreation departments and professionals are applying leadership theory within their student staff training (Padgett & Longino, 2016).

**Leadership within Recreation Departments**

Recently, NIRSA published an article discussing intentional leadership development within campus recreation programs (NIRSA, 2016). Leadership is one of six strategic values that NIRSA has identified as important to the association and its
members. Moreover, NIRSA created a commission in 2012 that was tasked with understanding what it takes to be a leader, opportunities necessary to become a leader, and finding a way to assess the stages of leadership and evaluate emerging leaders in recreation department in higher education (NIRSA, 2016). To date, a survey was sent to all recreation departments that are NIRSA members and a book was published for recreation and athletic departments to assist professional staff with developing intentional leaders within their departments (Padgett & Longino, 2016). In the spring of 2016 NIRSA institutions were sent a leadership survey from the leadership commission to better understand what recreation departments are currently doing on their campuses to provide leadership development, who is in charge of leadership development, and what resources departments would like for leadership development.

Padgett and Longino (2016) discuss the results of the survey in their article. Of the 70 responses, 61% provide leadership development for their student staff, but they do not use a theory. However, 21% do use the following seven leadership theories: Social Change Model, Multi-Institutional Study of Leadership, Leadership Challenge, Relational Leadership Model, Leadership Identity Model, and Chickering’s Seven Vectors. Thirteen percent do not provide intentional leadership development and 5% use another form such as servant leadership and Disney Style Best Practices.

When asked who develops the leadership charge in each department, respondents indicated that 40% came from their director’s vision, 27% was from each professional staff member in their work area, 21% came from training and development staff, 8% was other and 4% reported not applicable. Additionally, respondents reported that trainings
and workshops, assessment tools, and a web-based resource library are the best resources for their department.

**Publication and the Research Site**

In addition to the survey, a resource book was published for athletics and recreation departments—as part of the series of leadership books by Wiley Books. Moving forward, the commission is tasked with providing additional leadership resources for NIRSA members (NIRSA, 2016).

The research site follows an inclusive leadership model. Inclusive leadership is described as a model that includes all stakeholders in the model (New York University Wagner, 2011). This model was chosen because the research site would like to have input from its professional staff, students staff and members (Galucci, personal communication, July 28, 2016). However, the director of the department uses transformational leadership to work with the entire staff (Galucci, personal communication, July 28, 2016). Galucci explains that the director of the department works with each professional staff member on a personal basis to understand their needs for development as a leader and creating a vision for the department. This has been beneficial for buy-in from the department as a whole as well as helping staff members feel like they are a part of decision-making. Additionally, Galucci discussed that because of the transformational leadership style the staff can have a greater impact on students because the team as a whole has created the vision of the department.

**Recreation Departments’ Impact on Students’ Health**

Recreation departments show a positive impact on students’ physical and mental health. A 2010 NIRSA study showed that over 85% of students who live on campus
participate in a recreational activity (NIRSA/NASPA, 2010). While it may seem that students would be healthy if they are using the recreation facilities, Lowry, R., Galuska, D., Fulton, J., Weschler, H., Kann, L., & Collins, J (2000) and Arterberry (2004) show that 35% of undergraduate students are overweight or obese and that rate is not declining. Obesity is an epidemic that affects every generation in the United States. However, the American College Health Association (ACHA) reported in 2007 that the rates of overweight and obesity had dropped to 30.9% of undergraduate students (Arterberry, 2004; Lowry et al., 2000). The ACHA (2007) also reported that students who do not participate in healthy behaviors in college would have more issues, in essence resulting in academic troubles. Lindsey and Sessoms’s 2006 study of college-age students shows that only 40% of students are regularly physically active and 30% do not participate in any physical activity (Lindsey & Sessoms, 2006). Moreover, Lindsey and Sessoms only researched one institution while the NIRSA (2010) research was over 30 institutions. The NIRSA research shows growth in recreation participation between 2006 and 2010.

Forrester, Arterberry, and Barcelona’s (2006) research also determined that regular physical activity has several benefits, including a reduced risk of several diseases. Forester et al. (2006) also show that physical activity not only reduces anxiety and depression but also improves an individual’s mood and enhances his or her ability to complete tasks. In addition, research dating back over 20 years reports that students who participate in recreational sports while in college consume less alcohol and report better physical fitness, strength, well-being, and stress management (Astin, 1993; Haines, 2001, Kanters, 2000). In summary, research demonstrates that students who participate in recreational programs on campus are impacted physically.
For college-age students, physical fitness is not the only important aspect of being healthy. Mental health is one of the fastest-growing problems in college-age individuals. The ACHA reported in 2014 that student physical and mental health issues are still rising on campuses nationwide (American College Health Association, 2014). The continued concern about mental and physical health issues among college students is a top reason campus recreation professionals should be communicating their value related to student mental health to senior administration (Forrester, 2013). The study site continuously struggles with the challenges of keeping its students mentally healthy, as do campuses across the country. The National Alliance on Mental Illness (2016) cites that 25% of students have a diagnosable mental illness, 40% do not get the help they need, 80% of students are overwhelmed by responsibilities, and 50% struggle in school because they are so anxious (National Alliance on Mental Illness, 2016).

In other research, John Ratey’s 2013 book, *Spark: The Revolutionary New Science of Exercise and the Brain* discusses the benefits of exercise in relation to the brain (Ratey & Hagerman, 2013). Ratey begins by explaining human design. Humans were designed to be physically active and move. As the world developed, humans have lost this physical activity, and as a result, humans’ brains are shrinking. Ratey goes on to explain how exercise releases serotonin, dopamine, and epinephrine—all of which are important for thoughts and emotions. Ratey’s research directly relates the benefits of exercise for health, learning, stress, anxiety, depression, attention deficit, and addiction from the release of serotonin, dopamine and epinephrine. These themes; stress, anxiety, depression, attention deficit, are all related to challenges students experience at the
university. Ratey goes on to discuss two school districts that have shown the health and learning benefits of exercise—Naperville, Illinois and Titusville, Pennsylvania.

Naperville, Illinois’s public school district is similar to many school districts: students have to take reading, writing, math, and English. The difference between Naperville and other similarly situated school districts is that students are required to take a physical education course (PE) daily. The result is that Naperville students have only a 3% obesity rate—the national average is 30% with school age children (Ratey & Hagerman, 2013). In fact, Naperville teachers—and now several other researchers working with the district—found that students who take PE directly before a subject with which they struggle do better in that subject (Ratey & Hagerman, 2013). The effects of exercise on the brain help students retain the information better. Furthermore, Naperville students rank as some of the best in the world on the Trends in International Mathematics and Science Study (TIMSS). While Japan, China, and Singapore generally rank number one on these exams, Naperville students are ranked number one in science and number six in math (Ratey & Hagerman, 2013). Although this research is correlational in nature, it provides important, useful, and compelling information for other districts considering the implementation of a PE program for its students.

The effect Naperville’s program has had on students has spread throughout the country. Another primary example of success in academics through activity is in Titusville, Pennsylvania. After Naperville’s success, a similar program was introduced to Titusville students. Titusville student’s grades and test scores were below the national average prior to the Physical Education program and are now 17% higher than the national average in reading and 18% higher in math. Further, Ratey explains that exercise
is like Miracle Grow for the brain. While all this research is done with middle and high school students, these students depend on campus recreation facilities and programs once they reach college. One student from Titusville discussed that she went to college, was stressed out, and needed to revert to the physical activity that she learned to appreciate during her pre-college education. In college, she would go for a run or participate in another recreational activity in order to get back on track and focus her mind where it needed to be (Ratey & Hagerman, 2013). Not all students entering college understand the benefits of physical activity to reduce stress and anxiety. Therefore, recreation departments are essential to provide college students information and knowledge to make healthy life decisions.

Although the previously cited research was conducted with a kindergarten through high school population, similar findings have occurred in higher education. Research by Spivey and Hritz (2006) found that college students participated in recreational activities to improve their fitness level and to develop a healthy lifestyle (Spivey & Hritz, 2013). Their research indicated that students participate in recreational programs for a healthier life and to improve their fitness, attitude towards fitness, and their mood and self-confidence. Spivy and Hritz’s research demonstrates that students want to be healthier and happier, and by participating in recreational sports, 73.3% identified that they had improved fitness; 66.4% had healthier lifestyles; 71.5% enhanced their mood; and 69.4% amplified their attitude towards fitness.

Additional research by Todd, Czyszczon, Carr, and Pratt (2009) compared the following five health-related actions: physical activity, nutrition, Body Mass Index (BMI), smoking, and electronic usage between campus recreation users and non-users
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(Todd, Czyszczon, Carr, & Pratt, 2009). The study used the International Physical Activity Questionnaire (IPAQ) and an internet-based study. The outcome of the research suggested that frequent recreational-facility users intake less fat, smoke less (8-10% of non-users reported smoking daily), have lower than ‘moderate’ BMIs, and use electronics less than non-facility users. In addition, the Kerr-Downs report shows that students’ top four benefits they felt from participating in recreational sports activities include emotional well-being, stress reduction, improved happiness, and improved self-confidence (Downs & Kerr, 2002): all four benefits help over-worked students balance their academic and personal lives.

In a more-recent study, Henchy (2011) researched the benefits of using a student recreation center. Henchy’s research shows that 86% of college students agree: participating in campus recreation activities sparked their interest in staying fit. Moreover, almost 60% of students felt their fitness level improved as their participation in campus recreation increased, and 51% felt their well-being improved as a result of their participation (Henchy, 2011). Furthermore, Henchy’s research indicates that recreational services are offering more than enough physical fitness options to help students’ live happy, healthy, successful lives. Additionally, personal health is not the only way recreation participation can affect a student’s success in college. Growing research is now showing that academic achievement may be affected by recreation participation.

**Academic Achievement and Recreation Participants**

Research over the last 20 years reveals conflicting evidence regarding academic achievement, measured by GPA, of students who use recreation facilities. Belch et al.
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(2001) studied first-time freshmen between 1993 and 1995 at a large institution in the American Southwest. The study had 11,076 total students that participated in the study: 8,108 users and 2,968 non-users of the recreation facilities. Users started their college career with .09 lower GPAs than non-users: the difference between 3.15 for users and 3.24 for non-users. After the first year, users had a slightly higher GPA than non-users. Users averaged a 2.57 GPA, and non-users averaged a 2.54 GPA. Users also completed .7 more credit hours on average. Most research shows that there is at least a small correlation between recreation facility users and academic success and retention.

Furthermore, in these studies, students indicate that by participating in recreational programs they are successful in two areas: academic success and a community on campus (Belch, et al. 2001; Bryant, Banta & Bradley, 1995; Churchill & Iwai, 1981; Haines, 2001; Hall, 2006; Huesman et al., 2009; Miller, 2011).

However, other studies have yielded contrasting results with respect to the correlation between recreation-facilities usage and GPA. NIRSA’s 2004 multi-institutional study found that frequent users of recreational facilities earned an average GPA of 3.1, while less frequent and non-users averaged a 3.2 GPA (National Intramural Recreation Sports Association [NIRSA], 2004). Similarly, Watson, Ayers, Zizzi, and Naoi (2006) found very little difference in recreational facility users averaging 3.11 and non-users averaging a 3.19 GPA.

Danbert et al. (2014) research indicates a slightly higher GPA for users versus non-users. In their research, 4,803 entering freshmen, at a Midwestern institution with a population of 49,000, were studied. Rather than charge a blanket student fee for recreation, the institution that Danbert et al. studied allows students to choose if they
want to purchase membership. Of the students who participated in the study, 1,138 chose
to become members, and 3,705 were non-members. Recreation facility users had a
higher GPA, more credits completed, and a higher one- and two-year retention rate than
non-users. On average, users had a 3.13 GPA. Non-users averaged a 3.0 GPA. Users
also completed an average of 56.6 credit hours over two years, while non-users
completed an average of 54.1 hours.

A 2001 Washington State University report of over 15,000 students, compiled
from the card-swipe data warehouse, shows that students who used the recreational
facility at least once during the semester had a higher GPA than students who never
entered the facility (Washington State University, 2001). The report also indicates that
users were taking more credits than non-users. Furthermore, a freshman who used the
facility 30+ times a semester had a 2.85 average GPA, students who entered 1-10 times
had an average of 2.56 GPA, followed by non-users at 2.47 GPA—a difference of .4
GPA points between frequent users and non-users.

Huseman et al. 2007 study of over 5,000 students also identify similar results to
the studies in which GPA is only slightly higher in recreation facility users. Huseman et
al. (2007) reported that freshmen that used the recreation facility one standard deviation
more than an average user had a .11 higher GPA. Further, Todd et al. (2009) report that
students who have higher IPAQ scores and are heavier users of recreation facilities also
have higher GPAs (Todd et al., 2009). Overall, several studies affirm a correlation
between students who use recreation centers and slightly higher GPAs. Although some
studies find a negative relationship between GPA and recreation facility users, but more
studies show a positive correlation. One may hypothesize that as individuals begin to
understand the benefits of recreation facilities and the impact it can have on having a healthy balanced life, more college age students begin using the facility for all around well-being.

Most of these disparate research results from the past 20 years indicate no consistent conclusions concerning whether recreation facility users earn higher GPAs than non-users. However, the most recent studies suggest that researchers see a slightly higher GPA in recreation facility users (Huseman et al., 2007; Todd et al., 2009). While it is only a slight difference, .01% may not matter to a student with a high GPA, but .01 is significant to a student who may not be able to continue at an institution if his or her GPA falls below the requirement for good academic standing. Likewise, a student may not want to leave his or her campus community if they are happy at the institution.

**Students’ Campus Involvement and Sense of Community**

A sense of community is described as a place where students feel like they belong (McMillian & Chavis, 1976). Research shows that student’s sense of community is not only found in the classroom. Tinto’s Theory of Student Departure focuses on students’ academic and social commitment to an institution. More specifically, Tinto (1975) maintains that students who integrate into an institution’s academic and social system are more likely to continue and complete their degree. Tinto goes on to discuss dropping out of college as a longitudinal process for students. Tinto recognizes that students who integrate through informal friend groups and extracurricular activities are more likely to continue at an institution. In his 1987 research, Tinto discusses that students’ expectations of the institution before they enter their first year also plays a role in the student’s success. Tinto’s theory suggests that some students may have unrealistic
expectations prior to entry, such as the ease of making friends or that they will find a place on campus where they feel they belong—such as the recreation facility for some students. Furthermore, when the student’s expectations are not met, the student sometimes departs from the institution. Specifically, students are more likely to leave an institution because of their experiences after they begin their first year than to leave later in their college careers (Tinto, 1987). Additionally, in 1993, Tinto expressed that students with “patterns of incongruence and isolation, more than academic incompetence, appear to be central to the process of individual departure” (Tinto, 1993, p. 136). In other words, students who feel they do not belong at an institution are more likely to depart. Tinto compares being a “competent member of an academic or social community within college” to membership (Tinto, 1993, p. 136).

Similarly, Astin’s Theory of Involvement shows a relationship between student involvement in student activities, academic success, and retention (Astin, 1993). While the theories are very similar, Astin focuses on involvement in activities and academics whereas Tinto focuses on the sense of belonging students have on campus that may not be related to a campus activity, but a group of friends they may have on campus.

In Tinto’s (1975) theory, a student may find a place where they belong in one group or academic area. Astin (1999) states that student involvement is “the amount of physical and psychological energy that the student devotes to the academic experience” (p. 518). These two theories are very similar and indicate the same outcome: if students are happy outside the classroom then they are more likely to continue at the institution. Astin goes on to explain that a highly involved student interacts with faculty, studies on campus, is involved in student activities, and spends time on campus. An uninvolved
student refrains from campus and activities on campus. Furthermore, Christie and Dinham’s (1991) research also indicates that students who do not live on campus tend not to be as involved with recreational activities. Both theories focus on the idea that the more students feel involved with their institution and integrated into student life, the more likely they will be to stay at an institution, rather than to leave the institution. Recreation departments can directly affect many students’ decisions to stay at an institution, because students may feel a sense of community while participating in recreational sports programs.

After 40 years of studying students’ needs to feel part of a community, Tinto’s (2006) research broadens the depth of understanding on how students today succeed. Tinto declares there is three lessons intuitions need to understand. The first lesson is to know what the institution can do to aid in the success of students. Success may come from several influences: family, campus, academics, and social influences. The second lesson is program implementation. Institutions create programs to help students acclimate to their campus, but Tinto explains that not all campuses see their programs through to ensure success. Finally, the third lesson is income. Students of lower income may not have had the academic preparation that students of higher socioeconomic status have been given. Further, institutions can help the transition by understanding where on campus students find their community.

**Recruitment, Retention, and a Sense of Community in Campus Recreational Facilities**

Over the past few decades, campus recreation facilities have transformed from places where students used to go only to work out, usually in older athletic buildings, to
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places that now may be state-of-the-art facilities. These facilities influence students’
decisions (e.g., whether they will attend a particular institution) and provide students with
a sense of community, a place to feel better, and an opportunity to grow personally.
Henchy et al., (2011) and Zizzi, Ayers, Watson, and Keeler (2004) all have researched
the impact of a central student recreation center (SRC) for students. These studies have
similar outcomes and indicate the importance of SRCs.

Retention and Student Recreation Centers

Student recreation centers are a place where some students may find their
community. In the Henchy et al. (2011) study of 237 students at a southeastern
university, 28% of students indicated that the SRC had a strong or moderate influence on
their decision to attend the university, while 31% indicated that it influenced their
decision to continue at the university when they had considered departing (Henchy,
2011). Similarly, Miller’s 2011 study of 534 students shows the SRC was a factor in
choosing the university and a reason to stay at the university (Miller, 2011). Although
this finding may not seem important, it identifies value of having an SRC on campus.
Specifically, respondents who indicated that they had thought about leaving the
university indicated that the SRC was a place where they felt they belonged and a place
where they were happier at the institution. Students indicated that they feel a sense of
belonging at the SRC and a sense of community where they could form relationships and
grow. Miller’s research confirms Tinto’s conclusion: that students who have a sense of
community are more likely to finish their degree.

In another study, Zizzi et al. (2004) show that since their SRC was built at a mid-
Atlantic institution, 61.2% of users felt more at home on campus. Huesman et al., (2007)
study of 5,211 students suggests that SRCs can be a central vehicle for creating
community on campus. Moreover, Huesman et al. go on to explain that the SRC is a
place for social interactions that can lead to social integration, which results in students
building communities to which they feel they belong. Huesman et al. found that a first-
year student who used the SRC at least 25 times throughout a semester was 1% more
likely to continue to use the facility and 2% more likely to graduate within five years.

These numbers seem small but still show the influence SRC’s have on retention at
the institution (Huesman et al., 2007). Furthermore, Henchy’s (2011) research shows that
96% of the students he surveyed agreed or strongly agreed that the SRC and programs
improved the quality of life at the university, and 81% felt more at home on campus.
This research directly relates back to Tinto’s research: students feel like a competent
member in the social community and feel they are a part of the social community while in
SRCs. Tinto’s (1993) theory maintains that social experiences are vital to education.

Although students may feel more at home in an institution with an SRC than in an
institution without one, the majority of students are alone when they enter a recreational
facility: 48% of students used facilities alone; 38% of students used facilities with a
partner; and 14% of students used facilities with two or more people (Henchy, 2011).
Moreover, if students are more likely to enter alone, they may not have a community on
campus and may looking for one at the SRC, or they may feel comfortable at the SRC
and feel part of a community already. Further into the study, Henchy reports that 34% of
students felt that their sense of belonging strongly or moderately improved from
participating in recreational activities. In addition, 33% of students felt their opportunity
to develop friendships had strongly or moderately improved from participating in
recreational activities (Henchy, 2011). Therefore, although students frequently utilized the SRC alone, they still felt a greater sense of community from using the SRC’s facilities. Finally, a study completed by Watson et al. (2006) shows that 64.4% of SRC users felt more at home on campus and 41.4% reported that the SRC helped them make friends.

All five of these studies provide a look at what SRCs have provided for many students and at what benefits SRCs offer college campuses. A greater sense of community can allow students to feel more welcome on campus and potentially reduce mental health issues.

Mental and physical benefits are not the only valuable areas students found benefits related to SRC usage. Facility users also reported a variety of mental and physical benefits from participation in recreational services facilities and programs. In Miller’s study, students see the facility as a place to bond and grow (Miller, 2011). Students indicated they had an increase in leadership abilities, time-management abilities, and self-confidence. They also mentioned the benefits of interacting with new people and their overall happiness from using the SRC. Zizzi et al. found in their research that 79.9% of users felt the SRC increased the amount of time they exercised, and 40% of students surveyed did not work out before the construction of the SRC.

Henchy’s (2011) research indicated other benefits that students feel the SRC provides: enhanced fitness, overall improved health, and reduced stress. Eighty-six percent of students agreed or strongly agreed that recreational programs help them to stay fit, while 59% of students felt their fitness level strongly or moderately improved from participating in recreational activities. As for overall health, 57% of students felt their
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overall health had strongly or moderately improved from their participation in recreational activities, while 51% of students felt their well-being had strongly or moderately improved from participating in recreational activities. Almost half of students reported they felt their stress management has strongly or moderately improved based on their participation in such activities.

Retention in Recreation Overall

In Danbert et al. (2014) research, retention rates for recreation-facilities users were also higher than retention rates for non-users. The retention rate for recreation-facilities users after the first year was 90.7%, while non-users’ retention was 88%. The difference of 2.7% may not seem significant, but the two-year retention rate had a 3.5% difference with user retention at 88.5% and non-users remaining at 85%. As pointed out, in an institution with 49,000 students, 3.5% is about 1575 students: the financial impact of loss of fees, tuition, and potential alumni contributions may be substantial.

Belch et al. (2001) break their research down further and compared the persistence rate of users and non-users and the number of times in a semester that a student uses the facility. After one semester, 86% of non-users continued at the institution while users continued at the institution at a rate between 90-93% depending on the number of visits they had at the SRC. Users that only visited 1 – 4 times within the semester persisted lower at 90%, while that percentage increased as users visited the SRC more often. Users with 5 – 19 visits persisted at 92%, users who visited 20 or more times persisted at 93%. Furthermore, the percentage gap of students that persisted after a year was much less, but the users still had a higher rate of persistence. Non-users persisted at only 64%. Users with 1 – 4 visits persisted at 69%, users who visited 5 – 19 times
persisted at 72%, users who visited 20 – 49 times persisted at 74%, and users who used the SRC over 50 times persisted at 75%. A lot of tuition money is lost with percentages of departure that high. Together, all of these studies indicate that students find SRCs a benefit, in a variety of ways, to their experience as a college student.

**Recruitment, Retention, and a Sense of Community in Recreational Services Programming**

The Kerr-Downs report suggests that one of the top reasons why students do not participate in recreation programs is that they lack a support network (Downs & Kerr, 2002). If, during new student orientation, recreation services departments educate freshmen about the community available within recreational programs, students may be more likely to participate in those programs—and, thereby, capture benefits with respect to recruitment, retention, and a sense of community.

Frauman’s 2005 article comparing recreation program participants and non-participants shows users are happier with the institution in three ways: the college met the students’ expectations, users were more satisfied with campus life, and users were more satisfied with their overall college experience. Further, Kerr-Downs (2002) reported that students ranked participation in recreational programs as the fifth most-important factor why they choose an institution. Additionally, the inclusion of campus recreation programs ranked higher than internships, cultural activities, clubs, study abroad, work, shopping, entertainment, restaurants, fraternities and sororities, and community service. The report also shows that students agree that by participating in recreational programs, they were building character, they felt a sense of belonging to the campus community,
they had an improved social life, and they had more interaction with diverse people (Downs & Kerr, 2002).

As institutions are searching for a more-diverse population, it is important that student services do its part to ensure students have diverse interactions. Elkins, Forrester, and Noel-Elkins’ (2011) research shows that students who participate in recreational programs find more diverse relationships in five areas: everyone is there with a common goal, programs nurture relationships across cultures, the environment is non-judgmental, the group shares common behavioral expectations, and there are shared interests and values. Their research also explains that because participants come to programs with similar expectations, culture is not a big issue in recreation programs—program participants all share a common goal in recreation programs and that goal is not culture related. For example, when students come to a spinning or yoga class their goal is to get a workout or relaxation. Their goal is not to gain cultural perspective. Similarly, when students come to the facility for an intramural activity their goal is to come play their game. Recreation departments do a good job of offering recreation for students from cultures that differ in ethnicity, religious practice, or other ways. For example, some institutions provide women-only swim times for Muslim women who do not show their body in public—or group-fitness classes related to different cultures (e.g., Latin Israeli Dance, Tae Kwon Do, Capoeira, Belly Dancing, Salsa Dancing, and several others) (Dutcher, Personal Communication, March 20, 2014). Students are offered a variety of activities that are open to all students, and students can mix with students from other cultures who may be looking for the same recreational experience.
Students see another form of diversity among recreational participants: faculty and staff using the same facilities. Forty percent of the researched institution’s faculty and staff are members of the faculty/staff wellness program (Tipping, 2014). The faculty and staff wellness program allows faculty and staff to participate in the same fitness programs and use the same facilities that students use. Miller’s (2011) research on social belonging on campus revealed that students had a stronger bond to a recreation program when they saw faculty and staff working out on a regular basis. His research also indicated that the students did not increase their relationship or social bond with the faculty and staff, but by seeing their participation, the students felt a stronger sense of a campus community.

**Alumni Affinity**

Although no research specifically explores the correlation between recreational sports participation and the amount of alumni contributions, recreational programs create meaningful favorable impressions on students’ lives while they are in college and after they leave their institution (Downs & Kerr, 2002). Pepperdine University reports that the number one reason alumni give back is their student involvement on campus (Tran, 2012). For example, the former director of physical education and recreation points out that one student at the research site is an individual who was an intramural supervisor for three years during his time at university. The former student made it clear that without the intramural department and recreation he would not have a place on campus where he felt part of a community. Within a year of his graduation, this student sent the university’s Intramural Sports department a $1000 check as a donation. The student explained that while he was working for the recreation department he did not have many
friends in college, but he enjoyed his time in the intramural office and working games on the field. His affiliation with and bond to the recreation department helped him be successful at the university. Another example is a 1954 graduate whose passion during his undergraduate career at the university was intramural sports (Dutcher, personal communication, March 20, 2014). After graduation, he endowed the Director of Intramural Sports position. His experience as an intramural sports employee and participant gave him a sense of belonging to the institution and served as a place where he spent much of his free time (Dutcher, personal communication, March 20, 2014).

Fresk and Mullendore (2012) discuss the lasting bond students have with an institution and the likelihood that they will support the institution after graduation (Fresk & Mullendore, 2012). Their research presents three levels of student involvement. Level one is a basic level in which a student participates in only one main activity or job on campus. Level two consists of students who participate in a few activities and forms relationships with people involved in the same activities. Level three includes students who are very involved on campus, create relationships, and feel like a part of the institution. Students who are at levels two and three are more likely to give back to an institution than students at level one (Fresk & Mullendore, 2012). The Alumni Factor, a statistical organization that ranks institutions to inform parents and prospective students, on different topics related to universities, ranked the top 10 institutions for alumni contributions from 2008 – 2011. Among schools with over 10,000 students, the research institution is ranked fifth based on percentage of alumni who contribute to their alma mater: 21% of alumni make donations to the university (The Alumni Factor, 2014).
Institution Statistics

Currently, no research has explored the impact of the recreation department on student satisfaction, retention, or GPA at the research site. At this institution, the Physical Education and Recreational Services Department reaches every undergraduate student on campus. Specifically, all students are required to take at least one physical education course, and all students who start, as freshmen, have to take two courses. However, it remains unclear how participation in recreational activities at the multiple sites, excluding the required courses, impacts students’ overall impressions of the university or their overall well-being. Ratey makes a clear argument about the benefits of investing in recreational programs (Ratey, 2013). Particularly, as noted earlier, Ratey indicates that students learn better when they participate in physical activity, but the institution does not place physical activity as a priority, compared to other, academically related priorities. In a 2014 meeting with the director of university research, she discussed the importance of student involvement in campus activities and its impact on student retention. However, no formal survey or research has been done with the student population to determine what their needs and interests are and how the students rate the importance of campus recreation on their overall well-being and/or on their intention to remain at the institution through graduation. Furthermore, the leadership in the recreation department did not work to push research at the institution. Had the leadership worked to display the benefit of recreation facilities on student life and health the department may have better facilities and programs than they currently offer.

While no formal survey of campus recreation users has been conducted, the university did conduct a Perceptions of Undergraduate Life and Student Experience
(PULSE) survey in 2013 and 2015. The PULSE survey asks questions in seven areas: background, extracurricular involvement and well-being, diversity, changes in skills and abilities, interactions with faculty, academic involvement, and satisfaction with the institution. Although the PULSE survey provided important information about students’ well-being and sense of belonging on campus, the only relevant research and statistics for the university’s recreation department involved the membership statistics of the fitness centers.

**Perceptions of Undergraduate Life and Student Experience Survey**

Administrators at the site of the current study invite all students to participate in the PULSE Survey every two years. In 2013, 13,785 students were invited to participate in the institution’s PULSE Survey. Of the original 13,785 undergraduate students invited participants, 6,190 (45%) of the invited participants completed the surveys fully. Incomplete surveys were not recorded. In 2015, 13,780 students were invited to participate, and 4,892 students responded: a 36% response rate. As the director of the physical education and recreation department is a transformational leader, this information and any further research is important to the recreation department because it will help form decisions when making changes to the recreation programs and facilities.

Overall, two areas within the PULSE survey relate to student overall satisfaction at the university: sense of community and overall satisfaction with their experience.

The survey provided important, holistic information to the university about places of pride and places for improvement. For example, university administrators at the site of the current study were disappointed by the Pulse Survey findings concerning the students’ satisfaction with their overall sense of community on campus. In both 2013 and
2015, over 25% of students reported that they were not satisfied with the sense of community on campus; and in 2013, 15% of respondents reported that they had not found a place where they felt that they belonged. In 2015, the percentage of students who reported that they did not feel like they have a place where they belong increased: to more than 17%. Although a large percentage of students appear to be satisfied, these findings suggest that the university administrators should take steps to reach the students who do not feel they have a place where they fit in. While the 2015 data is not yet available concerning whether student satisfaction with the campus community is related to their finding a place where they belong, in 2013 students are split. Specifically, 47% of respondents indicated it the two concerns are not related, and 44% indicated that the two are related. The data shows the strongest relationships between students’ sense of belonging and the following factors: social life, educational experience, racial/ethnic diversity on campus, climate of respect, someone to talk to when they are sad, and their race/citizenship. As previously addressed, students who participate in recreational activities report having a diverse experience because of diverse individuals involved in recreational programs (Elkins et al., 2011). In the PULSE survey students indicated in large numbers that they interacted with diverse students. Only 7% of respondents said they rarely or never interact with diverse students—i.e., diverse with respect to race, ethnicity, sexual orientation, or political views. Nevertheless, it is unclear whether these interactions occurred because of or during recreational activities: the survey questions do not probe this relationship further.

The PULSE survey also indicated that students’ overall satisfaction with the institution as a whole is very high. Specifically, 88% (in 2013) and 82% (in 2015) of
students report their educational experience as excellent or good, while only 12% (in 2013) and 4.9% (in 2015) rank their experience as poor or fair. Another indicator of student happiness at the university that is the site of the current study is the students’ overwhelmingly favorable response to this question: “If you could do it over again, would you attend the university”? Eighty-six percent of students (in 2013) and 85% (in 2015) said they definitely or probably would attend the university. Only 14% in 2013 and 2015 said they would probably not or definitely not go to the university.

The PULSE Survey results, though, revealed one major issue likely to be of concern to university administrators. In 2013, 30% of students reported being very dissatisfied or dissatisfied with the administration’s responsiveness to student concerns, and that rate rose to 41% in 2015. Hence, these findings reveal that a sizable portion of the student population does not think the administration is addressing student concerns. One such example may well be student interest in increased indoor and outdoor recreation facilities. Specifically, in 2012, graduate students sent the administration a proposal highlighting the need for more indoor and outdoor recreation space; but two years later, nothing had been done to address these student concerns. Students often express their concerns to the director of the fitness centers, and those concerns are then passed along to higher-level university administrators. It is not surprising that academic issues take priority over student-service issues—especially at a highly competitive institution like the one that is the subject of the current study. An ancillary goal of this dissertation, then is to support for the premise that students’ total body wellness, through a centralized recreation facility, will positively impact student academic achievement as measured by, among other things, GPA, retention rate, and graduation rate.
Fitness Center Statistics

Currently, the study site has a total of roughly 90,000 square feet dedicated to indoor recreation for students, faculty, and staff. This space is spread across five fitness facilities in four locations across campus.

Facility one, located on the northern side of campus, was constructed in 1963 for women’s athletics but was transformed in the late 1990s to serve as a location for recreational activities for all students. This facility houses a two-court gymnasium, 25-yard pool, locker rooms, bowling alley, two dance spaces, a fitness center and office space for the majority of the recreation department staff.

Facility two and three, located on the south side of campus, are primarily athletic team facilities, but the recreation department has two spaces that serve as two different fitness centers—one for Olympic lifting and one for cardiovascular exercise. This location also has a dance space the recreation department uses for group fitness classes.

Facility four, located on the north side of campus across the street from facility one, houses a small fitness center used primarily for Physical Education classes and to take user load off of facility one during the evening busy hours.

Facility five, a smaller version of facility one and is located on the west side of campus, houses a fitness center, gymnasium, bouldering wall, three lounges, convenience store, dance studio and locker rooms.

To use the fitness facilities on campus students, faculty, and staff must purchase a fitness center membership. Membership includes access to the five fitness centers and all group-fitness classes on campus. This membership fee is $145 annually. All other recreation is free to students. Free recreation opportunities include the gymnasiums,
pools, locker rooms, running track, and table games. Students must have a student identification card in order to access all the facilities. The card reader at each facility detects whether students have a membership, are part of the campus community, and have an active card. Of the 14,000 undergraduate students, about 7,750 have bought a membership each year over the last five years (Tipping, 2014). This information indicates that the other 6,250 students do not have a fitness membership. (Many students choose off-campus—i.e., commercial—options in lieu of a fitness center membership. For instance, many students choose to pay a monthly fee of $45—or more—to work out at a variety of locally available off-campus gyms.

Although the research site lacks research and hard data about why students choose to travel to other facilities, rather than on-campus options, student complaints offer anecdotal evidence. Students report that other facilities are nicer and newer, have more cardiovascular machine options and more parking, are more spacious and offer more room to move between equipment. At the research site, over the last five years, student membership has fluctuated 3–4% (up or down) yearly: a consistent membership rate. Nevertheless, because of a number of funding and budget cuts have occurred since 2008, the recreation department has not been able to update their facilities to match or exceed the level of quality at many of the local facilities until the 2015-2016 school year. During this year, all five facilities were updated and participation increased rapidly. Over 60,900 more swipes into the fitness centers and group fitness classes were calculated than in the 2014-2015 school year. However, the upgrades did not allow for expansion. These renovations took place because of the new leadership overseeing the fitness facilities. The previous director would not spend the money to make the necessary upgrades.
Although the 90,000 total square feet of recreation-facility space for students, faculty, and staff may seem sizable, the 2009 Space Planning Guidelines for Campus Recreational Sports Facilities recommends 9,866 square feet per 1,000 students (Brown & Haines, 2009). Given that roughly 22,000 full-time students are enrolled at the university, it should provide more than 200,000 square feet of indoor recreation space if it is to comply with the 2009 Space Planning Guidelines.

Summary

With the lack of research in the field of campus recreation, data shows not only growth of collegiate recreation over the last 15 – 20 years, but also the need to invest in recreational facilities to meet student needs. Universities overlook the benefits that recreation departments bring to institutions. In the month of June 2015 —when classes were not in session—the recreation department’s website received just fewer than 50,000 views and in the 2015-2016 school year, the fitness centers had an increase in 60,000+ visits. Now is the time for institutions to understand the health and academic benefits that recreation departments bring to institutions and their students. Now is also the time for the administration to see the link between the communities that recreation departments provide for campus and to start utilizing that link. By understanding this link, students remain connected throughout their tenure at an institution. The current initiative to keep students busy during times when they are not focusing on academics should be focused on recreation and on a facility that will draw students to want to use it during these times. Currently, the Dean of Students Office is trying to facilitate late-night programs in a variety of locations. A new student recreation center could be large enough to house all
of those activities and other activities: club sports practices, intramural sports, group fitness, outdoor education, and several other large programs.
CHAPTER THREE: METHODOLOGY

Introduction

This quantitative study’s purpose was to evaluate how well a large, east coast Ivy League institution is supporting the well-being of its students through recreation services and how it compares to other institutions nationwide that participated in the 2015-2016 NASPA Consortium Survey. This format was chosen so the researcher could conduct a quantitative survey to gather primary data from a large portion of the current student population. This research will help the researcher to better understand how students utilize recreation services, what students expect and need from recreations services, and to provide an evidence-based solution for the development of more recreation space. The researcher used Campus Labs to administer the NASPA Consortium: Campus Recreation 2015-16 survey to 5,000 undergraduate (3,500) and graduate (1,500) students that were chosen at random. One thousand one hundred and seventy six students responded to the survey.

Baseline Assessment

Before this research, no assessment or research related to recreation within the institution had been completed. Currently, the university is facing $200,000,000 in deferred maintenance in several structures, including two recreation facilities (Dutcher, personal communication, January 15, 2016). These two facilities were built over 50 years ago: one building opened in 1954 and the other 1963. Because of growth at the university, the current recreation facilities are overcrowded during evening hours from 4pm to 8pm (Tipping, 2014). Frequently, students complain when they have to wait in line because the facilities have reached capacity. Furthermore, the university has about
90,000 square feet dedicated to indoor recreation for students, faculty, and staff (Adams, personal communication, February 20, 2016). The 2009 NIRSA Space Planning Guidelines for Campus Recreational Sports Facilities recommends 9,866 square feet per 1,000 students (Brown & Haines, 2009). Using these guidelines as a benchmark, the institution should have over 200,000 square feet of indoor recreation space.

**Research Question**

The following research questions guided this quantitative study:

1. How satisfied are students with the current recreation facilities?
2. How well do the existing campus recreation facilities meet the recreational needs of students?
3. How do the university’s students rank their recreation facilities compared to students at other institutions that participate in the NASPA Consortium?

This research study will help the university better understand student expectations, needs, and desires.

**Method**

The primary method of research was a quantitative online survey, administered through Campus Labs and disseminated during winter break and the start of the spring semester during the 2015 – 2016 academic year. The timing of dissemination for the survey was chosen because students would not have coursework and there were no other university surveys sent to students at that time.

The researcher conducted an online quantitative survey using Campus Labs for three reasons: the design of the tool enabled the researcher to use a commonly used valid
survey, the researcher could research more students with an online tool, and the tool preserved the anonymity of the participants.

The design of the tool allowed participants to answer the questions that pertained to them and their familiarity of the recreation programs and facilities on campus. The NASPA Consortium is “a series of national benchmarking studies designed in collaboration between Campus Labs, NASPA, and other professional organizations” (NASPA, 2016, p. 1). For this study, the campus recreation study was utilized. Participants did not have to answer questions they did not or could not answer. The survey also allowed participants to answer questions that have not been asked on their campus before—thus providing valuable information. Moreover, an online tool allowed the researcher to reach more participants—and thereby capture more opinions and more information—than would have been available had an in-person survey or if interviews been completed. Finally, an online survey allowed the researcher to have complete anonymity.

**Description of Participants**

The participants were chosen at random by the university registrar. The registrar then sent the researcher e-mail addresses for 5,000 students. Three thousand five hundred undergraduate and 1,500 graduate students were chosen to participate. This dispersion represents the ratio of the student population. Participants were asked via e-mail to participate in the study, but they did not have to participate. Of the recruited randomly chosen 5,000 students, 1,176 took the survey.
The demographic features—age, sex, ethnicity, class standing, enrollment status, residence, expected grade point average, and major—of the participants are typical of the demographic of the institution.

Age

Participants ranged from 17-45 years old, but 70% of participants were 18-22 years old.

Gender

Sixty percent of respondents were female, 39% were male, and 1% was other (transgender, preferred not to respond, gender nonconforming, or none).

Ethnicity

Four percent of respondents were African American, 30% respondents were Asian, 8% were Hispanic, >1% Native American, 50% were White, 4% were multiracial, 2% responded other, and 2% preferred not to respond.

Class standing

Twenty one percent of participants were freshmen, 17% were sophomore, 13% were junior, 17% were senior, and 31% were graduate or professional students.

Enrollment status

Less than 1% of survey respondents were less than fulltime students. Fulltime is considered 12 credits or more.

Residence

Forty-eight percent of respondents live on campus or in a Greek house; and 51% life off campus. One percent of respondents were studying abroad or in another program off campus.
Expected grade point average

The expected self-reported GPA of participants was primarily over a 3.0 (on a 4-point scale). Seventy percent of respondents expected a 3.5-4.0 GPA during the spring 2015-2016 semester, 26% expected a 3.0-3.4, and 4% expected below a 3.0.

Major

Respondents’ majors varied across the institution: 22% engineering, 2% architecture, 8% business, 6% computer science, 2% hospitality management, 4% industrial labor relations, 2% interdisciplinary, 5% liberal arts/humanities, 3% law, 2% mathematics, 17% physical sciences, 8% social sciences, >1% performing arts, 2% double majors, 2% vet medicine, 1% undecided, and 13% other.

Of the 1,175 responses, 79% currently use the recreation programs, facilities, and services, and 21% do not.

Data Collection Tools

All data was collected with the NASPA Consortium: Recreation and Wellness Benchmark. This assessment is sponsored by NIRSA and NASPA and is designed to assess “the impact of Campus Recreation offerings on student recruitment and retention, frequency of participation in various recreational opportunities, outcomes of participating in Campus Recreation opportunities, and recreational needs and interests. In addition to institution-specific data, the Campus Recreation Consortium Study provides comparison data for benchmarking with national averages and with peer campuses.” (NASPA Protocol, 2015, p. 3). The campus recreation survey was first offered in 2012-2013 academic year and it is schedule to be offered again during the 2018-2019 school year. During the 2015-2016 year, 31 institutions participated in the consortium.
The instrument was designed in three parts. Initially, NIRSA member and leader Juliette Moore, Director of Campus Recreation at University of Arizona, and a committee of NIRSA leaders from designed it in 2005. The survey was reviewed in 2009 by another NIRSA workgroup and modified based on statistical analysis and feedback from this workgroup. Finally, the survey was pilot tested with a sample of students to better understand the time needed to complete the survey, relevancy of questions and to ensure questions were easy to understand (NASPA Protocol, 2015).

The survey is a 137-question survey that allows institutions to adapt some questions to reflect their institution. For example, if the institution does not have Greek Life, those questions may be deleted, but most questions are un-editable. Each participating institution also has the option to add 10 additional questions. Before submission to the institutions IRB, the researcher had to submit a proposal and receive permission from the student and campus life division research team. In order to have approval from the divisional research team, the projected was blended with other planned research within the division so students did not receive two surveys: the additional 10 questions are related to sleep and body image.

The survey asks questions in seven different areas: demographic, participation, importance, facilities, programs, personal growth, university community, and the additional questions related to sleep and body image. All multiple choice questions were answered on either a three or five point Likert-type scale. The three point questions asked participants to answer from a range of definitely, somewhat, or not at all. The five point questions asked participants about their satisfaction or if they agreed with the statement. For example, questions relating to satisfaction asked if they were very
satisfied, somewhat satisfied, neither satisfied or dissatisfied, somewhat dissatisfied, or very dissatisfied. Questions related to agreement allowed participants to answer if they strongly agreed, somewhat agreed, neither agreed or disagreed, somewhat disagreed, or strongly disagreed. All questions also had a “No basis to judge” option.

Demographic

Demographic questions in the survey are an assortment of questions about age, ethnicity, residence, GPA, gender identification, participation on campus in other organizations, enrollment status, transfer status, major, and employment. There are a variety of questions that further explore student habits such as how many hours a week the student studies or how many hours a week the student works for pay.

Participation

The participation questions explore whether the student uses the recreation facilities on campus, or the facilities in the local community, or not at all. The questions probe which areas of recreation participants participate in—intramural sports, aquatics, fitness centers, outdoor education, group fitness, personal training, and open recreation—and how often.

Importance

The questions on importance focus on two areas: how important recreation is on campus—and how important recreation activities are to the students now and after they leave the institution.

The questions related to the importance of recreation on campus ask how important recreation participation was to the student when the student decided which
inclusion to enroll in—and whether to continue at the institution. For example, “How important were Campus Recreation facilities in your decision”?

The second set of questions related to importance asks how important recreation activities and programs are after the students leave the institution.

Facilities

The facilities-related questions ask the students their overall assessment about the current recreation facilities on campus and whether they are meeting the needs on campus. Moreover, facilities-related questions ask about how satisfied the students are with the equipment in the facilities and the current facilities themselves.

Programs

The questions related to the programs include how satisfied students are with available recreation programs and which types of programs the students participate in. These questions additionally explore whether the current programs meet the students’ needs.

Personal Growth

Personal growth questions ask whether the student has improved in a variety of personal-growth areas by using recreation facilities and attending recreation programs. Examples of areas of personal growth include problem solving skills, stress management, time management, communication, cooperation, leadership, and the ability to develop friendships.
Additional Questions

The 10 additional questions are related to sleep and body image. These questions will help the student health center better understand if either sleep or body image is a topic concerning which they should better educate students in the future.

Data Collection Procedures

The research took place over an 18-day period beginning at 3:00 p.m. on January 11th, 2016, and the survey closed at midnight on January 29th. These dates were chosen based on the recommendation from the director of assessment and planning at the institution. She believed more students would be likely to complete the survey because it began far enough after finals ended and the survey ended during the first week of the second semester of classes, when students were not yet loaded down with coursework (Meyerhoff, personal communication, December 15, 2015).

Students completed the survey at their leisure. All potential participants received a reminder e-mail to complete the survey on two occasions: seven days into the research and on the penultimate day of the survey. At the close of the survey, 1,176 students had participated.

Assumptions

Before gathering the data, the researcher hypothesized that survey respondents would report a need for more recreation space on campus. There are various complaints currently, and facility counts indicate that the space needs are greater than what is currently available. Nevertheless, because of the lack of previous research, it was hard to predict what the outcome would be.
Ethical Considerations

Research-related ethical considerations were taken into account in three forms: with the IRB, with participants, and with the researcher’s connection to the outcome of the research.

IRB

The researcher submitted all paperwork to both Creighton (Appendix A) and the research site’s IRB (Appendix B). IRB approval was received from Creighton and the participating university for the research. The research also had to be approved through the student and campus life research committee prior to the survey being sent.

Participants

All participants received an invitation e-mail to become active participants in the research. In order to begin the survey, all participants had to agree that they understood the risks of involvement in the research. The research was completed through Campus Labs. Campus Labs is an online platform that collects data, guarantees all confidentiality, and links the results to the strategic plan of the department that collects the research. The only way to know who completed any survey would be to ask their name on the survey. All research was 100% confidential.

Researcher

The researcher has a vested interest in the outcome of the research as the director of physical education and recreation. Due to the interest, the researcher determined that the NASPA Consortium was the best survey tool because it is a reputable widely used survey and the additional questions added were not related to the research. The survey allots the institution 10 additional questions that are the choice of the researcher. In order
to receive permission from the division research group, not all 10 of the additional questions are related to the researcher’s investigation but do not hinder the project. The researcher could not have changed the outcome of the research or swayed any students to answer questions in a way that would change the research.

Summary

In summary, the research was completed with ethical consideration and proper data collection procedures according to IRB policy. Five thousand students were invited to participate in the NASPA Consortium survey (137 questions survey with questions related to demographics, participation, importance, facilities, programs, personal growth, university community, sleep, and body image) to better understand the recreation needs and wants of students based off the three research questions the researcher was trying to answer. While only 1,176 students responded to the survey, the response rate showed a demographic distribution similar to the demographic makeup of the university.
CHAPTER FOUR: FINDINGS AND THE EVIDENCE-BASED SOLUTION

Introduction

The purpose of this quantitative study was to evaluate how well a large, east coast Ivy League institution is supporting the well-being of its students through recreation services and how the institution compares to other institutions nationwide that participated in the 2015 – 2016 NASPA Consortium Survey. The NASPA Consortium Benchmark Survey was used to research the needs and desires of current student students at the institution. To better understand what current students want and need from the recreation facilities and programs, the researcher used the following three research questions to guide this quantitative study:

1. How satisfied are students with the current recreation facilities?
2. How well do the existing campus recreation facilities meet the recreational needs of students?
3. How do the university’s students rank their recreation facilities compared to students at other institutions that participated in the NASPA Consortium?

The researcher used a quantitative research design that included a student survey, sent to 5,000 randomly chosen graduate and undergraduate students at the university. Moreover, as a benchmark point of comparison, the survey results at the research institution were compared to the results of the other 30 institutions that participated in the survey nationwide.

After analyzing the findings, the results revealed that overall; students at the institution are generally satisfied and recreation facilities and programs contribute to the quality of life at the institution. Although students believe that the existing indoor
facilities are at times overcrowded and lack space, they also recognize that recreation programs contribute to a better quality of life at the institution. Furthermore, students at the research site agree that the current facilities meet the students’ needs and that recreation participation increases their feeling of well-being, stress management, and overall health. The results indicate that although students may be generally satisfied with the existing recreation facilities and programs, those facilities and programs could be improved. The following chapter delineates these results.

**Purpose of the Study**

The purpose of this quantitative study was to evaluate how well a large, east coast Ivy League institution is supporting the well-being of its students through recreation services and how it compares to other institutions nationwide that participated in the 2015 – 2016 NASPA Consortium Survey.

**Aim of the Study**

The aim of this study was to provide evidence-based recommendations to improve indoor recreation needs of students that can be presented to the administration so students are provided recreation based on their needs and wants.

**Presentation of the Findings**

The findings of the research indicate that students are fulfilled with the current recreation facilities and programs, but improvements remain available in all areas. The data analysis was completed in Baseline, a subset of Campus Labs. Campus Labs is an online platform that is designed to collect student feedback (Campus Labs, 2016). Baseline is the portion of Campus Labs that administers the survey and analyzes the collected data.
The analysis took place in three stages. The first round of analysis took place after students from the research site completed the survey in January 2016. After analyzing the basic data, the researcher visually compared the number of times per week students use recreation facilities and their satisfaction with the current facilities. In late May 2016, the data for the other participating 30 institutions was released, which provided the researcher with access to the aggregate data for comparison from all other participating institutions.

The researcher then organized and analyzed the data to review three key questions to answer the three questions that govern this current study: How satisfied are students with the current recreation facilities? How well do the existing campus recreation facilities meet the recreational needs of students? And how do the university’s students rank their recreation facilities compared to students at other institutions that participated in the NASPA Consortium?

**Student Satisfaction with the Current Recreation Facilities**

To analyze student satisfaction with the researched institution’s current recreation facilities, the researcher reviewed the answers to several survey questions. These questions explore student satisfaction with fitness equipment quality, equipment availability, and facilities location.

**Satisfaction with equipment.** To assess students’ satisfaction with the current equipment at the research site, the researcher explored three areas: student satisfaction with cardio equipment, weight equipment, and free weights. Respondents were asked to rate their satisfaction based in a six option multiple choice question: very satisfied,
somewhat satisfied, neither satisfied or dissatisfied, somewhat dissatisfied, very
dissatisfied, and no basis to judge.

In total throughout the five indoor recreation sites, there are over 120 separate
cardio machines, including treadmills, rowing machines, AMTs, elliptical trainers,
upright bikes, and recumbent bikes. Overall, just over half of respondents are at least
somewhat satisfied with the amount of equipment—cardio machines, weight machines,
and free weights—in the facilities. Two thirds of students believe there are enough
machines. Specifically, 313 total students (n = 313) answered the question related to
satisfaction with equipment. Of the 313 respondents, 64.22% reported that they are very
or somewhat satisfied with the number of cardio machines in the fitness centers.
Additionally, 22.04% of students report that they are somewhat or very dissatisfied with
the number of cardio machines offered in the fitness centers, while the additional
respondents (15.74%), were neither satisfied nor dissatisfied or had no basis to judge.

When asked about their satisfaction with weight machines, 278 students total (n =
278) responded with respect to their satisfaction with the amount or weight (selectorized)
machines: 63.67% reported being very or somewhat satisfied, while 19.78% reported
being somewhat or very dissatisfied with the number of weight machines. Moreover,
16.55% had no basis to judge or were neither satisfied nor dissatisfied.

Of the 275 students that responded to satisfaction with free weights, the students’
response (n = 275) was similar: 66.18% of respondents indicated that they were very or
somewhat satisfied, and 21.82% of respondents indicated that they were very or
somewhat dissatisfied. The other 12% were neither satisfied nor dissatisfied or had no
basis to respond.
Satisfaction with equipment availability. In addition to reporting about their satisfaction concerning the amount of equipment available, students were asked if they strongly agreed, somewhat agreed, neither agreed or disagreed, somewhat disagreed, strongly disagreed, or had no basis to judge with the availability of fitness equipment when they want it available. A total of 351 students responded if they in relation to the availability of equipment. Just 50.14% of respondents reported that they strongly or somewhat agreed that the fitness equipment they wanted to use was available when they wanted it available. In turn, 32.76% of students somewhat or strongly disagreed that they had found the equipment available. This finding—namely, that roughly 1/3 of the students were somewhat or very dissatisfied with the availability of the equipment—is especially striking given that students are paying a fee to be a member and have equipment readily available to them when they come to the fitness center.

Furthermore, overcrowding is currently an issue at the research site. Between 5pm and 8pm at the research site, students are faced with lines to enter fitness center, gymnasiums and group fitness classes. Between 5pm and 8pm is when the highest percentage (37%) of students at the research site report using the recreation facilities. This is higher than the national average of 31% of students that use the facilities during the evening hours. This could be that the research site does not allow academic classes between 4pm and 7pm, which allows students time to use the recreation facilities. The second highest rated time at the research site (24%) and nationally (18%) is after 8pm. Students also reported in the open-ended questions their desire for more space and more equipment on campus. Because students’ academic rigor and lack of free time students have at the institution, they do not always have time to workout when the facilities are
not busy. The additional 17% were neither satisfied nor dissatisfied or had no basis to judge.

**Satisfaction with location of facilities.** The researcher wanted to better understand how students feel about the location of facilities. Because there are five locations in four different buildings, students do not have to walk far to be close to a facility. The researcher predicted students would be more satisfied with facilities spread across campus versus one central location. Respondents were asked to rate their satisfaction based in a six option multiple choice question: very satisfied, somewhat satisfied, neither satisfied or dissatisfied, somewhat dissatisfied, very dissatisfied, and no basis to judge. Among the survey responses, \((n = 96)\) 61.96% of students replied that they are very or somewhat satisfied with the current locations, while 22.01% reported they were somewhat or very dissatisfied with the locations. Oddly, the response rate to this question was quite low compared to other questions in this category, and the researcher does not believe it is a large enough sample size to be representative of the feeling of the entire student population. However, when asked in an open ended question any further comments, students did respond that they would like one central facility.

**Usage frequency and satisfaction with current facilities.** To dig further into the research, the researcher did a cross tabulation to compare respondents satisfaction and the amount of times a week students report using recreation sports, activities, and programs (Table 1). Students responses were broken into eight groups based on the amount of times they report using recreation offerings: 0 represents students who do not use facilities on average weekly, 1 — 7 is the number of times a week students report using recreation offerings and 7+ are students that use offerings more than 7 times a
CREATING COMMUNITY AT A LARGE IVY LEAGUE INSTITUTION

week. Additionally, the table displays how students answered on a Likert Scale as to whether students are very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, or very dissatisfied with the amount of current indoor recreation space. The researchers assumed that participants with higher participation rates would be more satisfied with recreation offerings, but Table 1 shows that there is no indication that higher usage equals more satisfaction with the amount of indoor recreation space.

Table 1

<table>
<thead>
<tr>
<th>Q11. On average, how many times per week do you participate in on-campus recreational sports, programs, and/or activities?</th>
<th>Very dissatisfied</th>
<th>Somewhat dissatisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Somewhat satisfied</th>
<th>Very satisfied</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.0%</td>
<td>17.9%</td>
<td>28.6%</td>
<td>25.0%</td>
<td>28.6%</td>
<td>28</td>
</tr>
<tr>
<td>1</td>
<td>1.5%</td>
<td>23.5%</td>
<td>26.5%</td>
<td>38.2%</td>
<td>10.3%</td>
<td>68</td>
</tr>
<tr>
<td>2</td>
<td>3.0%</td>
<td>15.2%</td>
<td>19.7%</td>
<td>28.8%</td>
<td>33.3%</td>
<td>66</td>
</tr>
<tr>
<td>3</td>
<td>10.3%</td>
<td>20.7%</td>
<td>20.7%</td>
<td>34.5%</td>
<td>13.8%</td>
<td>58</td>
</tr>
<tr>
<td>4</td>
<td>6.5%</td>
<td>15.2%</td>
<td>15.2%</td>
<td>41.3%</td>
<td>21.7%</td>
<td>46</td>
</tr>
<tr>
<td>5</td>
<td>8.6%</td>
<td>8.6%</td>
<td>11.4%</td>
<td>42.9%</td>
<td>28.6%</td>
<td>35</td>
</tr>
<tr>
<td>6</td>
<td>14.3%</td>
<td>0.0%</td>
<td>14.3%</td>
<td>14.3%</td>
<td>57.1%</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>7.7%</td>
<td>15.4%</td>
<td>15.4%</td>
<td>38.5%</td>
<td>23.1%</td>
<td>13</td>
</tr>
</tbody>
</table>

**Gender and satisfaction with current facilities.** In a similar comparison, the researcher assessed if there were any gender differences concerning whether recreation facilities and equipment met student needs. Table 2 shows that men and women do not report differently when answering if their needs are met.

Table 2

<table>
<thead>
<tr>
<th>Gender and Space Satisfaction</th>
<th>Q100. Please indicate your level of satisfaction with the following: - Amount of indoor recreation space on campus</th>
<th>Very dissatisfied</th>
<th>Somewhat dissatisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Somewhat satisfied</th>
<th>Very satisfied</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Row %</td>
<td>Row %</td>
<td>Row %</td>
<td>Row %</td>
<td>Row %</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>5.4%</td>
<td>17.2%</td>
<td>20.5%</td>
<td>34.6%</td>
<td>22.3%</td>
<td>332</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>7.1%</td>
<td>19.8%</td>
<td>20.6%</td>
<td>34.1%</td>
<td>18.3%</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>4.4%</td>
<td>14.8%</td>
<td>20.2%</td>
<td>35.5%</td>
<td>25.1%</td>
<td>203</td>
<td></td>
</tr>
</tbody>
</table>
Existing Campus Recreation Indoor Facilities and the Recreational Needs of Students

Over half of the population was very or somewhat satisfied with the amount of indoor recreation space currently on campus. Nevertheless, 382 students’ \( (n = 382) \) responded concerning their satisfaction with the amount of indoor recreation space and 56.93% were very or somewhat satisfied with the amount currently offered. Furthermore, 22.59% were somewhat or very unsatisfied with the amount of indoor recreation space, leaving a gap of 17.62% of students who reported that they were neither satisfied nor dissatisfied with the amount of indoor recreation space.

A Comparison of the Responses to the NASPA Consortium at the Research Site and Nationwide

With respect to student satisfaction and needs, the responses from students at the research site varied from those nationwide. Because of the lack of prior research at the research site, the researcher had offered no hypothesis related to how students would assess the value that recreation facilities, programs, and equipment contributes to students—and student life—at the research site. The researcher used four criteria to better understand how students report their recreation experiences. More specifically, students were asked to indicate their level of agreement with the following four statements:

1. Campus Recreation activities and programs contribute to the quality of life at this institution;

2. Overall, I would recommend Campus Recreation facilities, programs, and services to others;
3. From your participation in Campus Recreation, do you feel you have increased or improved your: - Stress management; and
4. From your participation in Campus Recreation, do you feel you have increased or improved your: - Overall health.

**Campus recreation activities and the quality of life at this institution.** With respect to student perception concerning the importance of campus recreation activities and programs relative to the quality of life on campus, the research site students are similar to students nationwide. Among the students at the research site ($n = 661$), 87.29% reported that they strongly or somewhat agree that recreation activities and programs contribute to the quality of life at the research site. Similarly, among students nationwide ($n = 18,971$), 85.67% strongly or somewhat agree that recreation programs and activities contribute to the quality of life on their campuses. These findings indicate that students at the research site believe, in line with similarly situated national campuses, that recreation programs and activities are beneficial to students on campus and that the recreation program contributes to student life on campus.

**Student endorsement.** With respect to whether they would recommend recreation programs and facilities to others, the average response from students nationwide is much higher than at the research site. Nationally, 88.72% of students ($n = 19,637$) strongly or somewhat agreed that they would recommend recreation facilities and programs to others. At the research site, 79.50% of students ($n = 678$) strongly or somewhat agree. This finding suggests that the recreation department at the research site has work to do so their students want to recommend the programs and facilities to others. Additionally, 38.23% of students at the research site responded that they strongly agree
they would recommend recreation programs and facilities while 56.44% of respondents nationwide reported that they would recommend recreation programs and facilities. Moreover, when students were asked what may impede their use of recreation facilities the top three responses were that the facilities are too crowded, the facilities are too spread out around campus, and that the times are inconvenient.

**Stress management.** Because of the focus on stress management at the research site, this data is essential to the study and the institution to better understand if recreation facilities and programs can assist. With regard to whether they feel that they have increased or improved their stress management from participating in recreation programs, 42.31% of the students ($n = 683$) at the research site reported that they definitely improved their stress management. Furthermore, 44.41% reported that using the recreation facilities somewhat helped them improve their stress management. In contrast, 48.34% of students ($n = 20,069$) nationwide reported that recreation definitely improved their stress management. Moreover, 38.41% of students nationwide reported that recreation programs somewhat increased their stress management. This research may be valuable to the mental health professionals on campus and testifies to the overall value that recreation brings to campus.

**Overall health.** With reverence to whether students feel that they have improved their overall health from participating in recreation programs, students at the research site and nationwide recognize a positive impact on their health from participating in recreation programs. At the research site, 90.86% of students ($n = 678$) reported that they somewhat or definitely believe recreation participation has improved their overall health. Nationwide, 92.66% of students ($n = 20,132$) report that recreation improves their overall
health. This finding is important for recreation research not only at the research site but also nationwide, given that campus recreation programs on some campuses may not be as valued as some of the other student-life departments.

All four questions analyzed display the importance students believe recreation departments bring to the research site and nationwide. Furthermore, this data shows senior administration that recreation program participants see an importance in recreation programs as it relates to their overall health and life on campus.

**Summary of the Study**

After reviewing all the data, students report that they are content with the current recreation facilities and programs, but there is room for improvement. Some areas of improvement include more cardio machines, better availability of equipment (more equipment), and satisfaction facilities. Areas where recreation programs and facilities are contributing to positive aspects on campus include stress management, health, and the quality of life at the institution. Furthermore, there is no correlation between the satisfaction of the facilities and the amount of time a student uses the facilities within a week. This shows that students are not necessarily using the facilities more often because they are happier with them. Additionally, when a comparison of men and women was analyzed to see if either gender reported if their recreation needs are met, both genders reported similarly. These results show that there are improvements, but recreation generally on campus is contributing to the campus and creating healthier students.

**Analysis and Synthesis of Findings**

A review of the NASPA Consortium Benchmark Survey data reveals that although students at the research site may be content with the current recreation facilities,
the students desire more. They want more space and equipment, and they want to have equipment available when they want to use it. Furthermore, the comparison of the research site findings to the national findings reveals that the research site’s students believe that recreation programs contribute to overall campus community, health, and well-being. The research site’s students similarly compared with students nationwide in relation to stress management, overall health, and the well-being recreation brings to campus. Additionally, students at the research site reported almost 10% less than students nationwide that they would recommend their campus recreation programs and facilities to others. By improving the facilities and providing students a place they want to recommend to others, the campus administrators from the research site should be able to improve students’ impression on recreation programs and facilities so they want to recommend them to other potential users.

The aim of this study is to provide evidence-based recommendations to improve indoor recreation needs of students. Survey responses from students at the research site have provided the evidence that, although the students are satisfied, they would like more indoor space and equipment.

**Summary**

The survey findings from students at the research site revealed their preference for additional recreation facility space and equipment. These survey findings and the students’ responses to follow-up questions indicate that the current amount of recreation facility space is inadequate and that students would like to have the problem remedied. Additionally, students reported they feel better overall when using fitness facilities. On a
campus in which university administrators are justifiably concerned with student mental health the administration needs to listen to students wants and needs.

Perhaps the most viable solution to the lack of space is construction of a larger recreation facility. A larger facility could meet student needs and enable them to build a community where students feel they belong. While that is an option, more research needs to be conducted with more non-user responses and additional questions to users. A new facility will be a vast undertaking, and should not be the solution until more research is completed. The financial constraints will be the biggest challenge, but the university may be able to leverage its current resources to focus on what is best for the students, namely through the development of a large, centralized recreation facility.
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

Introduction

This research project is the first of its kind for the institution. Student responses to the NASPA Consortium survey indicate that although the students are generally content with the current recreation facilities, students believe that existing facilities are over-crowded and that more indoor recreation space is needed. Additionally, the research illustrates the value recreation facilities bring to students and student life on campus—by contributing to the students’ quality of life on campus, reducing stress, enhancing their overall feeling of wellbeing, and improving students’ academic performance and overall health.

Unfortunately, in the former president’s parting speech in 2015, he discussed that the institution has built too many buildings across campus over the last 10 years that are not paid off. Until the recent construction and deferred maintenance situation improves, no new construction will occur without full funding before breaking ground.

Purpose of the Study

The purpose of this quantitative study was to evaluate how well a large, east coast Ivy League institution supports the well-being of its students through recreation services and how it compares to other institutions nationwide that participated in the 2015 – 2016 NASPA Consortium Survey.

Aim of the Study

The aim of this study was to provide evidence-based recommendations to improve indoor recreation needs of students, recommendations that can be presented to
the administration so that students are provided recreation facilities and programs that best meet the students’ needs and wants.

Summary of the Study

The study explored students’ recreation needs at a central New York Ivy League institution. The study used the 137-question NASPA Campus Recreation Consortium survey, which is designed to explore student satisfaction with recreation facilities and programs on their campus. The consortium is open for all institutions to participate in, but in 2015 – 2016, 31 institutions participated, including the research site. At the research site, 5,000 students were surveyed and 1,176 students completed at least a portion of the survey. As the first on-campus research designed to explore student satisfaction in relation to recreation programs and facilities at the institution, the current study was designed to better understand what students want out of recreation facilities and what the recreation department can do to improve the current facilities. Furthermore, the institution can better understand the physical and mental benefits students receive from using the facilities. The survey findings revealed that recreation programs and facilities provide a benefit to student life on campus, physically, and mentally, but there currently could be more indoor recreation space and equipment. There is room for growth at the research site to increase the amount of students that would recommend recreation facilities, programs, and services to others.

Proposed Solution

The results indicate that students are content with the current facilities, but agree that there is room for improvement. The proposed solution is for more research to be conducted to have a better understanding of students’ needs and wants. The research
needs to be conducted with three purposes: to better understand non-users of campus recreation facilities and programs, to have a higher response rate to each question related to satisfaction and wellness, and to conduct additional research with current recreation facilities users.

To better understand the needs and wants of non-users, research needs to target non-users or users that use the facilities less than once a month. Additionally, this research needs to help better understand why non-users do not use the facilities and what may make them want to use the facilities. Questions should be related to facility space, availability, equipment, programs offered, mental and physical benefits, and location.

The research with the non-users may be completed with the NASPA survey, but if it is used again participants need to better understand the purpose of the survey and why it is important for them to answer all the questions. However, for better results another survey may be designed that is shorter and requires answers to all questions. A new survey may also allow a researcher to ask questions that the NASPA survey does not ask related to non-users and mental health and well-being.

Moreover, further research needs to be completed with users and having a better response rate to all questions on the survey tool used. One option may be to do a survey for users and non-users that takes the participants to questions based on their responses. For example, non-users would be directed to questions about why they do not use facilities and what would make them want to use them while users would be asked questions related to the current facilities and what they like and do not like about them, as well as what benefits they feel physically and mentally from using the facilities.
Should future research with non-users and additional research with current users reveal the need for improvements, the researcher recommends a new facility with large enough to meet student needs that will provide more space to expand programs and allow more students to be active at the same time. The proceeding information gives the researcher and the recreation department further information they can use to prepare if the additional research indicates a new facility is desired. The researcher recommends that the new larger facility be built on the northern portion of campus with adequate transportation and parking for users. The two facilities on central campus and one on west campus may remain open to continue to assist in needs in these areas of campus, or they can be transformed to something beneficial to students. The two locations already on the north side of campus will no longer be recreation facilities. Combined, all facilities—i.e., the existing five facilities and the potential new facility—needs to offer students the suggested 200,000 square feet of indoor recreation space on campus that the ACSM guidelines suggest would be appropriate for the university population of roughly 22,000.

In a recent conversation with the Vice President of Student and Campus Life, he discussed the importance of a new recreation facility and his commitment to supporting the project when the institution is in a better place financially.

Support from Data

The data was not conclusive enough in this research to recommend a new facility at this time. If further research does show more support a new recreation facility, existing facilities across the country (Henchy, 2011) can serve as a model and provided students with a sense of community and improve student well-being while reducing costs.
Sense of Community

A new recreation facility can provide a sense of community for students at the institution. Currently, with five recreation sites across campus, students do not have the same community building opportunity as they would with one location. Tinto’s research (1975) describes that students who feel a sense of community are more likely to finish their undergraduate degree. While only 60% of respondents at the research site definitely or somewhat agree that recreation facilities contribute to their sense of community, perhaps they would have a greater sense if there was one central recreation facility on campus.

Across the country, research on SRCs is verifying that community is built in their central recreation facility. Henchy’s (2011) research reveals that 34% of students felt their sense of belonging strongly or moderately improved from participating in all planned recreational activities. A study conducted by Watson, Ayers, Zizzi, and Noel (2006) shows that 64.4% of SRC users felt more at home on campus than non-users, and 41.4% reported that the SRC helped them make friends. Similarly, at the researched institution 77% of students who use the recreation facilities feel part of a community. The latest PULSE survey at the university where the research took place shows that 24% of students do not have a place where they feel they belong. If the university administrators eventually build a larger, more centralized facility students will have the opportunity to begin their academic life with a place they feel they belong on campus near their residence.
Improved Well-being

The university currently has a focus on mental health and well-being. A new health center is being constructed to have additional space for mental health operations and there is an initiative across campus to improve mental health and well-being. Students reported in the NASPA Consortium that recreation programs contribute to well-being and the quality of life at the research institution. Nationwide, SRCs are proving to be beneficial for students’ mental and physical well-being. For example, Ratey’s (2013) research explains how exercise releases serotonin, dopamine, and epinephrine—all of which are important for thoughts and emotions.

Ratey’s research directly relates the benefits of exercise for health, learning, stress, anxiety, depression, attention deficit, and addiction. Furthermore, if students participate in physical activity, they should also experience not only the physical benefits but also the mental benefits. In addition, research dating back over 20 years reports that students who participate in recreational sports while in college consume less alcohol and have better physical fitness, strength, well-being, and stress management (Haines, 2001; Kanters, 2000). While there is a lack of research within university recreation, a growing number of studies provide evidence that suggests that physical well-being results in better mental well-being (Astin, 1993; Haines, 2001; Kanters, 2000; Downs & Kerr, 2002)—starting with Ratey’s (2013) research. This research adds to this growing body of literature with the finding that students believe that by participating in recreation activities they have improved quality of life on campus, stress reduction, feeling of well-being, and overall health.
Reduced Costs

A new recreation facility would reduce costs in student staffing, technology, and utilities. Currently, three of five facilities are over 50 years old. The utilities in the three older facilities are outdated and not as cost effective as current technology. Technology costs can be reduced because if an all-inclusive facility is constructed fewer computers would be needed for members to swipe in, less wifi and data ports are necessary, and the department would not need card swipes in satellite group fitness locations that now have hand held swipe machines.

Another place where costs would be reduced is in student staff. Currently, a minimum of 11 student staff is required to work in the facilities at access points. This number does not include additional programs or group fitness access points. A new facility would only require a minimum of two students at a time in the facility for access. Over the school year, fewer students would save professional staff time in hiring—because less students would be hired, scheduled, and disciplined—and the cost of paying extra students.

Existing Support Structure and Resources

Fortunately, a new recreation facility has been talked about with upper administration and the recreation department for over 20 years. During the North Campus Housing project, the drawings for a major renovation to the current large facility on North Campus was completed and planned if the funding was available. Unfortunately, the funds were not available.

A key supporter is the Vice President of Student and Campus Life. In a recent conversation he discussed his commitment to a new large recreation facility.
Furthermore, he has some ideas that may potentially help progress the project (Lombardi, personal communication, June 6, 2016). Additionally, he noted that when the current deferred maintenance is under control he will explore options for funding a recreation facility.

**Potential Barriers and Obstacles to Proposed Solution**

Before a new recreation facility can be constructed, a chief obstacle needs to be overcome: namely, financing. The former Director of Recreation Services believes that a new recreation facility is unlikely to be constructed unless a student fee is levied. Without funding, recreation will not be a priority and will not supersede funding that can be used to construct academic facilities (Dutcher, personal communication, March 20, 2014).

A student fee requires a vote from the Student Assembly (SA) or a directive from the Board of Trustees. Neither is likely, given that a new $350 fee was levied during the 2015 – 2016 school year for the renovations to the university’s health center. In the history of the institution, this fee is the first students have been assessed that students do not have control over. Additionally, students pay two costs at the institution: tuition and the student activity fee that the SA agrees upon (Division of Financial Affairs, 2016). The newly implemented fee caused multiple student demonstrations and student disruptions at several Trustee events. Given how recently the health-facility fee was instituted, now is not the ideal time to impose a new fee on students. Furthermore, current students who will not have the opportunity to use a new facility are unlikely to be eager to pay for the construction.
A new facility is unlikely to be constructed without a major donor (or group of donors) willing to contribute at least $50 million (Dutcher, personal communication, March 20, 2014). The university will not financially support a new facility on campus until the facilities built in the last 10 years are paid off. Very few buildings built on campus since 2001 have been paid for (Dutcher, personal communication, March 20, 2014). The university continued to build without complete financial support from donors or internal funds. Until these facilities are paid off or money is donated directly for a recreation facility, a new recreation construction project is unlikely to be approved or begun. Former Vice President for Student Services said that she would support a new recreation facility and her response was “if the money is donated” (Murphy, personal communication, November 4, 2014). Fortunately, in conversation with the new Vice President, he is more willing to discuss an imposed fee and he is willing to work on finding donors for a recreation facility.

**Issues Related to a New Facility**

Three issues of building a new facility include facility parking, facility location, and facility adjustments. Additionally, a new all-inclusive recreation facility was schedule to be built before the 2008 recession. A new facility is in the long-term plan at the institution and the site has been decided and consulting work has been completed, but until the funding for the facility is in place, it will not be built. Furthermore, because consulting work was done 10 years ago, consultants would have to be hired again to update the original renderings.
Parking

Two parking challenges to consider before a new facility is constructed are the amount of spaces and loss of parking. First, if a new facility is built, it would be built on space that is currently a large residential parking lot. This parking lot makes the university money with little overhead (Brady, personal communication, May 12, 2015). Second, if a facility is built, parking will be necessary for patrons and there is not extra space for parking. The construction of a new recreation facility would prompt the demolition of the current largest recreation facility. The old facility is four blocks from the proposed site of a new facility and adjacent to the intramural fields. The location of the current facility could be renovated and turned into parking or a parking garage. The current recreation facility location is closer to central campus, where most faculty and staff work, and therefore transportation can charge more for those parking spaces to cover the cost of moving the lot. If a garage is built, hundreds of spots can be added which in turn would increase revenue.

Location

The university is a sprawling campus reaching over a mile and a half at some points and the designated spot for a larger facility is on one side of campus. One larger facility with the additional satellites that currently exist may cause overcrowding in the two locations closer to central campus. To alleviate the issue, public transportation and convenient parking at the facility will have to be an option. This location is on the side of campus and has more space surrounding the site versus main campus where there is no extra space. Additionally, there are bus stops and a large parking lot adjacent to the facility.
Facility Adjustments

As with any new construction, there will be issues with the facility during and after the facility is going through its settling phase. The ideal way to avoid facility issues would be to hire an experienced architect who has designed recreation facilities at other universities or colleges, an architect who would work with the university to meet student needs. It is essential the facility is constructed to meet the needs of participants during construction to avoid issues and pieces of the project should not be value engineered out of the initial plan. An engineer without recreation experience designed the satellite recreation facility that opened in 2007, and the lack of experience in design created several issues that the facility administrators are still dealing with today. For example, two months after the facility opened, 60,000 gallons of water leaked onto the gym floor from a flood that came from the convenience store. This leak caused the gym to be closed for two months while the floor was replaced, which cause a presidential dinner and trustee dinner to have to find different locations with short notice. Another example is the construction of a weight room over a dance studio. The ceiling in the dance studio had to be reconstructed because it started falling down due to dropping weights shaking the ceiling tiles.

Change Theory

Lewin’s Change Theory relates to the recreation center project because the transition would have to happen in the three stages Lewin discusses: unfreezing, change, and refreezing. This dissertation has helped the research better understand what would need to take place in each step. During the unfreezing process a lot of preparation would need to go into the planning, prior to construction of a new facility. There would be
groups—Trustees, parking, and the upper administration—that would need to be fully support the project prior to planning within the department itself and a design team. Once that support is in place, there is a plethora of planning that would take place with construction management teams, the recreation staff, and the design team before the change begins.

Once the unfreezing stage is complete the change would begin. In this case it would be construction of a new facility and putting the recreation programs and staff in place as construction comes to an end. At completion, the refreezing stage would begin and the recreation team would seek stability in their daily routine after the change.

**Implementation of Solution Processes and Considerations**

The implementation process to build a new facility would take years to plan and execute. The following four steps will be necessary for the implementation: support from the student body, support from the administration, financial support, and/or the current facilities being condemned. The current main recreation facility where the largest facilities are located is on the list to go offline at the university within 10 years (Dutcher, 2013). A large portion of deferred maintenance in the department is in the current facility, and it is more costly to make improvements than to build a new facility. Furthermore, the university will be forced to find another option for indoor recreation space if a new facility is not built. Currently, discussions are taking place to move forward, and the new Vice President of Student and Campus Life is working with the author of this study to move the project forward. The university, which began the 2015-2016 school year with a new president, provost and, Vice President of Student and Campus Life, it is going through several changes by restructuring other areas of the
division. Because of these changes, recreation will not be a priority until the financial state of the institution improves, which will optimistically be within five years.

**Roles of Key Players in Implementation**

The key players in implementation include the students, Trustees, alumni and potential donors, Vice President of Student and Campus Life, faculty/staff, the local community, parents, the varsity swim teams, the Director of Athletics, and the Director of Recreation.

Students are one of the biggest stakeholders in implementation. If current students started a referendum or rally for a new facility the senior administration would be more likely to push the project forward sooner. Students can be a driving factor, but a challenge is that many students do not know the potential facility they could have on campus. Additionally, if a large facility was constructed, sport clubs and student groups would be allowed to hold practice and group meetings in the facility and currently student groups are not allowed to reserve gymnasium space for club practices or events.

Ground will not break on a facility without approval from the Board of Trustees. Due to the financial issues on campus, it is not likely Trustees are going to approve or buy-in to a new facility without full funding, or a proposed funding option that does not cost the university anything. The other option is a student referendum for a student fee that would cover the costs of the facility and operations in the facility. Which also makes alumni or other potential donors stakeholders in the project as well. Potentially, a donor would come from the vast alumni base at the institution or another donor that is interested in student health.
The Vice President’s commitment is necessary to support the project financially and ensure that it remains a priority as it competes for approval and funding along with other potential construction projects. The Athletic Director’s support is vital, given that he serves as the department head that oversees campus recreation. The Athletic Director would have to prioritize recreation—along with or above—other capital projects and help with fundraising to complete the construction. It is unlikely that the Athletic Director will prioritize recreation facilities because he has priorities building facilities that would benefit the athletic teams before recreation. Finally, the Recreation Director would have the role of promoting the new facility construction and working with architects and other professionals in the field of recreation to design and prepare for a new facility.

Faculty and staff are stakeholders in two ways: many use the current facilities and faculty and staff may have a different interest in construction than recreation. Currently, over 4,000 faculty and staff (McKinney, personal communication, September 15, 2016) have memberships to use the recreation facilities on campus. These faculty and staff may be opposed to one location or happy to have a new and nicer place to workout. Moreover, faculty and staff from other departments may think the money should go toward academic construction or construction to benefit students in other ways. Furthermore, the facilities department on campus is already busy with the deferred maintenance on campus and design and construction of a new facility of this size adds more work to their already very busy load.

The local community has a vested interest in a new facility as it would bring more commerce to the city during construction and potentially after if there are events hosted in the facility for students from other institutions.
Another potential stakeholder is parents. Parents have a vested interest in their child’s health and wellness and a new facility may help keep their child healthier, happier and provide a place on campus where their child finds a community or a student job.

If a new facility was constructed, a new pool would be built and the varsity men’s and women’s swim teams would want to be housed in the facility and have input in the construction and design of the new space. Furthermore, a new pool could help both teams in recruiting better swimmers.

Aligning the Athletic Director with the Vice President and Recreation Director will be the most challenging task. Whereas, the Vice President of Student and Campus Life and the Recreation Director focus on the campus experience for all students, the Athletic Director focuses on athletic teams and their success. Recreation would have to be a priority for him if this project is going to move forward. In the current situation, he is likely to support the project only if all the funding is coming from outside the athletic department (Noel, 2013). However, in a conversation with the new Vice President of Student and Campus Life in June 2016, he indicated that a new facility on the north side of campus is a priority of his. Because of the university has not earmarked the funds for the sort of major capital investment that a project of this scope needs, it would be difficult to get this project moving forward without a donor. The Vice President of Student and Campus Life indicated that it will likely be five plus years to get the project moving forward.

**Leader’s Role in Implementing Proposed Solution**

The leader’s role is to advocate for further research to better understand the recreation needs of non-users and potentially additional research that may arise from
responses to non-users responses. Additionally, more research needs to be conducted that has a higher response rate.

If the additional research suggests a new facility, the leader’s role is to advocate for the construction of a new facility and find all supporting information to bring forward to support the approval for the project. Considerations that would need to be made while planning a new facility include the impact on campus, the impact to the current recreation team, the impact on the recreation department and on the campus after the construction is completed.

The leader needs to be robust and resilient to push the project forward. Because the senior administration is resistant to change across campus, the department and the leader would face several individuals who would challenge the project. The leader may also face challenges because several retirements have happened in the last year and have continued at the end of the 2015 – 2016 school year. The loss of this institutional knowledge and understanding may be a disadvantage to progression if the new administration is not focused on student needs and does not recognize the value of improving the recreation facilities.

The leader needs to ensure the construction project is done the correct way or there may be potential problems in the future. This project, which may be a long time in the making, needs to be planned and executed correctly. If the leader does not demand the facility is built correctly, the leader would spend years dealing with issues within the facility that could have been prevented. For example, in one of the current facilities, the weight room was built on the second floor and the ceiling under that room had to be replaced after the first year of operation due to the ceiling tiles falling out because of the
shaking from weights being dropped constantly. This is an example of why an architect that has built recreation facilities needs to do the project. These same considerations need to be taken into account with timing of a new facility. The leader cannot allow a new facility if the recreation department does not have the financial or staffing support it will need to run a new facility. The leader will be challenged to approach the project with the persistence it would need to be done correctly, but if it is done correctly the outcome would be better for the students and campus community.

**Evaluation and Timeline for Implementation and Assessment**

A feasible timeline for implementation of more research is within six months. This allows for two to three months of preparation of a survey, the IRB approval, the research committee approval, and potential challenges that may arise during preparation. After preparation has taken place, research should be able to be completed and analyzed within the next month. However, if a new facility is suggested in further research, that implementation process would be another five years in the future. It would take one to two years for approval to move forward with a new facility and secure funding. After the appropriate university administrators approve the initiative and secure funding for this capital project, it would take an added year of planning before construction can begin. The construction phase would take an additional year after planning and finally a new facility would be opened. This timeline, which is similar to the timelines for other recreation facility construction projects nationally and it allows enough planning and approval time before construction commences (Fives, personal communication, November 6, 2013).
One year after the facility opens, the researcher should use the NASPA Campus Recreation Consortium Survey to assess if students’ report differently than the 2015—2016 Survey.

**Convincing Others to Support the Proposed Solution**

For the project to move forward, buy-in would have to come from the President and Vice President of Student and Campus Life. Because the Athletic Director is unlikely to make recreation a priority, the leader can best avoid obstacles along the way by having the support of university administrators who rank higher than the Athletic Director. Research and students voicing their desire for a new facility would be the best way to display the need and want for a larger facility.

To be successful, the leader needs to be aware of the priorities of the university president. Buy-in from the president can guarantee that the project will go forward. Findings from the student responses to the NASPA Consortium Survey and follow-up research will be the key to demonstrate to stakeholders—donors, trustees, and upper administration—the need of the project.

**Critical Pieces Needed for Implementation and Assessment**

The two critical pieces needed for implementation are administration buy-in and funds. The two can go hand-in-hand if the Board of Trustees supports the initiative—Trustees would have to buy-in to the project and help approve the funds. Without their support, the leader would need to have support from all other groups discussed above. In order to get buy-in from the Trustees, the Director of Recreation would have to work with the Vice President of Student and Campus Life. The Vice President has the ear of
Trustees and he can introduce the idea for a new project during Trustee Council Meetings.

Funds are not likely to come from the university, so it would be critical to have a major donor—most likely a Trustee, other alumnus, or outside donor—who is willing to underwrite (or support a large portion of) the project. Financial support would accelerate the process; without external funding, the project is unlikely to move forward.

**Internal Implications for the Organization**

Internal implications for the project include finances, personnel, and student issues. Currently, facility budgets are based on membership. Students who want to be a member of the fitness centers pay a fee to the department. The recreation department has control over this fee and can raise the fee to make sure the department has the financial support the department needs to not go over budget. It is possible that the university would control the finances with a university implemented student fee (to all students) if a facility is built, and the recreation department may not have the ability as it currently does to change the fee when necessary. Without financial support controlled by the department, programs and facilities may deteriorate. For example, the intramural program has been allocated the same amount of money for the last ten years even though wages and equipment costs have risen. The intramural department has had to make budget cuts for the program to survive.

Personnel would also be a challenge. The current staff is already overworked. Adding a construction project, which would add more work and additional space would create more work. For example, there is only enough space for 95 group fitness classes with the current facilities. If a new facility opens, potentially 20 more classes may be
offered because of the additional space available. Furthermore, there is not enough fulltime staff to grow the program more than its current state (Dutcher, personal communication, March 20, 2014). More staff would need to be hired to assist with the growth.

Student issues will arise with the implementation of a new facility. Students, as with the administration, do not adapt well with change on campus. For example, when facilities have been closed for renovations, students complained they had to walk to another site further from their residence. Additionally, when the pool was closed for three months and users had to use the pool on the north side of campus instead of central campus users complained. If the recreation facilities currently located on the north side of campus is closed (or demolished) and a new one built on a site further from main campus, students may complain unless there is good transportation or parking. The new facility would offer enough space that students do not have to wait for a machine, more indoor recreation courts (basketball, volleyball, and badminton), more dance studio space, and an Olympic size pool. Students should not be unhappy with a commute across campus, but the student body turns over every four years and none of the student body will remember what facilities were like prior to the new facility. Proper parking and bus transportation should help ease the challenge getting to the facility.

None of the internal implications should cause alarm or detour construction of a new facility. All three topics can be worked out with proper planning and execution of the new construction.
External Implications for the Organization

The only external implication would be community members and organizations wanting to use the facility. The university has an agreement with the city that it would not allow community members unaffiliated with the university to the current recreation programs and this agreement will continue. However, the recreation department would allow outside organizations to rent portions of their facility for special events during school intersessions.

Evaluation Cycle

Evaluation would take place at several different stages. As a whole, students on the PULSE Survey that students complete before graduation would evaluate the recreation program. Internal evaluation would take place as programs turn over within each department under recreation: group fitness, intramurals, personal training, and facilities. For example, intramural sports would have evaluation after every sport season. It is vital for their department to get participant feedback as the season ends versus once a year. Other programs would have ongoing evaluation for participants, and staff would be evaluated once a year in all areas. The NASPA Campus Recreation Consortium Benchmark Survey would also be administered bi-yearly.

Recommendations for Further Research

Further research about recreation and programs as a whole at the university is vital. The institution needs to focus on recreation and how it benefits students physically, mentally and in life after college. Additionally, a comparison of users versus non-users and more research focused on non-users related to their recreation needs would be beneficial to the future of the institution and their recreation facilities and programs.
Physical fitness is only growing and it is important for the university to understand what the needs and wants of their population are. Furthermore, by keeping students physically healthy, it may reduce visits to the medical center. As discussed, mental health is a priority and there is research that connects recreation facility participation and a reduction in mental health issues (Ratey, 2013; Haines, 2001). By adding questions to the PULSE Survey related to recreation satisfaction and to other surveys sent by the health center, the university can gain more data related to the benefits students are receiving from participating in physical activity. Additionally, the institution is a place for students to prepare for life after college. Continuing research should be happening to ensure we are preparing students to live a healthy life when they begin their careers.

The university constantly has research projects and surveys through the research office and the health services office. The researchers at the institution need to be prioritizing physical health research and at the least add some questions to the research that is already taking place. A research project that offers a comparison of recreation users versus non-users can may offer a different perspective from the current study. Furthermore, research focused on non-users can help the institution better understand the needs and wants of non-users and why they are not choosing to take part in recreation programs. The research should focus on why non-users are not using the facilities, what would make them want to use facilities, and their perception of recreation on campus.

Summary

This research project was the NASPA Campus Recreation Benchmark Consortium Survey. The survey is intended to enable university administrators to better
understand the recreation needs of students at an Ivy League institution. The findings revealed that students have a desire and need for additional recreation space and equipment—and demonstrated that students feel better physically and mentally when they participate in recreation activities. The researcher proposes that more research takes place with non-users and additional research with higher response from students. Moreover, the current recreation department should look at the process of building a new facility to prepare in the event it is the desired outcome of the research.

This research is beneficial to the other Ivy League recreation departments that face the same challenges of lack of funding and support from the administration. Previous research across the field of recreation indicates that although students may not attend an institution because of its recreation facilities, adequate facilities are necessary to meet students’ needs.
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Appendix A

IRB Approval from Creighton University

Social Behavioral Institutional Review Board
2500 California Plaza - Omaha, Nebraska 68178
phone: 402.280.2126 • fax: 402.280.4766 • email: irb@creighton.edu

DATE: April 22, 2016
TO: Jennifer Guraz, MS
FROM: Creighton University IRB-02 Social Behavioral
PROJECT TITLE: [771700-3] Fitness Center Feedback Research Project
REFERENCE #: Exempt 2/3
SUBMISSION TYPE: Amendment/Modification
ACTION: APPROVED
EFFECTIVE DATE: April 22, 2016

Thank you for your submission of Amendment/Modification materials for this project. The following documents have been reviewed as part of this submission:

- Amendment/Modification - Campus Recreation Benchmarking Student Survey with edits.docx (UPDATED: 04/21/2016)
- Amendment/Modification - Different survey (UPDATED: 04/21/2016)

The survey is approved for use.

If you have any questions, please contact Christine Scheuring at 402-280-3364 or christinescheuring@creighton.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Creighton University IRB-02 Social Behavioral's records.
Appendix B

IRB Approval from Research Institution

Institutional Review Board for Human Participants

Concurrence of Exemption

To: Jennifer Gudaz

From: Amita Verma, Director, ORIA

Approval Date: October 27, 2015

Protocol ID#: 1505005607

Protocol Title: Fitness Center Feedback Research Project

Your request for the following change(s)/modification(s) to the protocol referenced above has been approved:

- Revisions to survey.

Your protocol continues to be eligible for Exemption from IRB Review according to Cornell IRB Policy #2 and under paragraph 2 of the Department of Health and Human Services Code of Federal Regulations 45 CFR 46.101(b).

Please note the following:

- Investigators are responsible for ensuring that the welfare of research subjects is protected and that methods used and information provided to gain participant consent are appropriate to the activity. Please familiarize yourself with and conduct the research in accordance with the ethical standards of the Belmont Report (http://www.hhs.gov/ohrp/policy/belmont.html).
- Investigators are responsible for notifying the IRB office of changes or amendments to the protocol and acquiring approval or concurrence BEFORE their implementation.
- Progress reports or requests for continuation of approval are not required for this study.

For questions related to this application or for IRB review procedures, please contact the IRB office at irbexemptions@cornell.edu or 254-5162. Visit the IRB website at www.irb.cornell.edu for policies, procedures, FAQs, forms, and other helpful information about Cornell’s Human Participant Research Program.

Please download the latest forms from the IRB website www.irb.cornell.edu/forms/ for each submission.