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Student involvement theory: patterns of sport club participation at Rowan University

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**STUDENT INVOLVEMENT THEORY: PATTERNS OF SPORT CLUB
PARTICIPATION AT ROWAN UNIVERSITY**

by
Brian L. Stelzer

A Thesis

Submitted to the
Department of Educational Services, Administration, and Higher Education
College of Education
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For the degree of
Master of Arts in Higher Education Administration
at
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Thesis Chair: Burton R. Sisco, Ed.D.

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ABSTRACT

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STUDENT INVOLVEMENT THEORY: PATTERNS OF SPORT CLUB
PARTICIPATION AT ROWAN UNIVERSITY
2011/12

Burton R. Sisco, Ed.D.
Master of the Arts in Higher Education Administration

The purpose of the study was to examine patterns of involvement relating to the sport club student athletes during the 2011/12 academic year at Rowan University. The study also sought to examine how this involvement affected attitudes of students toward various aspects of campus. Survey responses were analyzed to determine frequency, mean, standard deviation, percentages and correlations between demographics and reported involvement activities.

The study examined the similarities between club sports, varsity athletics, and student government involvement at Rowan University. The findings suggested that students involved in sport clubs chose other physical activities, such as exercising and intramural athletics, as their primary involvement activities. Involvement also influenced their attitudes toward campus environment and showed some significant correlations between the specific involvement activities and the reported demographics, such as gender and involvement in residence hall activities and intramural athletics. The findings did support previous research on involvement theory and campus recreation.

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Chapter I

Introduction

As college environments continue to change and develop programs that supplement classroom experiences administrators and organizational governance require increased justification and assessment of these programs. Studies on student involvement have shown correlations between student intellectual development, student achievement, and student social development (Astin, 1984; Chen, 2002; Emerick, 2005; Jamelske, 2009; Pepper, 2009; Wever, 2003). These studies have provided insight into possible practices to aid college student development through student affairs and other non-academic areas of a university.

As student affairs professionals continue to seek improvements to current practices and adjust to new research, emphasis continues to be placed on the student experience. Determining significant patterns of involvement could aid higher education professionals in their attempt to improve college student retention and achievement. Prior research supported the implementation of involvement centered curriculum, and more research should be done to determine which patterns of involvement should be utilized and reinforced.

Statement of the Problem

While student involvement theory and assessment are not new to higher education, some areas of programming and student development still have not been fully researched. Research supports the student involvement theory and correlations between

social development and athletic involvement (Astin, 1998). Additionally, student involvement in campus recreation adds to student social development by providing an area of competition and cohesion for students both on and off campus (Chen, 2002).

Despite findings that both athletics and campus recreation support student involvement and the persistence of student programs, the role sport clubs play in student involvement and potential benefits has not been studied in detail. As the literature review shows, several studies have been conducted that include similar aspects of sport clubs and athletics, such as student government, social clubs, and campus recreation, but they generalize sport clubs in the category of campus recreation. Due to the level of organization required for club sports to operate effectively, further investigation of this specific university program into the patterns of involvement activities along with student attitudes relating to importance and satisfaction would be warranted.

Purpose of the Study

This study was conducted to analyze the patterns of involvement relating to sport club student athletes at Rowan University where I worked as a Graduate Coordinator during the 2011/12 academic year. In addition, the study encompasses the levels of involvement both as a student athlete in the sport club program and the possible correlations of involvement in other campus programs.

An additional purpose of this study was to determine any relationships between levels of involvement in sport clubs and how this affected the attitudes regarding importance of and satisfaction with involvement activities at Rowan University and the holistic college student experience.

Significance of the Study

The research of this study directly assessed the sport club program within campus recreation. Through analysis of the survey results and the literature review, administrators and academic professionals could better understand the relationships between athletics and campus recreation, as well as the distinctions that make each programmatic area unique to college student development.

Assumptions and Limitations

This study assumed that all subjects answered survey questions truthfully while providing responses. It is also assumed that the responses from the total population survey were representative of the population and that the instrument used in the study measured the intended constructs. The study also assumed that sport club involvement remained the same regardless of which specific sport the student chose to be involved in.

The relatively flexible and potentially transient sport club membership and seasonal involvement of some sport club members are limitations for the study. Some club rosters may include students who no longer participate in a sport club, which could have inflated the total targeted population.

Additionally, responses may also contain researcher bias due to my authoritative relationship as Graduate Coordinator of Sport Clubs and Intramurals. Thus, some students may have responded in such a way that skewed results, but as previously mentioned, this study assumed that all responses were answered truthfully by the subjects. In order to help control against coercion due to my relationship with sport club members, third parties distributed the surveys to protect the students' anonymity.

Operational Definitions

1. **Academic Year:** The period of formal instruction at Rowan University, from late August or September through early May; it is divided into two semesters with one in the fall and the other in the spring.
2. **Achievement:** The perceived attainment of a goal, either academic or otherwise, by the sport club member.
3. **Cumulative Grade Point Average (GPA):** Defined as the overall GPA for the individual's college career at Rowan University as reported by the survey subjects.
4. **Gender:** Whether an individual reports to be male or female based on their perception of themselves. This may or may not be related to their biological sex.
5. **Higher Education:** The university or college level of instruction at Rowan University including undergraduate and graduate studies.
6. **Involvement:** The student's participation and dedication in academic, social, and extracurricular activities during their college career at Rowan University.
7. **National Intramural and Recreational Sports Association (NIRSA):** The organization that represents recreation professionals and provides educational opportunities, research, and maintains standards for the industry.
8. **Student:** Any student currently enrolled at Rowan University through the admissions office. There were no restrictions on the number of credit hours the student was taking or their current class standing during the 2011/12 academic year.

9. Sport Clubs: For the purpose of this research study, sport clubs was limited to those student organizations currently recognized as chartered sport clubs by the sport club office during the 2011-2012 academic year. Those clubs that are petitioning for recognition were not included.
10. Sport Club Member: Any Rowan University student listed on the official club roster in the sport club office at the time of the survey during the 2011-2012 academic year, which required that a waiver had been signed, insurance submitted, and emergency contact information provided.

Research Questions

The study sought to address the following questions:

1. What are the patterns of involvement of selected sport club student members? What activities do they choose and to what degree?
2. What are the selected sport club members' attitudes toward the importance of social involvement, academic involvement, and the campus environment at Rowan University?
3. How satisfied are selected sport club members' relating to social involvement, academic involvement, and the campus environment at Rowan University?
4. Is there a significant relationship between the demographic variables of age, gender, race and ethnicity, specific club membership, and academic performance, and specific involvement activities at Rowan University?

Overview of the Study

Chapter II provides background from literature and outlines the issues surrounding campus recreation and its role in student education. The first section of this review underlines the significance of student involvement theory proposed by Alexander

Astin. The final section places emphasis on the role of campus recreation and organized clubs in a college student's development with a specific focus on the studies that have been completed in these fields.

Chapter III gives an overview of the research methods and data collection and data analysis used for the study, including restrictions, techniques, sample size, and other pertinent information.

Chapter IV lays out the findings of the study. This section reviews the research questions proposed in the introduction and summarizes the content from the survey responses and patterns.

Chapter V discusses the findings of the study, offers conclusions based on the findings, and suggests best practices and possible research for the future.

Chapter II

Review of the Literature

Understanding potential perceived benefits of sport club involvement and its relation to campus recreation, athletics, and student government requires a review of literature on student involvement theory, associated student involvement outcomes, and the social interactions associated with campus recreation programming. Each of these levels of involvement builds on the one prior to it, thus the review focuses on how each are interrelated.

Student Involvement Theory

The significance of student involvement, and the programs in which they chose to participate, have become the subject of increasing attention at institutions of higher education across the United States. The original idea by Astin (1984) described involvement as "simply, the amount of physical and psychological energy that the student devotes to the academic experience" (p. 297). As is evident from analysis of the theory, the academic experience no longer refers solely to the classroom and paper learning associated with higher education, but the full life of a student in higher education.

Unlike other theories of student development in higher education, involvement theory emphasizes the student's behavior rather than emotional, motivational, or intellectual ideas (Astin, 1984). Those abstract ideas through the theory of involvement developed by Astin (1984) are defined in a more measurable framework of time devoted to tasks (quantitative analysis) and the content covered over that time (qualitative). Both

relationships of the theory must be considered in order to determine accurate learning outcomes resulting from student involvement.

Students and individuals in a variety of situations must decide which activities require or deserve their attention, thus involvement can be viewed as a resource through the time students devote to certain aspects of college life (Astin, 1984). Because students can only devote certain amounts of time to any given activity, involvement in one requires absence of another. Despite potential issues regarding the management of time and resources, studies show that involvement increases self-efficacy and retention (Emerick, 2005). "The amount of development and learning (from involvement) is directly proportional to the quantity and quality of involvement" (Pepper, 2009, p. 11).

Involvement in the university experience can be described in a variety of forms based on the activities in which students engage (Emerick, 2005). Students choose to be involved in programs, academics at varying levels of intensity, athletics, organizations and a variety of other campus experiences. Each activity demands time from the student, and the policies and procedures on a campus affect which activities and to what extent students participate (Astin, 1984).

Astin (1984) also postulated that involvement occurs along a continuum, with students exhibiting varying degrees of involvement depending on time, place, and the student themselves. Over the length of a semester, for example, the amount of time one student spends devoted to academics increases significantly during periods of elevated anxiety or requirement such as mid semester or final exams.

In addition to providing activities and academic disciplines, educators at institutions of higher education must also stimulate students in order to facilitate

involvement. By promoting students' devotion of time and resources to involvement, achievement and retention of those students shows a direct positive correlation to the time devoted to any discipline (Astin, 1984). The goal of administrators and professors thus has been to study and increase this result through effective programming and pedagogy.

One of the environmental factors which significantly influence levels of involvement is students' place of residence. According Astin (1984), students living on campus increases self-efficacy and participation manifested through increased student-faculty interaction, greater involvement in clubs or organizations, as well as leadership opportunities. In part, this correlation could be attributed to increased contact with the campus culture and environment, permitting students to devote more time to these aspects of campus life.

Through analysis of student behavior in the context of involvement certain correlations can be determined based on the programs, academics, and co-curricular activities in which the student chooses to participate. The basis of this study, therefore, was to examine student involvement as it pertained to club sports on a university campus.

Outcomes of Student Involvement

Previous research has shown significant correlations between student involvement and students' persistence and achievement. Studies involving leadership, campus recreation, academic interest, residential status, and co-curricular activities all influenced student intellectual and learning development (Astin, 1984; Chen, 2002; Emerick, 2005; Jamelske, 2009; Pepper 2009; Wever, 2003). While each area of involvement varies slightly in both degree of impact and specific developmental areas affected, all exhibit

positive correlations in leadership development, social development, and academic persistence.

Supported both through the review of the literature and by the significance placed on them by administrators in higher education, programs emphasizing involvement promote student retention on campuses and persistence to degree attainment at an institution. According to Jamelske (2009), the first year experiences and programs support that year have a significant impact on student retention and achievement. Students that develop social ties and links to an institution through involvement correlated to the increased persistence to subsequent years.

Further research into students' perceived self efficacy showed "students who lack confidence in the skills they possess will less likely engage in tasks where those same skills are required or they will give up when they are confronted with difficulty" (Emerick, 2009, p. 31). Getting students involved in outside activities that encourage learning and development of skills in multiple areas has significant implications on students' futures. Programs that enhance the holistic student experience, as mentioned, correlate to higher retention rates and persistence to degree attainment.

Student involvement in co-curricular programs further compliments student learning at institutions of higher education through social development afforded by interaction with their peers. Through competitive environments such as intramural sports, students interact with diverse student backgrounds which can shape perceptions and relationships (Todaro, 1990). Through these interactions, students learn both what is acceptable in an environment outside the classroom. Frequently, these involvement

experiences enhance already present relationships and continue to develop the students' sense of autonomy (Todaro, 1990).

Furthermore, students that choose to be involved in activities outside of academics find roles of leadership that develop through these peer interactions. According to Gerhardt (2008), students with higher levels of involvement also correlate to leadership activities within those programs. Students learn responsibilities and accountability which enhance the lessons learned in the classroom. Those lessons that extend beyond the classroom create significant areas of benefit for both students and institutions, and as students increase involvement, the more likely they are to continue to leadership positions, which are a significant emphasis at institutions of higher education (Gerhardt, 2008).

One area that has received increased attention in past years has been the area of student affairs and campus recreation. Some studies have shown that students perceive campus recreation playing a role in the campus culture, while the directors of those facilities place more emphasis on the impact of campus recreation (Chen, 2002). That same study also indicated that students did perceive recreation centers as a bonus to the campus and getting involved, though not the primary reason for choosing one college over another.

Further research into the relationship between academics and student involvement in programming shows a significant relationship between the two. Astin (1984) noted that students only have a finite amount of time to devote to any given activity, thus students choose to be involved. Consistent with that theory, students with higher level academic workloads tend to be less involved in programming (Pepper, 2009).

Though academics and involvement compete for students' time and attention, those students who are involved in programs consistently achieve at high levels (Astin, 1984). This reinforces the emphasis placed on involvement at institutions of higher education. Each programmatic area contributes specific benefits to student development and achievement as it relates to the higher education experience (Astin, 1984).

Determining what motivates students to become involved has been the subject of much research. As cited in one study by Pepper (2009), involvement in activities was found to be positively correlated to the to the Chan Drasgow (2001) motivation to lead construct. In this case students with a desire to excel and lead were more likely to become involved at the university level. This could also be true of those students who lead clubs or organizations.

In a similar study relating to student leadership and involvement, Emerick (2005) found a positive relationship between self-efficacy and leadership in student organizations and intramural activities. The findings from this study emphasized the idea that multiple programs on campus could impact student development. In this case, campus recreation programming in intramurals along with student organizations contributed to the holistic student development.

Some programs dedicated to enriching the college student experience have a more targeted approach to student involvement and retention. In one study examining first year programs, student achievement positively impacted retention of below average students provided those programs followed institutional and program goals (Jamelske, 2009). These targeted approaches helped students identified as needing aid in persistence through at least the initial semesters of college.

Student Involvement in Campus Recreation

Student involvement theory and subsequent research has shown that experiences outside the classroom contribute significantly to overall college development and achievement (Astin, 1984). The programs outside the classroom developed by institutions of higher education for co-curricular involvement supplement academics to provide avenues of application for what students learn within normal academic settings. Astin (1984) cites several areas of involvement that fulfill this role, including academic honors programs and athletic involvement.

Central to this study was the role of campus recreation and the programs categorized underneath that department on a campus. Campus recreation helps shape the campus culture through the various programs offered that encourage student interaction (Chen, 2002). Students and alumni of an institution frequently describe their college experiences through the co-curricular experiences shared through campus recreation and other physical activities. Through these programs the physical and mental health of students shapes the social climate of the institution and the development of the students.

In addition to the campus culture, the organizational structure of campus recreation facilities and programs contribute to the unity of students on campus (Chen, 2002). This significant part of campus culture supports the theory of involvement and how it correlates to student retention. Because students who participate in recreational activities perceive themselves to be a member of the campus community, they would be more likely to persist through college and obtain a degree. Campus recreation is just one aspect of campus life that provides an avenue for students seeking that sense of community.

As a direct result of research and student feedback, campus recreation centers have become central to campus recruiting efforts. In a study done at Southern Illinois University at Edwardsville, Wever (2003) found that the availability of recreational facilities and its importance in students' decision to attend the university had risen from 32% of students reporting it was important in their decision in 1993 to 59% in 2000. This trend reflects the increasing number of students concerned with health and fitness, and it also reflects the significance of campus recreation on student involvement.

Furthermore, freshman students transitioning into college life use campus recreation as a means of coping with the loss of varsity athletics from high school (Helms, 2010). Many students who were active in their high school years seek to continue involvement, at least in some level, the activities that they pursued prior to college. In a study at the University of Arkansas, Helms (2002) showed that students leaving varsity sports exhibited high perceptions of identity loss and frustration when students still desired to play sports at the collegiate level but were unable to pursue those desires. Campus recreation and the role it plays in student involvement could help with that transitional loss and, thus, the retention and achievement of former high school student athletes.

Club Sport Involvement

Participation within sport club programs in campus recreation are composed of a unique blend of both student government and varsity athletics. Like most student government or organized student clubs on a campus, university students create, sustain, and govern themselves with only targeted guidance from university administrators. Thus,

classifying involvement in sport clubs requires a review of both athletic and student government research.

Involvement in university athletic programs inherently requires increased levels of time commitment, and thus, isolation from other influences on campus (Astin, 1984). Student athletes, due to finite amounts of time to commit to any given activity, choose to devote that time to a community of similarly dedicated students. As a result of this commitment, "athletic involvement is associated with satisfaction in four areas: the institutions academic reputation, the intellectual environment, student friendships, and institutional administration" (Astin, 1984, p. 304). These findings support the significance of involvement in athletics and its effect on student-athletes' social development. It can be determined, then, that sport clubs with similar structures and time commitments to varsity athletics would result in similar developmental significance. However, relatively few studies have been done specifically with sport clubs and how they differ from varsity athletics.

In a study investigating varsity student athlete involvement at Rowan University (Iacovone, 2007), the findings supported Astin's theory of involvement in respect to time commitment and other areas. Student athletes at Rowan University were found to not get involved in activities that required a large number of dedicated hours, however contrary to previous research, those students did study with other students outside of class (Iacovone, 2007). Due the time required to participate in athletics, patterns that indicate focused commitment to certain involvement activities supports Astin's research (1984) that proposed students' time as a finite resource. Due to the similarities in competition and practice requirements between sport clubs and varsity athletics, it would be

reasonable to deduce sport club members would also focus their time the way varsity athletes do, however to a lesser degree due to increased flexibility in time commitment.

In both varsity athletics and sport clubs, certain predictors of student involvement could be suggested. According to Lizza (2007), 41.5% of students surveyed at Rowan University noted a desire to continue an activity on from high school as the primary reason for involvement at the university level. Those same students also noted that some transferable skills were an added benefit to being involved in a sport or organization. These findings suggest that students would not likely start new activities once reaching colleges, but would continue interests provided the university offered those programs.

In a similar study, Akermann (2005) found that students got involved in out-of-classroom experiences at Rowan University because groups met their personal interests, social interaction for example, and also because of perceived learning outcomes, such as transferable skills and résumé fortification. These findings support the theory that students with limited time to devote to activities would engage in activities they perceived to be the most beneficial. The nature of those motivations can vary widely based on the intent of the student group.

In addition to athletic involvement, sport clubs' organizational structure is associated with aspects of involvement that resemble involvement in student government. Like student government, sport clubs elect executives to act on behalf of the clubs' interests in place of coaches as would be the case in athletics. This role in sport clubs and student government requires increased interaction with peers and thus accentuates development and changes associated with the college experience (Astin, 1984). This

evidence further supports the impact of involvement in sport clubs and campus recreation on college student retention and social development.

In a study done at Rowan University, Diorio (2007) found that involvement in student government impacted student development in the areas of idea presentation and accomplishment of students' personal goals. As would be expected, these students were also involved in high school and chose to continue their interests through to the university. While these findings focused on student government relationships and perceived benefits, similar correlations could be hypothesized about sport club involvement.

Furthermore, because club sports combine aspects of involvement in both varsity athletics and student government, club sports could play a role in perceived quality of life of former high school student athletes. Students wishing to continue former athletic activities from high school into college frequently exhibited identity loss if such an option was not available at their institution of higher education (Helms, 2010). Sport clubs offer a viable alternative to the more selective varsity sports. Students involved in sport clubs have lower levels of time commitment than varsity athletics and yet still impart aspects the social and competitive characteristics associated with varsity sports. As a result, students involved in sport clubs would have more time, a resource, to devote to other pursuits.

Summary of the Literature Review

This literature review provides a substantive theoretical base for student involvement and the potential perceived benefits of sport club student athletes. Through the use of Astin's (1984) theory of student involvement as a framework for research, the

literature review indicates how the theory can be applied to both campus recreation and sport clubs.

As demonstrated by the literature review, many studies have supported student involvement and its significance in student development beyond the classroom. Because relatively few studies have been conducted regarding sport club involvement, further research is needed to determine sport club members perceived benefit from involvement in campus recreation programming and club sports.

Despite potential benefits of sport club involvement, as previously mentioned, relatively few studies have been conducted specifically regarding club sports and the club athletes' perceived benefits. The goal of this study thus was to determine if correlations to athletic and student government involvement would be exhibited in club sport student athletes.

Chapter III

Methodology

Context of the Study

This study was conducted at Rowan University with its main campus located in Glassboro, NJ, 20 minutes away from Philadelphia, PA. Rowan University is categorized as one of the four year public institutions of higher education in New Jersey. “Rowan University was founded in 1923 beginning as Glassboro Normal School with just 236 students” (Iacovone, 2007, p. 21). The school has since changed its name from New Jersey State Teachers College in 1937, to Glassboro State College in 1950, to Rowan College in 1992 when Henry and Betty Rowan gave a 100 million dollar contribution to the institution. Today, Rowan University is made up of a School of Graduate and Continuing Education, a Medical School, and six academic colleges (Business, Communications, Education, Engineering, Fine and Performing Arts, Liberal Arts and Sciences) (www.rowan.edu). Rowan University offers degrees from the baccalaureate to the doctorate. In each of their programs, Rowan University policy is to have classes taught by professors and does not use teaching assistants. This leads to a student/faculty ratio of 16:1.

The university student population including graduate students as of December 2011 was 11,816 students, with an undergraduate population of 10,438 students and a graduate student population of 1,378 representing 28 states and 19 foreign countries. The

university population is also comprised of approximately 22.6% minority students. (www.rowan.edu/open/fastfacts).

The Student Recreation Center at Rowan University is a 92,000 square foot facility that was officially opened in 1993. The facility is open to all students currently enrolled in at least 6 credit hours and community members who purchase a membership. The facility staff includes the director and 4 professional staff members that oversee facility operations and intramural sports, sport clubs and youth programming, fitness and wellness programs, and marketing and member services.

The Sport Club Program at Rowan University is part of the Campus Recreation Department housed in the Student Recreation Center on the main university campus. The Sport Club Program is in its seventh year of existence under campus recreation and was previously overseen by the Student Government Association. At the time of the change, there were just 6 sport clubs officially recognized by the university, and now the program boasts 19 chartered clubs and 8 petitioning for official recognition. The individual sport clubs represent both recreational/instructional clubs along with competitive intercollegiate clubs. The level of competition for each club depends on both their size and their national governing body.

In order for sport clubs to become recognized as officially chartered by the sport club office at Rowan University, the sport club must first go through a one year petitioning period. During this one year period, sport clubs receive no funding from the sport club office and must submit progress reports monthly to ensure they are meeting the requirements of official recognition. These requirements include active club participation in sport club officer meetings, holding practices or club events, maintaining an active

roster of at least eight club members, and creation of a club constitution (Rowan University, 2011). At the conclusion of the one year petitioning process clubs are eligible for funding through campus recreation along with increased access to recreation center facilities and equipment.

Population and Sampling

The target population for this study was the student athlete members of officially chartered sport clubs recognized by the sport club office of the student recreation center. The available population was the entire membership of approximately 307 sport club student athletes on the roster for the 19 officially chartered sport clubs. Table 3.1 represents the total population of sport club members and the roster sizes of clubs at the time of the survey. The largest club recognized at the time of the survey was Rugby with 48 members. The second largest club was Ice Hockey with 36 members.

Table 3.1

<i>Sport Club Demographics of Survey Target Population</i>	
<i>Sport Club</i>	<i>Number of Members</i>
Cheerleading	22
Dance Team	20
Field Hockey (Women's)	14
Golf	9
Ice Hockey (Men's)	36
Lacrosse (Men's)	10
Lacrosse (Women's)	12
Mixed Martial Arts	10
Paintball	12
Parkour	8
Roller Hockey	22
Rugby (Men's)	48
Soccer (Men's)	16
Soccer (Women's)	12
Softball	12
Ultimate Frisbee (Men's)	14
Ultimate Frisbee (Women's)	10
Volleyball (Men's)	12
Wrestling	<u>13</u>
Total	312

A total population sampling was used to select subjects for participation in the survey. By sampling the entire population, biases and issues associated with selection were avoided and a full accurate representation of the sport club student athlete population could be measured.

Data Collection and Instruments

A survey instrument (Appendix B) titled *Sport Club Athlete and Involvement Theory* was designed based on previous instrumentation used in a similar study that examined involvement of varsity student athletes (Iacovone, 2007).

The survey instrument was comprised of background information in addition to academic standing, and several questions relating to the involvement activities of the survey subjects. The background information was requested in order to determine if any significant relationships existed between involvement activities and the student's age, race/ethnicity, gender, academic performance (GPA), and specific sport club membership.

The items determining level of involvement was divided into five sections. The first section asked for subjects to indicate if they had participated in any of the listed activities, and if so to indicate the number of hours per week they participated. The second section asked survey subjects to indicate the number of times a month they participated in the listed involvement activities. The third section asked subjects to indicate their current housing situation. The fourth section asked survey subjects to indicate on a five semantic differential, bipolar adjective scale their relationship with other students and with faculty members as either friendly and supportive or unfriendly and unsupportive. The final section used a five semantic differential, bipolar adjective

scale divided into social, academic, and campus involvement to determine the survey subjects' attitude toward the importance of and satisfaction with involvement activities at Rowan University.

The instrument was tested for reliability using the Statistical Package for the Social Sciences (SPSS) 19 computer software program. After analysis, the program determined a Chronbach's alpha of .960 for the 32 Likert scale items in section V, which indicates relatively high internal consistency and reliability. The instrument was also field tested on 2 non-sport club Rowan University students to ensure correct format and content validity of the instrument. The students were asked to critique the survey and provide feedback. No significant errors or problems of understanding the questions were reported. There was confusion in the final section of the survey based on the scaling of one to five. The students noted that the scale was opposite what they would have assumed, so a note was made for research assistants to emphasize the correct scaling and the survey was readied for implementation.

Data Gathering Procedures

Prior to the collection of any data, an Institutional Review Board (IRB) application (Appendix A) was completed and approved. In order to protect against coercion and bias due to my position as Graduate Coordinator of Intramurals and Sport Clubs, a third party was used to distribute and collect the survey instrument. All subjects involved in the study completed and returned the instrument which utilized an alternative consent statement because subjects were not asked any personally identifiable information, thus responses remained anonymous.

Permission was obtained from the Assistant Vice President of Campus Recreation, the Student Center, and Student Activities as well as from the Assistant Director of Sport Clubs and Youth Programming to collect data using the sport club student athlete survey instrument (Appendix B). Multiple research assistants distributed and collected the survey instrument between the months of February and April, 2012.

Data Analysis

The background information, involvement information, and attitude information from the survey responses were analyzed by entering the data into the Statistical Package for the Social Sciences (SPSS) 19 computer software program. Descriptive statistics provided frequencies, percentages, means, and standard deviations for the background information and attitudes of the student sport club athletes surveyed at Rowan University. A Pearson product moment correlation was calculated to determine any significant relationships between the demographics of gender, age, race/ethnicity, and specific sport club membership, and the sport club athlete's level of involvement at Rowan University. Additionally, a Pearson product moment was calculated to determine if any significant relationship existed between student GPA and the sport club athlete's level of involvement at Rowan University.

Chapter IV

Findings

Profile of the Sample

The subjects in the study consisted of 157 sport club members who participated in one of 20 chartered sport clubs sponsored by Rowan University Campus Recreation in Glassboro, New Jersey during the 2011-2012 academic year. The subjects in the study were recruited through total population sampling.

For the purpose of this study, all 312 members of chartered sport clubs were asked to participate and 157 were returned, based on the availability and cooperation of the participants for a response rate of 50.3%. After inspection of rosters and responses from surveys, some students indicated membership in multiple sport clubs, which increased the total response to 168 for a response rate of 53.8%

Tables 4.1 through 4.5 represent the male and female frequency and percentage breakdowns, age range, race and ethnicity percentages, specific club membership, and cumulative grade point average range. Table 4.1 displays the distribution of male and female subjects in the study, with a distribution of 52.2% of the subjects male, 29.9% female, and 17.8% unreported.

Table 4.1

Gender of Sport Club Athlete Survey Subjects (N=157)

	<i>f</i>	%
Male	82	52.2
Female	47	29.9
Unreported	28	17.8
Total	157	100

Table 4.2 describes the age range of the sample surveyed. The largest numbers were between the ages of 19 to 20 at 45.9%. The 21 to 22 age range was the second largest number of subjects at 29.9%. The 18 and under age range was the third largest number of subjects at 17.2%. The 23 and older age range represented the remaining survey subjects at 7%.

Table 4.2

Age Ranges of Sport Club Student Athlete Survey Subjects (N=157)

	<i>f</i>	%
18 & Under	27	17.2
19 & 20	72	45.9
21 & 22	47	29.9
23 & Older	11	7
Total	157	100

Table 4.3 depicts the racial and ethnic distribution of the survey subjects. The largest numbers were White/Caucasian with 86% of the sport club athletes who responded. The second largest group represented was Puerto Rican, representing 3.8% of the subjects surveyed. The remaining subjects represented American Indian/Alaskan

Native at 1.9%, Asian American/Asian at 1.3%, Mexican American/Chicano at 0.6%, Other Latino at 2.5%, Other at 2.5%, and 1.3% did not report their race and ethnicity.

Table 4.3

Race and Ethnicity of Sport Club Student Athlete Survey Subjects (N=157)

	<i>f</i>	%
White/Caucasian	135	86
American Indian/Alaskan Native	3	1.9
Puerto Rican	6	3.8
Asian American/Asian	2	1.3
Mexican American/Chicano	1	0.6
Other Latino	4	2.5
Other	4	2.5
Unreported	2	1.3
Total	157	100

Table 4.4 represents the distribution of the specific Sport Clubs of the survey subjects. The largest numbers were from the Rugby Club at Rowan University at 19%. The Ice Hockey club represented the second largest number at 12.5%. The third largest response was the Cheerleading Team at 11.9%. The Dance Team represented the fourth largest numbers at 9.5%. The combined Men’s and Women’s Lacrosse teams represented the fifth largest number at 7.7%. The remaining 39.4% of the sample was distributed across the Field Hockey Club at 7.1%, the Golf Club at 2.4%, the Parkour Club at 0.6%, the Roller Hockey Club at 6.0%, the Men’s and Women’s Soccer Clubs at 6.5%, the Softball Club at 4.8%, the Volleyball Club at 3.6%, the Men’s and Women’s Ultimate Frisbee Clubs at 1.2% and the Wrestling Club at 7.1%.

Table 4.4

Sport Club of Sport Club Student Athlete Survey Subjects (N=168)

	<i>f</i>	%
Cheerleading	20	11.9
Dance Team	16	9.5
Field Hockey	12	7.1
Golf	4	2.4
Ice Hockey	21	12.5
Lacrosse	13	7.7
Parkour	1	0.6
Roller Hockey	10	6.0
Rugby	32	19.0
Soccer	11	6.5
Softball	8	4.8
Ultimate Frisbee	2	1.2
Volleyball	6	3.6
Wrestling	12	7.1
Total	168	100

Table 4.5 shows the cumulative grade point average of the survey subjects. The greatest number of subjects was between the GPA ranges of 3.3 to 3.0 at 33.8%. The second largest distribution as in the GPA ranges of 3.6 to 3.4 at 24.8%. The GPA range of 4.0 to 3.7 represented the third largest response at 19.7%. The fourth largest response was the GPA range of 2.9 to 2.7 at 14.6%. The remaining 7.0% of the responses were represented by the GPA range of 2.6 to 2.4 at 5.1%, the GPA range of 1.6 to 1.4 at 1.3%, and the GPA range of 1.3 and below at 0.6%.

Table 4.5

<i>Cumulative Grade Point Average of Sport Club Student Athletes (N=157)</i>		
	<i>f</i>	%
4.0-3.7	31	19.7
3.6-3.4	39	24.8
3.3-3.0	53	33.8
2.9-2.7	23	14.6
2.6-2.4	8	5.1
1.6-1.4	2	1.3
1.3 & Below	1	0.6
Total	157	100

Analysis of the Data

Research Question 1: What are the patterns of involvement of selected sport club student members? What activities do they choose and to what degree?

Tables 4.6 and 4.7 provide information regarding research question one. The tables indicate how many sport club student athletes participated in individual involvement activities. The tables also illustrate the degree to which these students indicated their involvement based on the amount of time they spend participating in each involvement activity. Table 4.6 shows the number of students that participated in indicated involvement activities and how many hours a week they spent participating in those activities. The activities in which the most survey subjects participated were intramural athletics with 82 participants and off-campus employment with 42 participants. The activities with the least amount of participation were independent study, with 1 participant, university publication, with 2 participants, and religious organizations with 4 participants. The activities with the most average time indicated a week participating in the activity were off-campus employment with 14.94 hours per week,

internship activities with 12.75 hours per week, and on-campus employment with 12.52 hours per week. The activities with the least average time indicated per week at Rowan University were religious organizations with 1 hour per week and student government with 1.86 hours per week.

Table 4.6

<i>Hours a Week Participating in Involvement Activities</i>			
	<i>n</i>	<i>M</i>	<i>SD</i>
Hours a week spent in intramural athletics	82	3	2.34
Hours a week spent in an off-campus part time job	42	14.94	6.83
Hours a week spent in volunteer service	31	2.60	2.77
Hours a week spent in an on-campus part time job	29	12.52	5.10
Hours a week spent in field experiences	19	4.65	1.69
Hours a week spent in professional or departmental clubs	15	2.85	2.91
Hours a week spent in social clubs	14	4	3.39
Hours a week spent in an internship	13	12.75	9.85
Hours a week spent on college productions or performances	12	9.33	8.42
Hours a week spent in residence hall activities	10	3.14	3.23
Hours a week spent in leadership programs	10	4.13	3.52
Hours a week spent in student government	9	1.86	0.69
Hours a week spent in social fraternities or sororities	6	10	8.60
Hours a week spent in study abroad programs	6	-	-
Hours a week spent in religious organizations	4	1	-
Hours a week spent in university publication	2	4	-
Hours a week spent in independent study	1	-	-

Table 4.7 provides information that indicates how many sport club student athletes participated in individual involvement activities and how many times they participated monthly in those activities. The activities in which the most sport club student athletes participated were “times a month spent exercising” with 129 participants, “times a month spent working with classmates outside of class” with 122 participants, and “times a month spent discussing grades or assignments with an instructor” with 102 participants. The activities with the least number of participants were “times a month spent participating in religious or spiritual activities” with 28 participants and “times a month spent participating in community based projects” with 41 participants. The activities with largest number of times spent per month at Rowan University were “exercising” with an average of 16.60 times per month and “working with classmates outside of class” with an average of 6.99 times per month. The activities with the least amount of times participating per month were “participating in community based projects” with an average of 2.39 times per month and “attending an art exhibit, gallery, play or dance” with an average of 2.40 times per month.

Table 4.7

<i>Times a Month Participating in Involvement Activities</i>			
	<i>n</i>	<i>M</i>	<i>SD</i>
Times a month spent exercising	129	16.60	11.29
Times a month spent working with classmates outside of class	122	6.99	7.63
Times a month spent discussing grades or assignments with an instructor	102	4.83	6.00
Times a month spent attending an art exhibit, gallery, play or dance	58	2.40	2.21
Times a month spent discussing ideas with faculty members	54	3.72	4.45
Times a month spent tutoring other students	54	3.76	3.64
Times a month spent participating in community based projects	41	2.39	2.51
Times a month spent participating in religious or spiritual activities	28	4.96	5.74

Research Question 2: What are the selected sport club members' attitudes toward the importance of social involvement, academic involvement, and the campus environment at Rowan University?

Tables 4.8 through 4.10 provide information regarding research question two. Tables 4.8 through 4.10 indicate the mean scores and standard deviation of sport club student athletes' attitudes regarding the importance of social involvement, academic involvement, and campus atmosphere at Rowan University. Table 4.8 illustrates the attitudes of sport club athletes regarding the importance of social involvement. The sport

club members indicated on average that “establishing personal relationships with peers” was the most important social activity with a score of 2.48, while the least important activity indicated was “getting involved in religious activities” with a score of 3.43. The overall average score for social involvement was 2.89.

Table 4.8

Attitudes about the Importance of Social Involvement (N=157)

	<i>M</i>	<i>SD</i>
Establishing personal relationships with peers	2.48	1.55
Getting involved in student organizations	2.69	1.30
Getting involved in campus activities	2.71	1.28
Having a job while enrolled	2.75	1.43
Interacting with students of different races or cultures	2.92	1.32
Attending cultural events on campus	3.25	1.28
Getting involved in religious activities	<u>3.43</u>	<u>1.41</u>
Total	2.89	1.36

Table 4.9 shows the attitudes of sport club student athletes toward the importance of academic involvement. The most important academic activity indicated by sport club athletes was “academic advising” with a mean score of 2.39. The lowest mean indicated was social contact with faculty with a mean score of 2.75. The overall mean for attitudes toward academic involvement was 2.56

Table 4.9

<i>Attitudes about the Importance of Academic Involvement (N=157)</i>		
	<i>M</i>	<i>SD</i>
Academic advising	2.39	1.45
Faculty availability outside of class	2.55	1.47
Social contact with faculty	<u>2.75</u>	<u>1.34</u>
Total	2.56	1.42

Table 4.10 illustrates the attitudes of sport club student athletes toward the importance of campus environment. The highest level of importance indicated by survey respondents was “adequate academic atmosphere” with a mean score of 2.43, while the lowest level of importance indicated was “adequate social atmosphere” with a mean score of 2.47. The overall average attitude of sport club student athletes toward campus environment was 2.56.

Table 4.10

<i>Attitudes about the Importance of Campus Environment (N=157)</i>		
	<i>M</i>	<i>SD</i>
Adequate academic atmosphere	2.43	1.40
Fitting into the campus community	2.45	1.37
Adequate personal security	2.46	1.47
Adequate physical environment on campus	2.46	1.47
Adequate social atmosphere	<u>2.47</u>	<u>1.37</u>
Total	2.45	1.42

Research Question 3: How satisfied are selected sport club members' relating to social involvement, academic involvement, and the campus environment at Rowan University?

Tables 4.11 through 4.13 provide information regarding research question three. Tables 4.11 through 4.13 illustrate the satisfaction with social involvement, academic involvement, and campus atmosphere at Rowan University. Table 4.11 depicts the attitudes of sport club athletes regarding satisfaction of social involvement. Sport club athletes indicated that they were most satisfied with “establishing personal relationships with peers” with a mean score of 2.45, while they indicated they were least satisfied with “getting involved in religious activities” with a mean score of 3.20. The overall indicated average of satisfaction of social involvement was 2.82.

Table 4.11

<i>Attitudes about the Satisfaction of Social Involvement (N=157)</i>		
	<i>M</i>	<i>SD</i>
Establishing Personal Relationships with peers	2.45	1.38
Getting involved in student organizations	2.66	1.24
Getting involved in campus activities	2.75	1.24
Interacting with students of different races or cultures	2.79	1.27
Having a job while enrolled	2.81	1.43
Attending cultural events on campus	3.10	1.26
Getting involved in religious activities	<u>3.20</u>	<u>1.43</u>
Total	2.82	1.32

Table 4.12 reports the attitudes of sport club athletes toward the satisfaction level of academic involvement at Rowan University. Sport club athletes indicated that they were most satisfied with “social contact with faculty with a mean score of 2.79, while they indicated that they were least satisfied with “academic advising” with a mean score of 2.90. The overall average attitude of sport club athletes toward academic involvement was 2.83.

Table 4.12

Attitudes about the Satisfaction of Academic Involvement (N=157)

	<i>M</i>	<i>SD</i>
Social contact with faculty	2.79	1.19
Faculty availability outside of class	2.80	1.26
Academic advising	<u>2.90</u>	<u>1.38</u>
Total	2.83	1.28

Table 4.13 represents the attitudes of sport club student athletes toward satisfaction with the campus environment at Rowan University. Sport club student athletes indicated that they were most satisfied with “adequate personal security” and “adequate social atmosphere” both with a mean score of 2.55, while they indicated that they were least satisfied with “adequate physical environment on campus” and “adequate academic atmosphere” each with a mean score of 2.63. The overall average attitude toward satisfaction with the campus environment was 2.59.

Table 4.13

Attitudes about the Satisfaction of Campus Environment (N=157)

<i>n=157</i>	<i>M</i>	<i>SD</i>
Adequate personal security	2.55	1.32
Adequate social atmosphere	2.55	1.27
Fitting into the campus community	2.60	1.35
Adequate physical environment on campus	2.63	1.25
Adequate academic atmosphere	<u>2.63</u>	<u>1.28</u>
Total	2.59	1.29

Research Question 4: Is there a significant relationship between the demographic variables of age, gender, race and ethnicity, specific club membership, and academic performance, and specific involvement activities at Rowan University?

Tables 4.14 through 4.18 provide information regarding research question four. The tables illustrate the significant relationships between sport club athletes' demographics of gender, race/ethnicity, academic performance (GPA), age, and specific sport club membership, and specific involvement activities at Rowan University to see if there were any significant relationships. Table 4.14 represents the significant relationships found through data analysis between sport club athlete survey subjects reported cumulative GPA and their level of involvement at Rowan University. Table 4.14 indicates a weak correlation between the sport club athlete's grade point average and participation in student government ($r = .209, p = .009$) at a $p < .01$ level. The table shows a weak correlation between the sport club athlete's grade point average and

participation in college productions or performances ($r = .238, p = .003$) at a $p < .01$ level. The table shows a weak correlation between the sport club athlete's grade point average and participation in professional or departmental clubs ($r = .169, p = .034$) at a $p < .05$ level. The table shows a weak correlation between the sport club athlete's grade point average and participation in religious organizations ($r = .173, p = .030$) at a $p < .05$ level. The table shows a weak correlation between the sport club athlete's grade point average and participation in volunteer service ($r = .211, p = .008$) at $p < .01$ level. The table shows a weak correlation between the sport club athlete's grade point average and participation in an internship ($r = .209, p = .009$) at a $p < .01$ level.

Table 4.14

Significant Correlations about Cumulative Grade Point Average and Involvement of Student Sport Club Athlete Survey Subjects

Activities	<i>r</i> coefficient	<i>p</i> -level
Participation in Student Government <i>n</i> =9, <i>M</i> =1.86, <i>SD</i> =0.69	0.209	0.009**
Participation in College Productions <i>n</i> =12, <i>M</i> =9.33, <i>SD</i> =8.42	0.238	0.003**
Participation in Professional or Departmental Clubs <i>n</i> =15, <i>M</i> =2.85, <i>SD</i> =2.91	0.169	0.034*
Participation in Religious Organizations <i>n</i> =4, <i>M</i> =1, <i>SD</i> =n/a	0.173	0.030*
Participation in Volunteer Service <i>n</i> =31, <i>M</i> =2.60, <i>SD</i> =2.77	0.211	0.008**
Participation in Internships <i>n</i> =13, <i>M</i> =12.75, <i>SD</i> =9.85	0.207	0.009**

* $p < .05$, ** $p < .01$

Table 4.15 provides information regarding the relationship between indicated gender of sport club athletes and their level of involvement. The table shows a moderate inverse relationship between gender and participation in residence hall activities ($r = -.273, p = .002$) at a $p < .01$ level. The table also indicates a weak relationship between gender and participation in intramural athletics ($r = .227, p = .010$) at a $p < .01$ level. Another weak inverse relationship indicated by the table is between gender and having an off-campus job ($r = -.205, p = .020$) at a $p < .05$ level. There was also a moderate relationship between gender and the number of hours spent at an off campus job ($r = .421, p = .021$) at a $p < .05$ level. The table also shows a moderate inverse relationship between gender and participation in field experiences ($r = -.276, p = .002$) at a $p < .01$ level.

Table 4.15

Significant Correlations about Gender and Involvement of Student Sport Club Athlete Survey Subjects

Activities	<i>r</i> coefficient	<i>p</i> -level
Participation in Residence Hall Activities <i>n</i> =31, <i>M</i> =2.60, <i>SD</i> =2.77	-0.273	0.002**
Participation in Intramural Athletics <i>n</i> =82, <i>M</i> =3, <i>SD</i> =2.34	0.227	0.010**
Reported having an off-campus job <i>n</i> =42, <i>M</i> =14.94, <i>SD</i> =6.83	-0.205	0.020*
Hours a week you spend at an off campus job <i>n</i> =42, <i>M</i> =14.94, <i>SD</i> =6.83	0.421	0.021*
Participation in Field Experiences <i>n</i> =19, <i>M</i> =4.65, <i>SD</i> =1.69	-0.276	0.002**

* $p < .05$, ** $p < .01$

Table 4.16 shows the significant relationships between sport club athlete's indicated age and level of involvement at Rowan University. The table shows a weak relationship between age and participation in student government ($r = .180, p = .024$) at a $p < .05$ level. The table also shows a strong relationship between sport club athlete's indicated age and hours a week spent attending university performances ($r = .762, p = .017$) at a $p < .05$ level. The table also shows a weak inverse relationship between age and having an internship ($r = -.183, p = .000$) at a $p < .01$ level.

Table 4.16

Significant Correlations about Age and Involvement of Student Sport Club Athlete Survey Subjects

Activities	<i>r</i> coefficient	<i>p</i> -level
Participation in Student Government <i>n</i> =9, <i>M</i> =1.86, <i>SD</i> =0.69	0.180	0.024*
Hours a week you spend attending university performances <i>n</i> =12, <i>M</i> =9.33, <i>SD</i> =8.42	0.762	0.017*
Reported having an Internship <i>n</i> =13, <i>M</i> =12.75, <i>SD</i> =9.85	-0.183	0.000**

* $p < .05$, ** $p < .01$

Table 4.17 shows the significant relationships between sport club athletes' reported race/ethnicity and their level of involvement at Rowan University. The table indicates a weak inverse relationship between sport club athlete's race/ethnicity and participation in social clubs ($r = -.197, p = .014$) at a $p < .05$ level. The table also shows a moderate inverse relationship between sport club athlete's race/ethnicity and the number of hours spent at an off-campus job ($r = -.377, p = .023$) at a $p < .05$ level. The table also

indicates a weak inverse relationship between sport club athlete's race/ethnicity and having an on-campus job ($r = -.195, p = .015$) at a $p < .05$ level.

Table 4.17

Significant Correlations about Race/Ethnicity and Involvement of Student Sport Club Athlete Survey Subjects

Activities	<i>r</i> coefficient	<i>p</i> -level
Participation in Social Clubs <i>n</i> =14, <i>M</i> =4, <i>SD</i> =3.39	-0.197	0.014*
Hours a week you spend attending university performances <i>n</i> =12, <i>M</i> =9.33, <i>SD</i> =8.42	-0.377	0.023*
Reported having an Internship <i>n</i> =13, <i>M</i> =12.75, <i>SD</i> =9.85	-0.195	0.015*

* $p < .05$

Table 4.18 shows the significant relationships found through data analysis between specific sport club membership and the level of involvement of the sport club athlete at Rowan University. The table indicates a moderate inverse relationship between specific sport club membership and participation in intramural athletics ($r = -.303, p = .000$) at a $p < .01$ level. The table also indicates a weak inverse relationship between specific sport club membership and participation in student government ($r = -.186, p = .019$) at a $p < .05$ level. Another weak relationship indicated in the table is between specific sport club membership and participation in university productions or performances ($r = .164, p = .040$) at a $p < .05$ level. The table also indicates a weak inverse relationship between specific sport club membership and participation in social clubs ($r = -.204, p = .010$) at a $p < .01$ level. The table also indicates a weak relationship between specific sport club membership and participation in residence hall activities ($r =$

.161, $p = .043$) at a $p < .05$ level. The table also indicates a moderate inverse relationship between specific sport club membership and the number of hours spent at an off-campus job ($r = -.437$, $p = .008$) at a $p < .01$ level. The table also indicates a weak relationship between specific sport club membership and participation in field experiences ($r = .187$, $p = .019$) at a $p < .05$ level. Finally, the table indicates a weak relationship between specific sport club membership and participating in a study abroad experience ($r = .188$, $p = .018$) at a $p < .05$ level.

Table 4.18

Significant Correlations about Specific Sport Club and Involvement of Student Sport Club Athlete Survey Subjects

Activities	<i>r</i> coefficient	<i>p</i> -level
Participation in Intramural Athletics <i>n</i> =82, <i>M</i> =3, <i>SD</i> =2.34	-0.303	0.000**
Participation in Student Government <i>n</i> =9, <i>M</i> =1.86, <i>SD</i> =0.69	-0.186	0.019*
Participation in Productions or Performances <i>n</i> =12, <i>M</i> =9.33, <i>SD</i> =8.42	0.164	0.040*
Participation in Social Clubs <i>n</i> =14, <i>M</i> =4, <i>SD</i> =3.39	-0.204	0.010**
Participation in Residence Hall Activities <i>n</i> =31, <i>M</i> =2.60, <i>SD</i> =2.77	0.161	0.043*
Hours a week you spend at an Off-Campus Job <i>n</i> =42, <i>M</i> =14.94, <i>SD</i> =6.83	-0.437	0.008**
Participation in Field Experiences <i>n</i> =19, <i>M</i> =4.65, <i>SD</i> =1.69	0.187	0.019*
Participated in Study Abroad <i>n</i> =6, <i>M</i> =n/a, <i>SD</i> =n/a	0.188	0.018*

p* = <.05, *p* = <.01

Chapter V

Summary, Discussion, Conclusions, and Recommendations

Summary of the Study

This study was designed to investigate the patterns of involvement of student sport club athletes at Rowan University during the 2011-2012 academic year. The study also investigated the relationships between student sport club members' cumulative grade point average, reported gender, age, race and ethnicity, and specific sport club membership and their level of involvement. The respondents in this study included 157 sport club members representing 168 roster positions in sport clubs at Rowan University during the 2011-2012 academic year.

A review of the literature revealed support for programs designed to increase student involvement outside of the academic classroom. Students have come to expect more than the strictly academic methods of learning and have been shown to develop and achieve at higher levels when this occurs (Astin, 1998). As a result more universities have emphasized student affairs programming along with program assessment to ensure students are indeed benefitting from the programs offered by the institution.

Based on a gap in the knowledge base relating to sport club involvement patterns, a survey was developed based on previous research done at Rowan University on varsity student athletes by Iacovone (2007). The survey requested certain demographic information including gender, age range, race and ethnicity, sport club membership, and

cumulative grade point averages. The survey also requested information regarding involvement activities and degree of involvement at Rowan University.

In order to determine patterns of involvement, survey responses were entered into the Statistical Package for the Social Sciences (SPSS) 19 computer software program. Using this program, frequency of responses including levels of involvement at Rowan University were investigated. The software was also used to determine any significant relationships between level of involvement and reported gender, age range, race and ethnicity, specific sport club membership, and cumulative grade point average.

Discussion of the Findings

Research Question 1: What are the patterns of involvement of selected sport club student members? What activities do they choose and to what degree?

The findings indicated the number sport club members participated in involvement activities and how frequently they participated in these activities. The responses were split into two sections. The first section indicated if they participated and how many hours weekly, while the second section asked them to indicate the number of times they participated monthly. Of the activities in the first section, intramural athletics was listed most often with 82 of 157 responding that they participated with an average of three hours per week. In the second section based on monthly participation, students most often exercised or engaged in physical activity and worked with classmates outside of class with an average of 16.6 and 6.99 times per month respectively.

The findings indicated that relatively few sport club student athletes participated in independent study, university publications, study abroad programs, religious organizations, or social fraternities and sororities. These findings are consistent with

research by Astin (1984) and Iacovone (2007) that showed athletes tend to have lower levels of involvement in activities outside of athletic events due to the time commitment required to participate in athletics. Similar to the study by Iacovone (2007) that showed Rowan University student athletes had high levels of involvement with classmates outside of the classroom, this study's findings indicate that sport club members consistently work with other Rowan students. This would be more expected in sport club involvement because they require less time commitment and isolation from the campus community than was found by Astin (1984) regarding varsity student athletes. However, the difference found relating to the study by Astin (1984) could also be due to the difference in school sizes, as that study was done at a Division-I school, UCLA.

Research Question 2: What are the selected sport club members' attitudes toward the importance of social involvement, academic involvement, and the campus environment at Rowan University?

The findings indicated that the sport club members' attitudes toward the importance of social involvement, academic involvement, and the campus environment varied slightly in the average scores reported. The average scores for importance of social involvement 2.89, academic involvement, 2.56, and campus environment 2.45 had a range of just .44 on the bipolar adjective scale from one-to-five. The students indicated that "establishing personal relationships with peers" at 2.48 was the most important social involvement activity, "academic advising" at 2.39 was the most important academic involvement activity, and "adequate academic atmosphere" at 2.43 was the most important aspect of campus environment. These findings support previous research by Chen (2002) who found campus culture and environment was influenced the presence of

campus recreation facilities. The high responses relating to importance of campus environment suggest that students consider multiple factors in addition to the academic environment of the institution when selecting the institution of higher education they want to attend, which is supported by Astin (1998) that suggested students wanted more involvement outside of the classroom to encourage development and learning.

The importance of “establishing personal relationships with peers” also supports findings by Lizza (2007) and Ackermann (2005) that students become involved in activities that meet personal interests and meet their desire for social interaction on campus. It can be deduced that at least some of the students involved in sport clubs got involved to persist in a sport they played previously or to meet friends once they attended the university.

Research Question 3: How satisfied are selected sport club members’ relating to social involvement, academic involvement, and the campus environment at Rowan University?

The findings indicated that attitudes of satisfaction toward social involvement, academic involvement, and campus environment were similar. The scores for each of the involvement areas (social involvement 2.82, academic involvement 2.83, and campus environment 2.59) shared a combined average of nearly 2.75. The most satisfying social involvement activity indicated was “establishing personal relationships with peers” at 2.45. The sport club members indicated “social contact with faculty” was the most satisfying academic involvement activity at 2.79. The sport club members indicated “adequate social atmosphere” and “adequate personal security” were the most satisfying aspects of campus environment. These findings support previous research by Astin

(1984) that indicated that involvement in athletic activities was tied to satisfaction with student friendships. The higher scores for both “relationships with peers” and “social atmosphere” suggest that this was the case for sport club members at Rowan University. The other findings related to satisfaction with campus environment are also supported by Chen (2002) and Wever (2003) that indicated the positive relationship of recreational programs with student satisfaction of campus.

Research Question 4: Is there a significant relationship between the demographic variables of age, gender, race and ethnicity, specific club membership, and academic performance, and specific involvement activities at Rowan University?

The findings indicated that there were some weak relationships between gender and specific involvement activities. For example, there was a moderate inverse relationship between gender and participation in residence hall activities ($r = -.273, p = .002$) at a $p < .01$ level. There was a moderate relationship between gender and hours a week spent at an off-campus job ($r = .421, p = .021$) at a $p < .05$ level. Finally there was a moderate inverse relationship between gender and field experiences ($r = -.276, p = .002$) at a $p < .01$ level. The findings also indicated a strong relationship between age range and hours a week spent attending university performances ($r = .762, p = .017$) at a $p < .05$ level. Finally, the responses indicated a moderate inverse relationship between specific sport club and the number of hours a week spent at an off-campus job ($r = -.437, p = .008$) at a $p < .01$ level. These findings were neither supported nor disputed by previous research done in the review.

Conclusions

At the end of the study there were several patterns that emerged from the survey data. First, the study showed that sport club athletes participate in multiple involvement activities outside of sport clubs. The highest involvement was in other physical or competitive activities such as intramural athletics and exercise. This is not surprising because many athletes who participate in sport clubs participated in multiple sports at the high school level and would want to continue those sports to some degree while attending college. Additionally, those activities that require more time dedicated to them, such as university publication, Greek organizations, and religious organizations, showed less involvement from sport club members. This resembles the choice in commitment in varsity athletics, but with some degree of flexibility.

Second, the study found that sport club members indicated campus environment to be most important and were most satisfied with it. Both satisfaction and importance had an average of 2.52, which indicates that sport club members tend to be more to the positive side of the bipolar adjective scale used in the study. The other two areas of investigation, social involvement and academic involvement, consistently did not score as high on the scale but were still above the neutral satisfaction and importance levels based on the bipolar adjective scale used.

Additionally, the study found that some significant relationships did exist between the various demographic information provided from survey responses. For instance, the study found that there were relationships between gender and involvement in residence hall activities, hours a week spent at an off-campus job, and participation in field experiences. The study also found relationships between age ranges and the hours a week

spent attending university performances. This suggests that some demographics could be used to target future research and determine how demographics such as age influence the involvement levels of students across an institution.

Many of the findings were supported by research relating to Astin's student involvement theory. Research that emphasized campus recreation programs such as Chen (2002) and Wever (2003) supported the aspects of sport clubs relating to campus environment and culture, while investigation into involvement patterns of student government by Lizza (2007) and Ackermann (2005) also revealed some similarities to sport clubs as might have been predicted.

Recommendations for Practice

Based upon the findings and my conclusions, I would propose the following recommendations for current practice:

1. Encourage university programs that promote multiple areas of student development to enhance the student experience, such as sport clubs.
2. Student affairs professionals should encourage students to continue involvement in activities similar to those they participated in during high school.

Recommendations for Further Research

Based upon the findings and my conclusions, I would propose the following recommendations for future research:

1. The survey instrument used in this study could be used to determine patterns in other areas of the university, such as student government and campus employment to determine if other similar patterns exist.

2. The survey instrument did show some weakness in scaling in Section V, so future research with it should reverse the scaling with 5 being “most satisfied.”
3. Further research should be done at other institutions with sport club programs to determine if results are similar at comparable institutions.
4. Studies could be conducted regionally to determine if geographic location influences the patterns of involvement of sport club members.
5. A future study including qualitative investigation should be done to determine a deeper relationship between sport club involvement and the university.

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Appendix A

Institutional Review Board Approval Letter



January 18, 2012

Brian L. Stelzer
Rowan Recreation Center
Esbyjornson Hall

Dear Brian L. Stelzer:

In accordance with the University's IRB policies and 45 CFR 46, the Federal Policy for the Protection of Human Subjects, I am pleased to inform you that the Rowan University Institutional Review Board (IRB) has exempted your project:

IRB application number: 2012-154

Project Title: Student Involvement Theory: perceived Benefits of Sport Club Participation at Rowan University

If you need to make significant modifications to your study, you must notify the IRB immediately. Please reference the above-cited IRB application number in any future communications with our office regarding this research.

If, during your research, you encounter any unanticipated problems involving risks to subjects, you must report this immediately to Dr. Harriet Hartman (hartman@rowan.edu or call 856-256-4500, ext. 3787) or contact Dr. Shreekanth Mandayam, Associate Provost for Research (shreek@rowan.edu or call 856-256-5150).

If you have any administrative questions, please contact Karen Heiser (heiser@rowan.edu or 856-256-5150).

Sincerely,

A handwritten signature in cursive script that reads "Harriet Hartman".

Harriet Hartman, Ph.D.
Chair, Rowan University IRB

c: Burton Sisco, Educational Services, Administration and Higher Education, Education Hall

Office of Research
Bole Hall
201 Mullica Hill Road
Glassboro, NJ 08028-1701

856-256-5150
856-256-4425 fax

Appendix B

Instrument: Survey of Sport Club Athletes and Involvement Theory

Sport club Athlete and Involvement Theory

This survey is being administered as part of a master's degree research project. The purpose of this research is to determine sport club involvement patterns at Rowan University. While your participation is voluntary and you are not required to answer all of the questions herein, your cooperation and participation are important to the success of the project and are greatly appreciated. If you choose to participate and are at least 18 years of age, please understand that all responses are anonymous and no personally identifiable information is being requested.

For any questions please contact Brian L. Stelzer at stelzer@rowan.edu or 856-256-4542 OR Dr. Burton Sisco at sisco@rowan.edu or 856-256-4500 Ext. 3717

Background Information

What is your age?

- 18 & Under
- 19 to 20
- 21 to 22
- 22 & older

What is your gender?

- Male
- Female

What class are you in?

- Freshman Sophomore Junior Senior Graduate

Are you:

- | | |
|---|---|
| <input type="checkbox"/> White/Caucasian | <input type="checkbox"/> African American/Black |
| <input type="checkbox"/> American Indian/Alaskan Native | <input type="checkbox"/> Asian American/Asian |
| <input type="checkbox"/> Pacific Islander | <input type="checkbox"/> Mexican American/Chicano |
| <input type="checkbox"/> Puerto Rican | <input type="checkbox"/> Other Latino |
| <input type="checkbox"/> Other | |

What Sport Club do you participate in here at Rowan?

- | | |
|---|---|
| <input type="checkbox"/> Cheerleading | <input type="checkbox"/> Dance Team |
| <input type="checkbox"/> Field Hockey | <input type="checkbox"/> Golf |
| <input type="checkbox"/> Ice Hockey | <input type="checkbox"/> Lacrosse |
| <input type="checkbox"/> Mixed Martial Arts | <input type="checkbox"/> Paintball |
| <input type="checkbox"/> Parkour | <input type="checkbox"/> Roller Hockey |
| <input type="checkbox"/> Rugby | <input type="checkbox"/> Soccer |
| <input type="checkbox"/> Softball | <input type="checkbox"/> Ultimate Frisbee |
| <input type="checkbox"/> Volleyball | <input type="checkbox"/> Wrestling |

What is your cumulative GPA?

- | | | |
|-------------------------------------|-------------------------------------|--------------------------------------|
| <input type="checkbox"/> 4.0 to 3.7 | <input type="checkbox"/> 3.6 to 3.4 | <input type="checkbox"/> 3.3 to 3.0 |
| <input type="checkbox"/> 2.9 to 2.7 | <input type="checkbox"/> 2.6 to 2.4 | <input type="checkbox"/> 2.3 to 2.0 |
| <input type="checkbox"/> 1.9 to 1.7 | <input type="checkbox"/> 1.6 to 1.4 | <input type="checkbox"/> 1.3 & Below |

Please print your major(s) or your expected major(s) below:

Involvement Information

SECTION I

In your experience at Rowan University, have you participated in any of these activities? If so, check "yes" and write in how many hours you participate in the activity each week on average?

- | | YES | Hours per Week |
|--|--------------------------|----------------|
| 1. Member of a social fraternity or sorority | <input type="checkbox"/> | _____ |

	YES	Hours per Week
2. Intramural Athletics	<input type="checkbox"/>	_____
3. Student Government	<input type="checkbox"/>	_____
4. University Publication	<input type="checkbox"/>	_____
5. College Productions or Performances	<input type="checkbox"/>	_____
6. Professional or Departmental Clubs	<input type="checkbox"/>	_____
7. Social Clubs	<input type="checkbox"/>	_____
8. Residence Hall Activities	<input type="checkbox"/>	_____
9. Religious Organizations	<input type="checkbox"/>	_____
10. Volunteer Service	<input type="checkbox"/>	_____
11. Leadership Programs	<input type="checkbox"/>	_____
12. Off-Campus Part Time Job	<input type="checkbox"/>	_____
13. On-Campus Part Time Job	<input type="checkbox"/>	_____
14. Internship	<input type="checkbox"/>	_____
15. Field Experience	<input type="checkbox"/>	_____
16. Participated in Independent Study	<input type="checkbox"/>	_____
17. Participated in Study Abroad Program	<input type="checkbox"/>	_____

SECTION II

In your experience at Rowan University, on average how frequently do you participate montly in each activity below? (give total number for each category below)

	How Often
1. Worked with classmates outside of class	_____
2. Tutored or taught other students	_____
3. Participated in community-based projects as part of a class	_____
4. Attended an art exhibit, gallery, play or dance	_____
5. Exercised or participated in physical activities	_____
6. Discussed grades or assignments with an instructor	_____
7. Discussed ideas with faculty member	_____
8. Participate in religious or spiritual activities	_____

SECTION III

Which of the following best describes where you are living? (check one)

- Dormitory or other campus housing
- Residence (house, apartment, etc.) within walking distance
- Residence (house, apartment, etc.) within driving distance

SECTION IV

Mark the box that best represents your relationship with people at Rowan University:

<i>a. Relationships with other students</i>				
Unfriendly, Unsupportive				Friendly, Supportive
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5
<i>b. Relationships with faculty members</i>				
Unfriendly, Unsupportive				Friendly, Supportive
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5

SECTION V

The following questions have two parts. First rate how important each item is to you by circling one of the numbers from 1-5. Second, rate how satisfied you are with each item by circling one of the numbers from 1-5. Use the following scale.

<u>Importance</u>					<u>Satisfaction</u>				
Very Important			Not at all Important		Very Satisfied			Not at all Satisfied	
1	2	3	4	5	1	2	3	4	5

	<u>Importance</u>					<u>Satisfaction</u>				
<u>Social Involvement</u>										
1. Establishing Personal Relationships w/Peers at Rowan	1	2	3	4	5	1	2	3	4	5
2. Getting Involved in Student Organizations	1	2	3	4	5	1	2	3	4	5
3. Getting Involved in Campus Activities	1	2	3	4	5	1	2	3	4	5
4. Attending Cultural Events on Campus	1	2	3	4	5	1	2	3	4	5
5. Interacting with Students of Different Races or Cultures	1	2	3	4	5	1	2	3	4	5
6. Getting Involved in Religious Activities	1	2	3	4	5	1	2	3	4	5
7. Having a Job While Enrolled	1	2	3	4	5	1	2	3	4	5

<u>Academic Involvement</u>										
1. Faculty Availability Outside of Class	1	2	3	4	5	1	2	3	4	5
2. Social Contact with Faculty	1	2	3	4	5	1	2	3	4	5
3. Academic Advising	1	2	3	4	5	1	2	3	4	5

<u>Campus Atmosphere</u>										
1. Adequate Personal Safety	1	2	3	4	5	1	2	3	4	5
2. Adequate Physical Environment on Campus	1	2	3	4	5	1	2	3	4	5
3. Adequate Social Atmosphere	1	2	3	4	5	1	2	3	4	5
4. Adequate Academic Atmosphere	1	2	3	4	5	1	2	3	4	5
5. Fitting into Campus Community	1	2	3	4	5	1	2	3	4	5

THANK YOU FOR COMPLETING THE SURVEY YOU CAN RETURN IT TO DENISE ONCAY IN THE STUDENT RECREATION CENTER AT THE MAIN OFFICE DESK.