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# Impact of involvement in athletics upon leadership preferences among selected Rowan University athletes

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# IMPACT OF INVOLVEMENT IN ATHLETICS UPON LEADERSHIP PREFERENCES AMONG SELECTED ROWAN UNIVERSITY ATHLETES

by
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# ABSTRACT

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The purpose of the study was to assess the level and attitudes of involvement of selected Rowan University student-athletes and any significant relationships between involvement and preferences among five dimensions of leadership. Involvement included activities such as academics, athletics, on and off campus occupations, religious organizations, professional clubs, and other organizations found on campus. Demographic factors were also studied including age, class level, role on team, ethnicity, gender, and participation in a specific sport. The five dimensions of leadership studied were autocratic behavior, democratic behavior, positive feedback, social support, and training and instruction.

The researcher surveyed 210 student-athletes at Rowan University during the 2007-2008 academic year. The Statistical Package for the Social Sciences (SPSS) was used to calculate descriptive statistics, and Pearson correlations between demographics, attitudes of involvement, and leadership dimensions. The study provides insight on the

amount of time and attitudes of Rowan University student-athletes regarding involvement. The study also provides insight on Rowan University student-athletes leadership preferences and demographic variables. The relationship between the leadership patterns and the student-athletes' attitudes toward involvement was studied as well. Significant relationships were detected between the leadership patterns of Rowan University student-athletes and the attitudes toward social, academic, and campus involvement. A significant relationship was found between student-athletes and the preference of the training and instruction dimension of leadership.

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Dr. Burton Sisco, who during my first meeting with him regarding graduate school asked me why? Why, Lindsay, do you want to join this program and continue your education? I said, "I would like to work in athletics at the collegiate level one day Dr. Sisco, and I think this is the best situation for me." Three years later Dr. Sisco, can you believe that day has come already and I am working in athletics at the collegiate level?! Thank you Doc, for all of your help, guidance, and discussions on leadership as you know mine has been tested at many different levels this year. Thank you for not giving up on me after I wrote my first literature review, even though I would not have blamed you if you decided to!

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# CHAPTER ONE

# INTRODUCTION

At a time when institutions of higher education in the United States are more diverse, more expensive, and subject to increasing criticism they have to maintain their mission and yet adapt to the needs of a changing society. Colleges and universities have evolved to become a mainstay in American society with high expectations. The public demands that institutions provide every avenue possible to grow not only academically but personally, socially, and athletically.

## Statement of the Problem

Since 1852, athletics have been a compelling part of higher education institutions. In the early years only men were involved in athletics and organizations made up their own rules, uniforms, and recruitment policies. Today the National Collegiate Athletic Association (NCAA) is the decision making body that enforces rules, uniforms, and recruitment. Also, today more opportunities are available to women athletes to participate in the collegiate arena due in part to Title IX legislation (www.ncaa.org). Athletics is one form of involvement for college students; however, the research conducted primarily by Alexander Astin has focused upon all students. Astin's Involvement Theory (1984) stipulates that the more involved students are in their education the greater the overall growth both academically and socially. In this study Astin's Involvement Theory is used to describe the impact and levels of involvement among student-athletes.

Research conducted by Beauchamp, Bray, Eys, and Carron (2005) on Canadian student-athlete's provided insight on the impact of role ambiguity while participating in a sport upon student-athlete's leadership development. Two instruments used in the study were the *Role Ambiguity Scale* (RAS) and *Leadership Scale for Sports* (LSS). This study opened the door for further research on student-athletes, leadership preferences, and potential relationships with involvement on campus.

## Purpose of the Study

The purpose of the study was to assess the involvement levels of selected Division III Rowan University student-athletes. The study also investigated the connection between student-athletes' attitudes toward involvement and preferences for five dimensions of leadership. Furthermore, demographic information was studied including, gender, grade point average, ethnicity, academic year, specific sport, starter, nonstarter, and age to determine if there were any significant differences between involvement and the five dimensions of leadership.

## Significance of the Study

This study examined two important aspects of the collegiate experience for athletes; campus involvement and leadership preferences. The research focused on Astin's Involvement Theory and the minimal focus on student-athletes. Furthermore, the research examined the leadership preferences of student-athletes using Chelladurai and Saleh's *Leadership Scale for Sports* (LSS) (1980). The findings of this study could provide insight into the knowledge base of student involvement levels among student-athletes and their leadership preferences. The offices of Student Affairs, Student Government, and Athletic Departments nation-wide could use the information to further

their understanding of academic and personal development within a selected group of collegiate students, athletes.

## Assumptions and Limitations

It was assumed that research linking involvement theory to student-athletes' and their leadership preferences was a worthy area to study. The survey used in the study was only given to a selected number of Rowan University student-athletes. Only those who returned the survey participated in study, and the assumption is that each subject was honest and truthful in their responses. The subjects were involved in a variety of sports offered at Rowan University which varied from first year freshman to fifth year seniors. Findings from the survey were limited to a selected group of athlete's involvement levels and associated attitudes and leadership preferences in January of 2008; therefore, the timeframe of the study limited its results. Moreover, of the 350 student-athletes the goal was to use random selection to survey 175 student-athletes and yield a 70% return rate. Rowan University Athletic Department, different coaching styles, and sport differences, as well as researcher perspectives, may have presented potential bias in findings.

## Operational Definitions

1. Athlete: Student's who meet the academic requirements instituted by Rowan University and participate in a varsity sport at Rowan University. The sports offered at Rowan University are: football, field hockey, men's and women's soccer, men's and women's cross country, women's volleyball, men's and women's swimming, men's and women's basketball, women's lacrosse, men's baseball, women's softball, and men's and women's track and field (www.rowan.edu/athletics).

2. Higher Education: A college or university, such as Rowan University, that provides academic opportunities for students of different ages, backgrounds, and professional goals.
3. Leadership: Refers to the five dimensions of leadership including autocratic behavior, democratic, behavior, positive feedback, social support, and training and instruction.
4. Rowan University: A university that provides academic, athletic, and social opportunities to undergraduate and graduate students. The main campus is located in Glassboro, New Jersey and contains approximately 10,500 undergraduate students.
5. Student Involvement: A theory created by Alexander Astin (1984) in which he asserts that the more involved a student is in the campus environment, the higher the retention rate and the greater the academic success.
6. Undergraduate Students: Students that vary from age whose primary purpose is to receive a bachelor's degree. In this study, undergraduate students were those who participated on a varsity athletic team at Rowan University during the 2007/08 academic year.

## Research Questions

This study addressed the following research questions:

1. How involved and how much time do selected Rowan University student-athletes spend on their involvement activities?
2. What are selected Rowan University student-athletes attitudes toward the importance of being involved in social, academic, and campus life?

3. What are selected Rowan University student-athletes attitudes toward the leadership dimensions of democratic, autocratic, training and instruction, social support, and positive feedback?
4. Is there a significant relationship between student-athletes' demographic variables of age, class, grade point average, and role on team and attitudes of involvement?
5. Is there a significant relationship between student-athletes' demographic variables of age, gender, class, ethnicity, sport, grade point average, and role on team and the five leadership dimensions?
6. Is there a significant relationship between student-athletes' attitudes toward involvement and the five leadership dimensions?

## Overview of the Study

Chapter two provides a conceptual framework of scholarly literature that relates to the study. The chapter includes a brief history of athletics and the establishment of the National Collegiate Athletic Association, as well as discussions of Alexander Astin's Involvement Theory, Beauchamp, Bray, Eys, and Carron's study of Canadian athletes using the *Leadership Scale for Sports* (LSS) and *Role Ambiguity Scale* (RAS), and the connection with collegiate athletics.

Chapter three discusses the study of methodology and procedures. The section includes: the context of the study, population and sample selection, instrumentation, data collection, and how the data were analyzed.

Chapter four concentrates on the research questions addressed in the introduction by presenting the finding and results of this study. Statistical and narrative analysis was used to summarize the data in this section.

Chapter five summarizes the major findings of the study, with conclusions and recommendation for practice and further research.

# CHAPTER TWO

# REVIEW OF LITERATURE

## Brief History of Intercollegiate Athletics

A crew race between Yale and Harvard College in 1852 was the start of intercollegiate athletics for higher education institutions in the United States (http://www.answers.com). One-hundred and fifty years later athletics have become a valuable asset to institutions and students nation wide. Today, intercollegiate athletics is governed by a rule-making body, established in 1910, known as the National Collegiate Athletic Association (NCAA). Prior to 1910, student-athletes determined their own rules, schedules, and recruitment; however, frequent and deadly injuries forced President Theodore Roosevelt to demand reform. On December 28, 1905, the Intercollegiate Athletic Association of the United States (IAAUS) formed to represent college and universities athletic programs. In March of 1906, the IAAUS became official and four years later turned into the rule-making body National Collegiate Athletic Association (http://www.ncaa.org).

The National Collegiate Athletic Association's core purpose, as stated on their official website and manual, is "to govern competition in a fair, safe, equitable and sportsmanlike manner, and to integrate intercollegiate athletics into higher education so that the educational experience of the student-athlete is paramount" (¶ 2). The NCAA believes that the core values of the association are to teach student-athlete's the skills

necessary to balance, and excel in, academics due to the social involvement, sportsmanship, diversity, and leadership that athletics offer.

Davis, (as cited in Blann, 1985) stated in 1978 that "for the most part intercollegiate contests are played by young men and women undergraduate students dedicated to academic pursuits… athletics provide students with an opportunity to enrich and supplement their educational experience" (p. 115). The NCAA provides an opportunity, through the higher education institutions, for young student-athlete's to mature and grow as young adults. Moreover, the NCAA established a Division III Student-Athlete Leadership Conference, in which, Dan Dutcher, Vice-President for Division III stated in 2005, "It is an enjoyable and rewarding program that recognizes and builds upon the realities of our diverse and challenging world" (¶ 2). Furthermore, the NCAA Leadership Institute for Ethnic Minority Males and Females, NCAA Fellows Leadership Development Program, National Student-Athlete day, and the Student-Athlete Advisory Committee (SAAC) are examples of programs available to young student-athletes in preparation for positions of leadership and to reinforce the academic integrity of higher education institutions.

In 1973, the NCAA separated the participating institutions into three separate divisions by level of competition, funding, and size. The governing body declared each separate tier as division one, two, and three. However, two subdivisions exist under division one; division one-double-a and division one-a. Division three consists of one level comprised of 442 active college and universities nationwide. Eighty-percent of the institutions are private and 20% are public institutions. In 1980, the NCAA began to administer women's programs as well (www.ncaa.org).

Hawes (2004) comprised a news release from the Division III Management Council that noted Division III had the largest number of participating institutions second to Division I with 140,579 student-athlete participants. In 1997 the Division III Management Council was established to focus on the diversity amongst the Division III programs. In one report from the NCAA (2003) Division III men were more likely to engage in gambling; however, they were also described as pure student-athletes who play for the love of the game.

Rowan University, a division three institution, incorporates 16 athletic teams, six women's teams, four men's teams, and three teams of both male and female athletes tallying an average of 350 athletes a year (Penny Kempf, personal communication, July 31, 2007). Rowan University's Athletic Department's mission statement states that "Through strong support services, students are challenged to succeed, inspired to achieve and instilled with a sense of pride and tradition in the college community" (¶ 1). Also, the "Rowan ambition is knowledge through study, responsibility through service and character through challenge" (¶ 2).

## Astin's Involvement Theory

As higher education institutions are continuously held accountable for the curriculum, campus programs, retention rates, residence halls, and other collegiate criteria they also have to defend why student involvement is a critical part of the institution. Cooper, Healy, and Simpson (1994) cited a report by *The Study Group on the Conditions of Excellence in American Higher Education* (1984) in which the study noted "the more involved students are on campus the greater will be their growth and achievement, their satisfaction with their educational experiences, and more likely they

are to continue their learning (p. 98)." Thus complementing Alexander Astin's Involvement Theory that the more involved a student is in the campus environment the higher the retention rate and the greater the academic success.

In 1966, *The American Council of Education* created an organization called *Cooperative Institutional Research Program* (CIRP) to gather data on student involvement in higher education institutions. Alexander Astin was a key figure of the CIRP, and it soon became a key figure in his UCLA program *Higher Education Research Institute* (HERI). The CIRP performed longitudinal studies on incoming freshman and then repeated the study during the senior year. Astin (2003) claimed that the CIRP "data has been crucial, for example, in enhancing our understanding of the importance of faculty-student contact, of the residential experience, of the power of student peer group, and of the critical role played by student involvement" (p. 24). This study started in 1966 and soon became Astin's involvement theory.

As Astin continued his research on involvement he conducted a longitudinal study in 1975 on college dropouts. The study depicted a high number of college dropouts were not involved on campus during the undergraduate experience compared to those students who were involved on campuses. Astin believed that the 1975 study began a necessary discussion on involvement and its positive impact on a students overall performance academically.

Astin (1984) defined involvement as "the amount of physical and psychological energy the student devotes to the academic experience" (p. 297), and conceptualized his idea around three established theories and the *black box* theory. The *black box* is a term used by Astin to depict a student's participation in their own academic achievement. For

instance, a student's grade point average is the result of a college or university that has set procedures and policies in which a student must follow to receive their grade point average. The grade point average then becomes an outcome of achievement that can be measured (1984). This *black box* approach is the exact opposite of Astin's theory of involvement; where as, the student does not actively receive his/her grade point average instead it is computed by institutional procedures.

Furthermore, Astin chose three pedagogical theories with the goal of depicting how each theory can be altered to include student involvement (1984). The first theory is described as the subject-matter theory, the area college professors tend to value. This theory is based on the notion that students learn by attending lectures, reading assignments, and studying long and hard at the library (Astin). Astin believes that this theory is ideal for the college professor with the greatest amount of knowledge but the student is left with a passive role in the learning process. This theory does not evaluate the student who is unsuccessful by reading or conducting individual assignments and needs to be involved in other aspects of college to be more successful academically (Astin).

Resource theory is the second theory and Astin places this among administrators and policy makers within the university or college. Resource theory places all of its emphasis on the best libraries, highest achieving students, classrooms, professors, staff, and low student-faculty ratio. However, Astin argues that the best resources available may not result in better student development outcome. To illustrate his point, Astin stated "having established a multimillion-volume library, the administration may neglect to find out whether students are making effective use of that library" (p. 300).

Individualized (eclectic) theory is the third and last theory Astin used and this theory attracts developmental and learning psychologists. Those who implement this theory believe "no single approach to subject matter, teaching or resource allocation is adequate for all students" (Astin, 1984, p. 300). However, the theory does not evaluate the involvement of students and is a very expensive theory to conduct at an institution of higher education.

Astin integrated the theories with student involvement, the underlying missing concept in all of them. Therefore, the purpose of involvement theory is to measure students' active participation in their education and academic process. Astin (1984) described the theory as one that focuses on "behavioral mechanisms or process that facilitate student development, the how of the student development process" (p. 301). Specifically, student involvement theory demonstrates that student achievement is equal to the amount of effort put into each activity. Astin's 1975 study on college dropouts depicted college men who felt bored in the classroom and women who dropped out due to marriage or pregnancy to illustrate his point that retention and student-involvement are interconnected.

Astin emphasized that behavioral motivation is behind a student's involvement in his/her academic process. Involvement theory has five basic assumptions:

1. Involvement is the energy invested to the activity;
2. Involvement occurs on a spectrum;
3. Involvement is quantitative and qualitative;
4. Student involvement is directly related to the academic achievement; and

5. Educational policy will effect student involvement. (Astin, 1984, p. 298)

To coincide with Astin's Involvement Theory, Graham and Cockriel (1996) conducted an *ACT College Outcomes Survey* in which they used a sample base of 9,400 undergraduate students to evaluate personal growth through the college experience. Graham and Cockriel used Astin's definition of involvement and found similar results as compared to Astin. Also, Niles, Sowa, and Laden's study (cited in Graham & Cokriel, 1996) found "that participation in student role activities, or what students actually did while they were in college, had more impact on student development than affective measures of their commitment" (p. 503). Pike (2003), used involvement theory to compare student demographics. The study suggested that different institutions provided different patterns of involvement, experiences, and student background's.

In regards to athletics, Astin (1984) states, "Participation in sports, particularly intercollegiate sports, has an especially pronounced, positive effect on persistence" (p. 302). Astin indicated that athletes were satisfied in four areas: "the institution's academic reputation, the intellectual environment, student friendships, and institutional administration" (p. 304). Moreover, Astin mentions that attendance is not affected by the student-athletes as much as the college student population due to the amount of time spent with their team.

Ryan (1991), a student of Astin, conducted a dissertation in which he sampled 737 Division One men and women college athletes to determine their involvement patterns and its impact on the psychosocial development of athletes. His study suggests that athletes spend a significant amount of time, energy, and personal emotion in his/her

sport. Ryan's research suggested that student athlete's are willingly taking an active part in their education and will in turn continue to grow personally and academically. Their heavy involvement on campus and long hours training seem to have a positive impact. However, as noted in the study athletics has been debated for years on the positive and negative impact on student-athletes and Ryan calls for further research to end the debate. Nevertheless, Ryan's study suggests that athlete's do gain dependence on the sport and in turn have more emotional problems then the non-athletes.

On the other hand, athletics teaches team-work, competition, cooperation, and sportsmanship which Ryan suggests may increase close interpersonal relationships and allow athletes to learn how to effectively balance individual and group roles. Furthermore, 85% of the athletes surveyed disagreed fully with the statement ''my athletic experiences have not improved my ability to cooperate with others; which, depicts athletes belief that they excel in competitiveness and cooperativeness'' (Ryan, 1991, p. 73). Furthermore, swimmers, basketball players, and water polo team members had significantly high correlation with leadership abilities more so then other athletic teams. Ryan suggests that it may stem from the low number of team members, the ability to communicate, and the small family like atmosphere. The other sub-categories that had "a significant and positive simple correlations with self-reported changes in leadership abilities were: black athletes ($r$=.11), big-time athletes ($r$-.10), revenue sport athletes ($r$=.10), Division One athletes ($r$=.08), scholarship athletes ($r$=.05), and football players ($r$-.05)" (Ryan, 1991, pp. 75-76). This study critically explored the positive and negative impacts of Astin's student involvement theory upon college athletes.

Icavone (2007) found that student-athletes at Rowan University did not participate in fraternity or sorority, study abroad, student performances, or student government; however, student-athletes did participate in 17 other activities listed and averaged 2.69 hours per week in activity. Icavone depicted that Rowan University student-athletes did not have very strong feelings toward importance and satisfaction with social, academic, and campus importance. However, Icavone suggested that the demographics affected the involvement patterns and the student-athlete's academic performance.

## Leadership Defined

Leadership has become an important topic in education of all levels. The characteristic of leadership and associated skills has generated discussions for many years. This is not just a topic for higher education, as shown by Victor Elementary School, California, a kindergarten to fifth grade school that has implemented a Student Leadership Development Program to help build leadership skills at an early age (Marsden, 2007). The question then becomes what is leadership?

Leadership can be defined in a variety of ways. For example, in a study conducted by Dobosz and Beaty (1999), leaders are described as having "the capacity to guide others in the achievement of a common goal. Decisiveness, determination, interpersonal and organizational aptitude, loyalty, self efficiency, and self discipline are considered some of the attributes of effective leaders" (¶ 3). On the other hand, Wielkiewicz (2000), defined leadership as "a process that emerges from individual actions and interactions which influence systems both inside and outside an organization. Each individual action in the system potentially influences the leadership process" (p. 336).

Even though the definitions may vary the idea is the same throughout the research. Leadership is a pattern of behavior that students gain through involvement that is dynamic and is in preparation for their future careers. Roberts and Ullom (as cited in Knight, 1999) discussed the impact of leadership and the need at the higher education level for the recognition of co- curricular activities within the curriculum:

> One of the central and traditional purposes of higher education is the preparation of citizens for position of leadership…With the growing complexity of education, its increased tendency toward specialization, and the need for leaders to cope with change, leadership programs assume an even greater importance. (pp. 39-40)

The definition of leadership may not alter as much as the patterns and different leadership styles. For instance, Bass (1985), (as cited in Schyns & Sanders, 2007); described one type of a leader, *transformational leadership*. Those are leaders who are able to alter the goals of those that follow them for the betterment of the whole organization. *Transformational leaders* are those that do not put forth their own agenda first, yet establish a plan for others to achieve and a goal for all to obtain. According to Schyns and Sanders (2007), research has depicted that transformational leadership is highly effective. However, as research has shown that leadership is directly impacted by those that follow them (2007). As Weber (1980), (as cited in Schyns & Sanders, 2007), stated "leaders could not be charismatic if their followers did not perceive them as such" (p. 2347). As Cassel (1999) explains "for without followers there would be no leader" (p. 288).

Also, Cassel (1999) used 10 principles to illustrate his idea of leadership. His second step, right before building trust, cited Kurt Lewin's 1940 study of leadership and

group dynamics. Lewin (as cited in Cassel, 1999) broke leadership styles into four categories: Laissez-faire, democratic cooperative, autocratic submissive and autocratic aggressive. In laissez-faire leadership, the leader does not praise, does not reprimand, and does not separate themselves from the group, yet is available at all times for them. The democratic cooperative approach is a team oriented structure of leadership. Furthermore, autocratic submissive is where research and evidence is used and requested for blame or praise. Lastly, the autocratic aggressive is when the leader makes all decisions for the group based on his/her desires (Cassel).

Furthermore, leadership is an essential component in higher education and athletics. The National Athletic Collegiate Association (NCAA) developed specific leadership training organizations and hosts events centered on building leadership values and identifying leaders in student-athletes. However, athletics is one of many arenas where leadership is crucial for success. Knauss (2007) broke leadership into two steps. First, leadership is the ability to create a method to win within the organization. Second, the leader must identify and cherish the values of the organization to continue the traditions already established while ensuring the winning will continue (Knauss).

A Leadership Development Instrument Applied to Student-Athletes

Beauchamp, Bray, Eys, and Carron (2005) conducted a study that used 159 Canadian university athletes from a variety of interdependent varsity teams to determine the impact role ambiguity had upon athletes and their overall leadership development. Beauchamp et al., used two instruments in the study. The first instrument was the *Role Ambiguity Scale* (RAS) created by Beauchamp in 2002. This 40-item scale surveyed each athletes understanding of their individual role upon the team (Beauchamp et al.). Role

ambiguity is broken down into four manifestations "a) the scope of one's responsibilities; b) the behaviors associated with one's role; c) how one's role performance is evaluated; d) the consequences of failing to fulfill one's role responsibilities" (Beauchamp et al., 2005, p.6).

The second instrument used was the *Leadership Scale for Sports* (LSS) created by Chelladurai and Saleh in 1978. Beauchamp, described this survey as "perhaps the most extensively employed framework for studying coaching behaviors in sport" (2005, p. 7). The scale was created to acknowledge that the leadership instruments being used were not accurate for athletes due to the extreme differences between athletics and the business sector, which at the time was the focal point for many leadership instruments. Therefore, Chelladurai and Saleh (1980) determined that athletes spent a considerable amount of time preparing each day, that athletes are often driven for rewards because they are trained to win, and finally the teams are only together for a short duration. Many of these characteristics differed from the business world.

Prior to the creation of the LSS other researchers tested for leadership in athletes as well; however, Chelladurai and Saleh commented that validity and reliability was in question in regards to the other instruments. Therefore, they set out to revise the survey that they created in 1978 and could be used for future research. As a result, a 40-item version of the LSS was created; the validity coefficient ranged from 0.71 to 0.82. The LSS was designed to test five dimensions of sport leader behavior: (a), autocratic behavior (five items); (b), democratic behavior (nine items); (c), training and instruction (13 items); (d), positive feedback (five items); and (e) social support (eight items). According to Chelladurai and Saleh, "the LSS consists of one direct task factor (Training

and Instruction), two decision-style factors (Democratic and Autocratic Behavior), and two motivational factors (Social Support and Positive Feedback)" (Chelladurai & Saleh, 1980, p. 43). Chelladurai and Saleh used both physical education students, that were used in the original survey, and then compared their responses with those of the athlete's that were surveyed as well.

## The Impact of Student Involvement in Athletics on Leadership

Higher education offers many avenues for student's involvement including participation in academics, student affairs organizations, Greek life, or athletics for student-athletes. Researchers have been able to identify leadership patterns through involvement in these organizations. Unfortunately, there have been a limited number of studies conducted regarding athletics and some of the information is contradictory. The studies have shown a positive relationship between athletics and leadership, retention, and interpersonal skills; however, the contradiction lies with the media's representation of athletics, the affect of athletics on career patterns, and the ability to form mature relationships are negatively affected by athletics. Also, Astin has provided data to show a positive impact from athletics on student's retention; whereas, Blann argues that athletics in division one negatively impact career paths (as cited in Ryan, 1989).

Researchers have used the definition of leadership, the conflicting data of the impact of athletics, and different leadership instruments to determine their own conclusions toward athletics. The studies seem to illustrate a modest yet positive result amongst the two. Ryan (1989) looked at four developmental factors: "satisfaction with college, motivation to finish bachelor's degree, interpersonal skills, and leadership ability" (p. 123). Using information gathered in a pre-test and post-test from the

*Cooperative Institutional Research Program* in 1981, Ryan, was able to yield a 31% (1,150) response from athletes. He concluded that a modest yet positive relationship existed between athletes and interpersonal skills, leadership ability, educational goals, and satisfaction in their college experience (1989). Ryan, then in 1990, used the *Student Developmental Task Inventory* to determine that it is "clear that participation in intercollegiate athletics is associated not only with high self-ratings on leadership, but also with large self-reported improvements in leadership abilities" (p. 78).

Furthermore, Pascarella and Smart (1991), conducted research focused on African American male and Caucasian male athletes and found similar results using the same test Ryan used in 1989. Involvement in athletics yielded a modest positive result for African American males in regards to obtaining a bachelor's degree, self-esteem, student involvement, and satisfaction of collegiate experience (Pascarella & Smart). For Caucasian males, a positive result was indicated for social integration, grades, satisfaction with college, bachelor's degree, and self esteem (Pascarella & Smart). These studies contradicted Blann's (1985) suggestion that "intercollegiate athletics at a high level of competition may detrimentally affect students' ability to formulate mature educational and career plans" (p. 118).

Moreover, studies have also investigated the impact of involvement on leadership of women. Even though Dobosz and Beaty (1999) could not confirm that men had greater ability then women to conduct acts of leadership, Knight (1999), believes differently. Knight argues that leadership lessons are often taught on the playground as children; therefore, women are at a disadvantage because they often do not participate in those types of activities and are missing out on a valuable lesson. On the contrary,

Wielkiewicz (2000) developed a model showing that gender is not a factor to study but the perception of leadership and how people think about the leadership process is the primary focus.

## Summary of the Literature Review

Since 1852, athletics have been an integral part of the higher education experience for numerous students. Athletics have impacted college images, recruitment of students, and retention. The National Collegiate Athletic Association (NCAA) has developed many programs to emphasize the importance of character and leadership among student athletes throughout each division. As a division three institution, Rowan University has included leadership, character, and involvement within their athletic department mission statement.

Astin's Involvement Theory, suggests that athletics has a positive impact on the student, but stresses the importance of involvement for all students on campus. He negates the theories that do not include student involvement in their own educational pursuits and stresses the necessity for involvement to have a successful collegiate experience. Chelladurai and Saleh's *Leadership Scale for Sports* (LSS) is an instrument that has been created with the student-athlete in mind. It is a survey that has been used to test for patterns and growth in student-athlete's leadership patterns. Beauchamp, et al's (2005) study and the results of Chelladurai and Saleh's (1980) instrumentation provide data to compare.

Limited research has depicted a modest yet positive impact of athletics upon leadership ability. Ryan (1989), Pascarella and Smart (1991), Dobosz and Beaty (1999), and Wielkiewicz (2000) all have shown a positive relationship between leadership characteristics and athletics. However, Blann (1985) and Knight (1999) are still debating

the impact on individuals of athletics within higher education. Therefore, future research is needed to expand the lack of information on the impact of student involvement in athletics and any associations with leadership characteristics and patterns.

# CHAPTER THREE

# METHODOLOGY

## Context of the Study

The study was conducted at Rowan University, in Glassboro, New Jersey. Rowan University is a Division III institution. There are approximately 10,500 undergraduate and graduate students enrolled at Rowan University; 350, approximately, are student-athletes (Penny Kempf, personal communication, July 31, 2007). The total number of athletes according to each sports individual roster is 429; however, 79 of those athletes are two sport athletes tallying the total number of student athletes to be 350 (Patty Raube, personal communication, November 19, 2007). The university offers 42 undergraduate majors and graduate students can choose from educational certificate programs, 38 master's and specialization degrees, 19 graduate certification programs, or a doctoral program in educational leadership. Currently, the university contains a total of 16 sports. The women's teams include: volleyball, field hockey, soccer, cross country, swimming, basketball, lacrosse, softball, and track and field tallying nine sports. The men's teams include: soccer, football, cross country, swimming, basketball, baseball, and track and field tallying seven teams.

Rowan University is a member of the New Jersey Athletic Conference (NJAC). Rowan is one of 10 teams affiliated with the NJAC; however, currently football has added three more members to the NJAC. The institutions in the NJAC are: Kean University, Montclair State College, New Jersey City University, Rutgers Camden,

Rutgers Newark, Ramapo College, The College of New Jersey, Richard Stockton College, and William Patterson College. In addition to those nine the three football schools are: Cortland State University, Buffalo State College, and Western Connecticut State University.

## Population and Sample Selection

The available population for this study was approximately 350 student-athletes at Rowan University. The targeted population consisted of one-half or 175 student-athlete at Rowan University, Glassboro, New Jersey during the fall and spring semester of 2007-2008. The procedure included receiving from Ms. Patty Ruabe, Assistant Athletic Director and Compliance Officer each team's final season roster. Once each roster was collected and checked with the sports information for any late players or players who quit the final number of each athletic team's student-athletes was tallied. The total number of student- athletes was 429; however, 79 of those athletes are two sport athletes therefore 350 athletes were available.

The process used was to divide each team's final number in half to 175 to find the percentage of players needed to receive a proportioned response. Next, the procedure was a random selection of each student athlete by sport. Numbers one to 50 were placed separately into a box and each student-athlete was numbered according to placement on the roster. Number selection was random and proportional. The final stage was to request each coach to distribute and collect the instrumentation from their student-athletes. The men and women selected were athletes that varied by academic year, years of athletic participation at Rowan University, sport, playing time, and level of skill.

## Instrumentation

There were two instruments and a demographic questionnaire used to gather data in the study. The demographic information requested: the athlete's gender, ethnicity, academic year, grade point average, specific sport, starter, nonstarter, and age. Furthermore, the first instrumentation used to determine the involvement patterns of athlete's was a survey created and used by Thomas Icavone (2007) in an unpublished thesis at Rowan University. This survey was not changed as it tested for involvement patterns in student-athletes which is the basis for this study (Appendix B). Icavone's survey entitled *Student-Athlete and Involvement Theory* sampled student-athlete's on their overall involvement in campus life. The survey contained five sections and 45 questions. Section one requested each subject to check activities they have been involved with on campus while attending school; other than athletics. Section two surveyed how often they participated in those activities. Section three simply asked where the student resided. Section four contained two questions that pertained to the student's relationship with the faculty and other students on campus. The final section, section five, included two subsections: social and academic involvement. On a Likert-scale of one (very important) to five (not at all important) the students were to identify the importance and satisfaction they placed on each item listed.

The second instrumentation, *Leadership Scale for Sport* (LSS), was used by Joe Frontiera (2006) in his study for the West Virginia University thesis requirement. The LSS was first created in 1978; however, Chelladurai and Saleh felt the instrumentation needed to be adjusted and retested for reliability and validity. This instrument was created to test leadership patterns among selected athletes; therefore, the survey was not altered

and used in its entirety to fit the needs of this study (Appendix C). Consequently in 1980, the survey was broken into five sections: Training, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback and retested amongst physical education students and athletes for reliability and validity. The test-retest reliability coefficients ranged from .71 to .82. The survey was a 40-item questionnaire and five responses were available: *always, often, occasionally, seldom, and never* (Chelladurai & Saleh, 1980).

Following approval from the Institutional Review Board of Rowan University (Appendix A) a pilot test of the survey was conducted. Two student-athletes were selected to perform the pilot test. The demographic questionnaire and both instrumentations were given to each student-athlete. Each athlete completed the demographic information, after they were instructed on the confidentiality; followed by the involvement survey and then the LSS.

## Pilot Testing

Prior to distribution of the instrumentation a pilot test was given to three Rowan University lacrosse players. To help ensure validity and reliability the participants were asked to critique the instrument for appropriate content and design. The three athletes varied in grade level and were current athletes; therefore, they could accurately represent the subjects. Upon completion of the survey the athletes did not note any problems or misunderstandings so it was ready for use.

## Data Collection Procedures

Upon permission from the Institutional Review Board to conduct the research survey permission was given by Mrs. Joy Solomen, Athletic Director, to survey the student-athlete's. No information identifying any student-athlete's was collected, and a

description of the confidentiality was on the top of each instrument distributed. Two weeks prior to releasing the survey each coach was sent an email regarding the survey distribution. In return positive feedback, encouragement, and understanding were expressed by each head coach. One week prior to distributing the survey's another email was sent regarding time limitations and collection procedures. Each team then received an envelope with a list of randomly selected names and surveys inside to be completed and returned. A one week window was given to complete each survey and return. By the following Monday all but three sports were returned. 210 survey's were distributed even though 175 was half of the student athlete population to account for players who may have graduated in the winter, no longer a member of the program, and two sport athletes. 132 were returned yielding a 62% return rate.

## Data Analysis

Data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS) computer software. Demographic information was the first questionnaire each student-athlete completed. The independent variables included gender, sport, age, starter, nonstarter, playing experience, and grade point average. The dependent variables were information on individual involvement on campus, attitudes toward being involved on campus, and attitudes toward leadership and their leadership patterns. The connection between involvement patterns of student-athletes and its impact upon leadership was studied using Pearson product-moment calculation, descriptive statistics (mean, range, and standard deviation), and frequency distribution (including mean and standard deviation). SPSS was used to examine the data in regards to the research questions.

# CHAPTER FOUR

# FINDINGS

## Profile of the Sample

The subjects were selected from rosters submitted to the Compliance Officer, Ms. Patty Raube, of Rowan University prior to each of the 16 team's individual season. The subjects were recruited through random sampling. Of the 210 distributed surveys, 132 were returned completed, yielding a return rate of 63%. There were 67 males (51.1%) and 50 women (38.2%). Nine point nine percent of the subjects surveyed were 18 years old, 58% of participants were between the age of 19 to 20, 29.8% ranged from 21 to 22, and three student-athletes were 23 years old or older.

Table 4.1 contains demographic data on the sample selected including information on gender, age, class, ethnicity, sport, grade point average (GPA), and the athlete's role on the team. The table depicts that the largest class were freshman followed by sophomores, juniors, and seniors. A total of 84% of the sample was Caucasian/white; 9.9% African American/Black, and 2.3% Puerto Rican. The specific intercollegiate sport that the subjects were members of is depicted in Table 4.1. Football had the greatest number at 35.1%, followed by baseball 12.2%, and swimming and diving at 9.9%. Of those surveyed, 51.9% of the athletes reported having had a starting role and 46.6% did not. A total of 33.6% of those sampled reported having a cumulative grade point average of 3.3 to 3.0 followed by 22.9% indicating a GPA of 2.9 to 2.7.

Table 4.1

*Sample Demographics*

| Value | *(N=130)* Frequency | *%* |
|---|---|---|
| Age | | |
| 18 | 13 | 9.9 |
| 19 to 20 | 76 | 58.0 |
| 21 to 22 | 39 | 29.8 |
| 23 and older | 3 | 2.3 |
| Gender | | |
| Male | 67 | 57.3 |
| Female | 50 | 42.7 |
| Class | | |
| Freshman | 45 | 34.4 |
| Sophomore | 38 | 29.0 |
| Junior | 30 | 22.9 |
| Senior | 17 | 13.0 |
| Ethnicity | | |
| White/Caucasian | 111 | 84.7 |
| Puerto Rican | 3 | 2.3 |
| Other | 1 | 0.8 |
| African American/Black | 13 | 9.9 |
| Asian American/Asian | 7 | 0.8 |
| Other Latino | 2 | 1.5 |
| Sport | | |
| Basketball | 9 | 6.9 |
| Soccer | 6 | 4.6 |
| Track and Field | 7 | 5.3 |
| Football | 46 | 35.1 |
| Field Hockey | 10 | 7.6 |
| Volleyball | 1 | 0.8 |
| Baseball | 16 | 12.2 |
| Cross Country | 2 | 1.5 |
| Lacrosse | 11 | 8.4 |
| Softball | 10 | 7.6 |
| Swimming/Diving | 13 | 9.9 |
| GPA | | |
| 4.0 to 3.7 | 9 | 6.9 |
| 3.6 to 3.4 | 21 | 16.0 |
| 3.3 to 3.0 | 44 | 33.6 |

| | | |
|---|---|---|
| 2.9 to 2.7 | 30 | 22.9 |
| 2.6 to 2.4 | 13 | 9.9 |
| 2.3 to 2.0 | 9 | 6.9 |
| 1.9 to 1.7 | 3 | 2.3 |
| 1.6 to 1.4 | 1 | 0.8 |
| 1.3 and below | 1 | 0.8 |
| Role on Team | | |
| Starter | 68 | 51.9 |
| Nonstarter | 61 | 46.6 |

## Analysis of Data

Research Question 1: How involved and how much time do selected Rowan University student-athletes spend on their involvement activities?

Table 4.2 and 4.3 depicts information regarding question 1. Table 4.2 provides the number of how many selected student-athletes participated in an activity, as well as, the average amount of hours per week they spent in that activity. The activity with the greatest number of participants was intramural sports with 43 student-athletes averaging 2.79 hours a week. The second largest activity was off campus part time jobs with 24 athletes; followed by, on campus part time jobs with 19. Study abroad was the only activity listed with zero participants; however, university publications and leadership programs contained one student-athlete. The activity listed that consumed the most amount of overall time was the internship with 15.67 hours per week.

Table 4.2

*Hours of Involvement by Student-Athletes in Selected Activities*

| Activity | *n* | *M* | *SD* |
|---|---|---|---|
| Hours in a week spent in intramural athletics | 43 | 2.79 | 1.505 |
| Hours in a week spent in off campus part-time job | 24 | 15.13 | 7.753 |
| Hours in a week spent in on campus part-time job | 19 | 13.26 | 9.140 |
| Hours in a week spent in field experience | 14 | 6.50 | 2.929 |
| Hours in a week spent in religious organizations | 10 | 4.10 | 5.859 |
| Hours in a week spent in professional development | 10 | 1.70 | 0.675 |
| Hours in a week spent in college production/ performance | 9 | 3.00 | 1.658 |
| Hours in a week spent in residence hall activities | 6 | 1.67 | 1.211 |
| Hours in a week spent in an internship | 6 | 15.67 | 10.231 |
| Hours in a week spent in social clubs | 5 | 2.80 | 3.033 |
| Hours in a week spent in volunteer services | 5 | 3.00 | 2.000 |
| Hours in a week spent in individual study | 5 | 8.80 | 11.946 |
| Hours in a week spent in a fraternity/sorority | 4 | 4.50 | 4.041 |
| Hours in a week spent in student government | 2 | 6.00 | 5.657 |
| Hours in a week spent in university publication | 1 | 6.00 | |
| Hours in a week spent in leadership programs | 1 | 1.00 | |
| Hours in a week spent studying abroad | 0 | | |

Table 4.3 provides information that suggests how much time a month student-athletes are involved in specific activities. Religious activities with 126 participants and exercise or physical activity with 105 participants were the activities that had the greatest number of participants. The table depicts that the student athlete spent the greatest number of days per month with 25.50 on exercise or physical activity; followed by, working with classmates with 3.91 days per month. Community based projects with a mean score of 1.70 times per month was the activity with the least amount of involvement time.

Table 4.3

*Amount of Times a Month Student-Athletes Participate in Selected Activities*

| *Activity Time* | *n* | *M* | *SD* |
|---|---|---|---|
| Times a month spent in religious activity | 126 | 3.20 | 1.271 |
| Times a month spent with exercise or physical activity | 105 | 25.50 | 7.288 |
| Times a month spent working with classmates | 93 | 3.91 | 2.466 |
| Times a month spent attending an art gallery/play/exhibit/dance | 35 | 2.63 | 4.983 |
| Times a month spent being tutored or tutoring a student | 23 | 2.48 | 3.108 |
| Times a month spent with community based projects | 23 | 1.70 | 1.329 |

Research Question 2: What are selected Rowan University student-athletes attitudes toward the importance of being involved in social, academic, and campus life?

Tables 4.4 through 4.6 provide mean scores and standard deviations of the student-athletes attitudes toward social, academic, and campus involvement. Table 4.4 looks at the athletes' attitudes toward social involvement. The selected Rowan University athletes felt the most important activity was their personal relationship with peers with a mean score of 2.43. The least important was attending a cultural event with a mean score of 3.45.

Table 4.4

*Rowan University Student-Athletes Attitudes toward Importance of Social Involvement*

| Involvement Activity | *n* | *M* | *SD* |
|---|---|---|---|
| Personal relationship with peers | 129 | 2.43 | 1.468 |
| Involvement in student organization | 129 | 2.97 | 1.075 |
| Involvement in campus activities | 129 | 2.83 | 1.039 |
| Interacting with students of a different race | 129 | 2.71 | 1.154 |
| Attend cultural events | 128 | 3.45 | 2.993 |
| Having a job while enrolled | 128 | 3.02 | 1.217 |
| Involvement in religious activities | 126 | 3.20 | 1.271 |

Table 4.5 describes three academic involvement categories and the attitudes of selected Rowan University athletes in regards to the importance of being involved in each. The students felt the most important activity to be involved in was academic advising with a mean score of 2.37. The least important activity was social contact with faculty with a means score of 2.59.

Table 4.5

*Rowan University Student-Athletes Attitudes toward Importance of Academic Involvement*

| Academic Involvement | *n* | *M* | *SD* |
|---|---|---|---|
| Faculty available | 128 | 2.47 | 1.334 |
| Academic advising | 127 | 2.37 | 1.402 |
| Social contact with faculty | 125 | 2.59 | 1.192 |

Table 4.6 looks at the attitudes of the student athletes toward involvement of campus activities. With a mean score of 2.32 adequate academic atmosphere was the most important aspect for campus environment; followed by, adequate social atmosphere with a mean score of 2.35. The least important aspect of campus environment with a mean score of 2.52 was an adequate physical environment.

Table 4.6

*Rowan University Student-Athletes Attitudes toward Importance of Campus Involvement*

| Campus Involvement | *n* | *M* | *SD* |
|---|---|---|---|
| Adequate personal security | 129 | 2.40 | 1.647 |
| Adequate academic atmosphere | 129 | 2.32 | 1.293 |
| Fitting into campus community | 129 | 2.46 | 1.364 |
| Adequate physical environment on campus | 128 | 2.52 | 2.177 |
| Adequate social atmosphere | 127 | 2.35 | 1.294 |

Research Question 3: What are selected Rowan University student-athletes attitudes toward the leadership dimensions of democratic, autocratic, training and instruction, social support, and positive feedback?

The *Leadership Scale for Sports* (LSS) was used to determine the preferences of student-athletes toward the leadership dimensions of democratic, autocratic, training and instruction, social support, and positive feedback. Table 4.7 provides information regarding Rowan University student-athlete's preferences towards each of the five dimensions of leadership. Student-athletes at Rowan felt the strongest form of leadership was training and instruction. The lowest mean score of 1.66 was make an athlete work to capacity and then explain to each athlete the techniques needed followed with a mean score of 1.84. Training and instruction had a total mean score of 2.08. The least favorable leadership dimension with a mean score of 3.262 was autocratic behavior. The least favorable leadership quality was to speak to discourage questions from the autocratic behavior dimension with a mean score of 3.73.

Table 4.7

*Rowan University Student-Athletes Preferences toward Leadership by Dimension*

| Variable | *n* | *M* | *SD* |
|---|---|---|---|
| Training and Instruction | | | |
| Every athlete works to capacity | 128 | 1.66 | .900 |
| Explain to each athlete techniques | 128 | 1.84 | .943 |
| Special attention to correct mistakes | 127 | 1.94 | .957 |
| Coaches function is understood by all athletes | 128 | 1.97 | 1.003 |
| Explain to every athlete what should be done and what should not be done | 127 | 2.00 | .939 |
| Specify in detail what is expected of athletes | 128 | 2.04 | .934 |
| Figure ahead on what should be done | 127 | 2.06 | .924 |
| Expect every athlete to carry out one's assignment to the last detail | 127 | 2.10 | .898 |
| See to it that the athletes' efforts are coordinated | 125 | 2.14 | .859 |
| Instruct athletes individually in skills | 128 | 2.15 | .940 |
| Point out each athlete's strengths and weaknesses | 128 | 2.37 | .895 |
| Explain how each athlete's contribution fits into the total picture | 127 | 2.37 | 2.031 |
| Give specific direction for every situation | 127 | 2.39 | .976 |
| Democratic Behavior | | | |
| Let the athletes set their own goals | 126 | 2.09 | .996 |

| | | | |
|---|---|---|---|
| Ask for the opinion of the athletes on strategies for specific competitions | 128 | 2.17 | 1.005 |
| Let the athletes share in decision making | 128 | 2.38 | .888 |
| Get group approval on important matters before going ahead | 127 | 2.41 | 1.057 |
| Encourage athletes to make suggestions | 127 | 2.57 | 1.013 |
| Ask for the opinion of the athletes on important coaching matters | 128 | 2.81 | 1.048 |
| Let the athletes try their own way even if they make mistakes | 127 | 2.83 | 1.016 |
| Let the athletes work at their own speed | 127 | 2.87 | .962 |
| Let the athletes decide the plays | 128 | 2.92 | 1.032 |
| Autocratic Behavior | | | |
| Plan relatively independent of the athletes | 127 | 2.79 | 1.995 |
| Keep aloof from the athletes | 124 | 3.13 | 1.059 |
| Refuse to compromise on a point | 126 | 3.24 | 1.249 |
| Not explain his/her actions | 127 | 3.42 | 1.192 |
| Speak in a manner which discourages questions | 128 | 3.73 | 1.277 |
| Social Support | | | |
| Look out for the personal welfare of the athletes | 128 | 1.83 | .940 |
| Help athletes with their personal problems | 128 | 2.32 | .939 |
| Encourage the athlete to confide in the coach | 128 | 2.41 | 2.075 |
| Help members of the group settle their conflicts | 127 | 2.56 | 1.044 |

| | | | |
|---|---|---|---|
| Do personal favors for the athletes | 128 | 2.96 | 1.053 |
| Encourage close and informal relations with athletes | 128 | 3.25 | 4.041 |
| Express any affection felt for the athletes | 125 | 3.32 | 3.015 |
| Invite the athletes home | 127 | 3.55 | 1.289 |
| Positive Feedback | | | |
| Tell an athlete when the athlete does a particularly good job | 127 | 1.91 | 1.002 |
| Give credit when it is due. | 127 | 2.06 | .957 |
| Compliment an athlete for good performance in front of others | 127 | 2.11 | 1.002 |
| Express appreciation when an athlete performs well | 127 | 2.25 | .943 |
| See that an athlete is rewarded for a good performance | 127 | 2.31 | .931 |

Research Question 4: Is there a significant relationship between student-athletes' demographic variables of age, gender, class, ethnicity, sport, grade point average, and role on team and attitudes of involvement?

The demographic variables of age, class, grade point average and role on team did not depict a significant correlation with involvement. The demographic variable of ethnicity depicted one weak negative correlation between student-athletes ethnicity and social contact with faculty ($r$= -.187, $p$= 0.036) at a $p$<0.05 level.

Tables 4.8 to 4.9 look at information regarding research question 4. Table 4.8 provides information regarding the correlation with gender and involvement. A significant correlation was noted between gender and involvement. The table shows a

weak correlation between the student-athletes gender and feeling of adequate personal security ($r$=-.241, $p$=.010) at a $p$< 0.01 level. The table shows a weak correlation between the students gender and feeling of adequate social atmosphere ($r$= -.219, $p$= .020) at a $p$< 0.05. The table shows a weak correlation between student-athletes gender and feeling of adequate academic atmosphere ($r$= -.219, $p$= .018) at a $p$< 0.05.

Table 4.8

*Correlations between Gender and Attitudes toward Involvement*

| Involvement | *r* coefficient | *p*-level |
|---|---|---|
| Adequate Personal Security | -.241 | 0.010 |
| Adequate Social Atmosphere | -.219 | 0.020 |
| Adequate Academic Atmosphere | -.219 | 0.018 |

Table 4.9 provides information on the significant relationships between the student-athletes sport and attitude toward involvement. The table shows five weak correlations between the sport and attitude toward involvement. Religious activities and attitudes of involvement had a weak positive correlation ($r$=.231, $p$=.009) at a p<0.01 level. The table shows a weak correlation between academic advising and the student-athletes specific sport ($r$=-.231, $p$=.009) at a p<0.01 level. The weakest correlation between students attitude toward the importance of involvement and sport was with adequate personal security ($r$=-.174, $p$=.049) at a p<0.05.

Table 4.9

*Correlations between Specific Sport and Attitudes toward Involvement*

| Involvement | *r* coefficient | *p*-level |
|---|---|---|
| Personal relationship with peers | -.186 | 0.035 |
| Religious activities | .231 | 0.009 |
| Academic advising | -.231 | 0.009 |
| Adequate personal security | -.174 | 0.049 |
| Adequate academic atmosphere | -.187 | 0.034 |

Research Question 5: Is there a significant relationship between student-athletes' demographic variables of age, gender, class, ethnicity, sport, grade point average, and role on team and the leadership dimensions?

Tables 4.10 to 4.11 present the significant relationships between gender and the five dimensions of leadership. A total of nine significant correlations were between gender and training and instruction. Positive feedback followed with three significant correlations, followed by social support and autocratic leadership with two significant correlations. Democratic behavior, represented by the statement, "athletes share in decision making," contained only one significant correlation ($r$=.240, $p$<.010) at a $p$<0.05.

Table 4.10 provides information on the significant relationships between student-athlete's gender and the leadership dimension of training and instruction. The table shows a moderate correlation between the student-athlete's gender and every player works to capacity (r= -.302, $p$=.001) at a p< 0.01 level. The table also shows a significant

correlation between gender and special attention to correct mistakes ($r$= .293, $p$= .002) at a $p$< 0.01 level.

Table 4.10

*Correlation between Gender and the Training and Instruction Dimension of Leadership*

| *Variable* | *r* coefficient | *p*-level |
|---|---|---|
| Every athlete works to capacity | -.302 | .001 |
| Explain to each athlete techniques | -.199 | .034 |
| Special attention to correct mistakes | .293 | .002 |
| Coaches function is understood by all athletes | -.276 | .003 |
| Figure ahead on what should be done | -.269 | .004 |
| Explain to every athlete what should be done and what should not be done | -.218 | .020 |
| Expect every athlete to carry out one's assignment to the last detail | -.235 | .012 |
| Point out each athlete's strengths and weaknesses | -.188 | .045 |
| Specify in detail what is expected of athletes | -.187 | .046 |

Table 4.11 provides information that looks at the significant relationships between gender and the leadership dimensions of positive feedback, social support, and autocratic behavior. Three significant correlations were found between positive feedback and gender. A negative moderately strong correlation was detected between gender and tell an athlete when the athlete does a particularly good job ($r$=-.339, $p$=.000), at a $p$< 0.01 level. Table 4.11 also shows two significant negative weak correlations between gender and express appreciation when an athlete performs well ($r$=-.194, $p$=.039), at a $p$< 0.05

level; as well as, between gender and give credit when it is due ($r$= -.213, $p$= .023), at a $p$< 0.05 level. Also, the table provides information regarding two significant correlations between social support and gender. A moderately strong correlation was found between gender and invite the athletes home ($r$=.383, $p$=.000), at a $p$< 0.01 level. Two moderately strong correlations were detected between gender and autocratic behavior. The table shows a positive moderately strong correlation between gender and speak to discourage questions ($r$= .310, $p$=.001), at a $p$<0.01 level.

Table 4.11

*Significant Correlations between Gender and Positive Feedback, Social Support, and Autocratic Behaviors*

| Variable | *r* coefficient | *p*-level |
|---|---|---|
| Positive Feedback | | |
| Tell an athlete when the athlete does a particularly good job | -.339 | .000 |
| Express appreciation when an athlete performs well | -.194 | .039 |
| Give credit when it is due | -.213 | .023 |
| Social Support | | |
| Look out for the personal welfare of the athletes | -.189 | .044 |
| Invite the athlete home | .383 | .000 |
| Autocratic Behavior | | |
| Speak in a manner which discourages questions | .310 | .001 |
| Refuse to compromise a point | .269 | .004 |

Research Question 6: Is there a significant relationship between student-athletes' attitudes toward involvement and the five leadership dimensions?

There were a total of 92 significant correlations between the student-athletes' attitudes toward involvement and the five leadership dimensions. Of those 92 correlations, 67 were weak correlations ranging from 0.01 to 0.24 (Appendix D). The remaining 25 moderate correlations ranging from 0.25 to 0.49 are presented in Tables 4.12 to 4.15. The leadership dimension of training and instruction had the greatest number of moderately strong correlations with 12. Democratic behavior and positive feedback both had four moderately strong correlations. Social support had two moderately strong correlations while autocratic had no moderately strong correlations.

Table 4.12 presents the moderately strong correlations between the leadership dimension of training and instruction and the attitudes of selected Rowan University student-athletes. The highest correlation coefficient was between the role of a coach to explain to every athlete what should be or not be done and the importance of an adequate academic atmosphere ($r$= .310, $p$= .000), at a $p$< 0.01 level. A positive correlation was also found between the role of a coach to figure ahead what should be done and the importance of an adequate academic atmosphere ($r$=.301, $p$=.001), at a p< 0.01 level. The lowest correlation coefficient was between the role of a coach to explain to every athlete what should be or not be done and an adequate social atmosphere ($r$=.230, $p$=.001), at a p< 0.01 level.

Table 4.12

*Correlations between Training and Instruction and Attitudes of Importance of Involvement*

| Variable | *r* coefficient | *p*-level |
|---|---|---|
| Explain to every athlete what should be done or should not be done and adequate academic atmosphere | .310 | .000 |
| Figure ahead on what should be done and adequate academic atmosphere | .301 | .001 |
| Expect every athlete to carry out one's assignment to the last detail and academic atmosphere | .278 | .002 |
| Every athlete works to capacity and adequate academic atmosphere | .275 | .002 |
| Explain to each athlete techniques and religious activities | -.271 | .002 |
| Explain to every athlete what should be done or should not be done and faculty available | .264 | .003 |
| Coaches function is understood by all athletes and adequate academic atmosphere | .250 | .004 |
| Explain to every athlete what should be done or should not be done and personal relationship with peers | .248 | .005 |
| Expect every athlete to carry out one's assignment to the last detail and social atmosphere | .238 | .007 |
| Explain to every athlete what should be done or should not be done and adequate social atmosphere | .230 | .009 |

Table 4.13 presents the relationships between the student-athletes attitudes toward the importance of involvement and the leadership dimension of democratic behavior. Two of the nine survey items regarding democratic behavior had significant correlations with five statements regarding the importance of involvement. The highest positive correlation coefficient was between part of the role of a coach is to ask for the opinion of the athletes on strategies for specific competitions and religious activities ($r$=.282, $p$=.001), at a $p< 0.01$ level. The preferred behavior of the coach to let the athletes set their own goals and the importance of an adequate social atmosphere had another positive correlation coefficient ($r$= .277, $p$=.002), at a $p< 0.01$ level.

Table 4.13

*Correlations between Democratic Behaviors and Attitudes of Importance of Involvement*

| Variable | *r* coefficient | *p*-level |
|---|---|---|
| Ask for the opinion of the athletes on strategies for specific competitions and religious activities | -.249 | .005 |
| Ask for the opinion of the athletes on strategies for specific competitions and faculty available | .282 | .001 |
| Let the athletes set their own goals and the importance of personal relationship with peers | .249 | .005 |
| Let the athletes set their own goals and the importance of social atmosphere | .277 | .002 |
| Let the athletes set their own goals and the importance of adequate academic atmosphere | .251 | .005 |

Table 4.14 presents information on the significant relationships between social support and the attitudes of importance toward involvement. Both had weak correlation coefficients regarding the coach's responsibility to look out for the personal welfare of the student-athlete. A weak correlation coefficient found was regarding adequate academic atmosphere ($r$=.335, $p$=.000), at a $p$<.01 level; followed by, the importance of faculty being available ($r$=.289, $p$=.001), at a p<.01 level.

Table 4.14

*Correlations between Social Support and Attitudes of Importance of Involvement*

| Variable | *r* coefficient | *p*-level |
|---|---|---|
| Look out for the personal welfare of the student-athlete and the importance of faculty being available | .289 | .001 |
| Look out for the personal welfare of the student-athlete and the importance of adequate academic atmosphere | .335 | .000 |

Table 4.15 presents information on the significant correlations between positive feedback and the selected student-athlete's attitudes toward involvement. Four weak correlations were found regarding the coaches ability to give credit when it is due. The most significant weak positive correlation was between the coach's ability to give credit and the importance of adequate academic advising ($r$= .275, $p$= .002), at a $p$< .01 level; followed by, the importance of faculty being available ($r$=.262, $p$= .003), at a $p$<.01 level.

Table 4.15

*Correlations between Positive Feedback and Attitudes of Importance of Involvement*

| Variable | *r* coefficient | *p*-level |
|---|---|---|
| Give credit when it is due and the Importance of personal relationship with peers | .260 | .003 |
| Give credit when it is due and the importance of religious activities | -.257 | .004 |
| Give credit when it is due and the importance of faculty being available | .262 | .003 |
| Give credit when it is due and the importance of academic advising | .275 | .002 |

# CHAPTER FIVE

# SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

## Summary of the Study

The purpose of this study was to assess the level and attitudes of involvement of selected student-athletes at Rowan University to see if there were any significant relationships between involvement and preferences among five dimensions of leadership. The study was conducted at Rowan University during the 2007-2008 academic school year. The study provided insight on the amount of hours and time spent in specific activities on campus through academics, social situations, and within the campus environment and the impact of those situations upon individual leadership preferences. The subjects in this study were 131 student- athletes selected proportionally to represent all 16 team sports sponsored by Rowan University.

Two surveys were used in the study. To gauge involvement levels and attitudes of the student-athletes, a survey created by Thomas Icavone (2007) was used. The survey provided information about specific activities on campus, hours involved, amount of time per month involved, and attitudes of importance for involvement.

The second survey was the *Leadership Scale for Sport* (LSS), first created in 1978 by Chelladurai and Saleh, and used in an unpublished master's thesis at West Virginia University by Frontiera (2006). The survey was used in its entirety and provided a means of gauging what the student-athletes' preferences were of leadership from their coaches. The survey asked each student-athlete to indicate the leadership preferences based upon

the dimensions of democratic, autocratic, training and instruction, social support, and positive feedback.

To protect the well being of each subject approval was necessary from the Institutional Review Board (IRB). The application was approved on January 2, 2008 (Appendix A). Upon approval from the IRB the student athletes were surveyed. Each coach received a brief explanation of the procedure prior to distribution of the surveys and then a list of names of student-athletes selected to take the survey. Two hundred and ten surveys were distributed to the student-athletes. One hundred and thirty two surveys were completed yielding a return rate of 63%. Student-athletes from men's soccer and men's track and field did not participate in the study.

The Statistical Package for the Social Sciences (SPSS) computer software was used to analyze the data. SPSS was used to calculate Pearson product-moment correlations, descriptive statistics, including the mean, standard deviation, and percentages regarding the attitudes of student-athletes attitudes toward involvement and leadership. Also, it was used to see if there were any if a significant relationships between the level of involvement and leadership dimensions of coaches.

## Discussion of the Findings

Research Question 1: How involved and how much time do selected Rowan University student-athletes spend on their involvement activities

The findings show that many of the student-athletes are involved socially, academically, and on campus. The estimated time spent by the athletes participating in selected activities was measured by hours a week and time a month. Of the 132 surveys completed and returned only one activity had no student-athletes involved, study abroad.

As a student-athlete the primary season takes place in the fall or spring, except basketball which encompasses both semesters; however, each sport has a non-traditional season as well. This would make it very difficult for a student-athlete in any sport to study abroad. Icavone's study (2007) depicts four categories of zero involvement by student-athletes: "social fraternity or sorority, student government, college productions or performances, and the study abroad program" (p. 49). Of those categories, four students surveyed belonged to a fraternity or sorority, two students were involved in student government, and nine students were involved in college productions or performances. These findings represent a slight difference from Icavone's study. On the other hand, both findings were similar for participation in intramural athletics. The findings showed intramural athletics was listed most at an average of 2.79 hours per week similar to Icavone's (2007) findings "2.69 hours per week."

These findings are not consistent with Astin's (1984) study in which he suggested that student-athletes tend to separate from the rest of campus and isolate themselves from the general student body. The data suggest that 93 of the 131 student-athlete's surveyed spent on average 3.91 times a month working with classmates on a variety of projects. Also, the data suggest that the student-athletes are involved in a variety of activities including theater, dance, and religion. On the other hand, the findings are consistent with Ryan (1991) who found that student athletes willingly took an active part in their education and continued to grow personally and academically. Moreover he suggests that athletes spend a tremendous amount of energy, time, personal emotion, and the long hours of training that result in a positive effect. As noted in the findings of Rowan

University student-athletes, high numbers of students are involved in a multitude of activities and have an average mean score of 5.64 hours of activity per day.

Research Question 2: What are selected Rowan University student-athletes attitudes toward the importance of being involved in social, academic, and campus life?

The findings showed that the student-athletes attitudes toward the importance of involvement in academics, social, and on campus are similar in terms of average scores reported. The average mean score of total social involvement was 2.94 hours per day, 2.47 hours in academic situations outside of class, and 2.41 hours in campus involvement. Moreover, findings suggest that student-athletes' attitudes toward the importance of involvement were significant but rated as not very important. On the other hand, Icavone's (2007) study had an "average social involvement of 3.13, academic involvement 3.16, and campus environment 3.12." Icavone's study suggested that student-athletes' attitudes toward the importance of involvement were not significant and rated as neutral. Icavone's study suggested "the student athletes believed that the most important social involvement activity was getting involved in religious activities with a score of 2.88" (pp. 50); however, the findings of this study suggest that adequate academic atmosphere was the most important involvement activity with a mean score of 2.32.

Research Question 3: What are selected Rowan University student-athletes attitudes toward the leadership dimensions of democratic, autocratic, training and instruction, social support, and positive feedback?

Dobosz and Beaty (1999) described leaders as having "the capacity to guide others in the achievement of a common goal. Decisiveness, determination, interpersonal

and organizational aptitude, loyalty, self efficiency, and self discipline are considered some of the attributes of effective leaders" (¶3). Selected student-athletes at Rowan University identified similar attributes in their coaches by rating highly the ability to make sure the athletes work to capacity, explanation of technique and agenda, correct mistakes, complement when necessary, coaches function is understood by athletes, and coaches look out for the personal welfare of athletes. The results parallel the definition of leadership given by Dobosz and Beaty.

Furthermore, the definition of leadership may change but the idea is the same throughout research. Leadership is a pattern of behavior that students gain through involvement. Cassel (1999) illustrated his idea of leadership through the use of Lewin's (as cited in Cassel, 1999) four leadership categories: laissez-faire, democratic cooperative, autocratic submissive, and autocratic aggressive. According to the results of the *Leadership Scale for Sport* (LSS) Rowan University student-athletes prefer the training and instruction category followed by the democratic behavior category. Training and instruction is the pattern of leadership that prompts the athletes to work to their highest level of capability. Thirteen questions were asked regarding training and instruction and student-athletes preferred for a coach to make an athlete work to capacity as noted by the highest mean score of 1.66. Training and instruction had a total mean score of 2.08. The second category of leadership, democratic behavior, stresses the team oriented approach. The average mean score for democratic behavior was 2.14.

The data suggest that the selected student-athletes did not rate an autocrative aggressive pattern of leadership highly. The student-athletes do not prefer for a coach to speak in a manner to discourage questions resulting in an average mean of 3.73;

followed, by not explain his/her action, refuse to compromise a point, and to keep aloof from athletes. These statements of preference are consistent with Cassel's (1999) definition of an autocratic leader, one who makes all the decisions and leaves little room for compromise.

Research Question 4: Is there a significant relationship between student-athletes' demographic variables of age, gender, class, ethnicity, sport, grade point average, and role on team and attitudes of involvement?

The findings showed that there were no a significant correlations between age, class, grade point average, role on team, and the student-athletes' attitudes toward involvement. The demographic variable of ethnicity depicted one weak negative correlation between student-athletes ethnicity and social contact with faculty ($r$= -.187, $p$= 0.036) at a $p$<0.05 level. Gender and specific sport were the two variables that resulted in a significant correlation. A weak correlation was found between the student-athletes gender and feeling of adequate personal security ($r$= -.241, $p$=.010) at a $p$<0.01 level. Also, a weak correlation was shown between the students gender and feeling of adequate social atmosphere ($r$= -.219, $p$= .020) at a $p$< 0.05. A weak correlation between student-athletes gender and feeling of adequate academic atmosphere ($r$= -.219, $p$= .018) at a $p$< 0.05 was presented.

Five weak correlations were shown between the athletes' specific sport and attitude toward involvement. Religious activities and attitudes of involvement had a weak positive correlation ($r$=.231, $p$=.009) at a p<0.01 level. A weak correlation between academic advising and the student-athletes specific sport ($r$=-.231, $p$=.009) at a p<0.01 level was shown. The weakest correlation between students attitude toward the

importance of involvement and sport was with adequate personal security ($r$=-.174, $p$=.049) at a p<0.05.

The findings of this study differ from those of Icavone's (2007) study of selected Rowan University athletes. Icavone found a significant correlation with the student-athletes grade point average and the attitudes toward involvement; however, Icavone did not detect a significant relationship with the demographic variables of age, gender, race and ethnicity, or specific sport played. Icavone (2007) suggested that academic performance of student-athletes may be impacted by the amount of involvement. The findings from this study suggest that gender affects the attitude toward the importance of being involved on campus academically and socially.

Research Question 5: Is there a significant relationship between student-athletes' demographic variables of age, gender, class, ethnicity, sport, grade point average, and role on team and the five leadership dimensions?

The findings showed the greatest number of significant correlations was between gender and training and instruction. Positive feedback, social support and autocratic leadership had significant correlations. Democratic behavior, represented by the statement, "athletes share in decision making," contained only one significant correlation ($r$=.240, $p$<.010) at a $p$<0.05. The findings showed a moderate correlation between the student-athlete's gender and every player works to capacity (r= -.302, $p$=.001) at a $p$< 0.01 level. Also, a significant correlation was found between gender and special attention to correct mistakes ($r$= .293, $p$= .002) at a $p$< 0.01 level. Three significant correlations were found between positive feedback and gender. A significant negative moderate correlation was detected between gender and "tell an athlete when the athlete does a

particularly good job" ($r$=-.339, $p$=.000), at a $p< 0.01$ level. The findings provide information regarding two significant correlations found between social support and gender. A significant moderate correlation was found between gender and "invite the athletes home" ($r$=.383, $p$=.000), at a $p< 0.01$ level. Two significant moderate correlations were detected between gender and autocratic behavior.

The *Leadership Scale for Sports* created by Chelladurai and Saleh (1980) surveyed both male and female student athletes as well as physical education students. In the study, Chelladurai and Saleh (1980) attributed the difference in preferences or perceptions are based upon the participating sport. The results of their survey also indicated that gender factored into the decision of preference. In a study conducted by Frontiera (2006), the participants studied were male high school basketball players; therefore, demographic variables differed from those in this study. No comparable data were generated from either study.

Research Question 6: Is there a significant relationship between student-athletes' attitudes toward involvement and the five leadership dimensions?

The findings showed a significant weak correlation between the attitudes of selected Rowan University student-athletes toward involvement and the leadership dimensions. The greatest correlation was between the attitudes of the importance of involvement and training and instruction dimension of leadership. Following training and instruction was democratic behaviors. The findings suggest a relationship between the importance of adequate academic attitudes and the student-athletes leadership preference.

No studies focused upon both the attitudes of the importance of involvement and leadership. However, the findings were supported by researchers such as Astin (1984)

(1999) (2003), Ryan (1989) (1991), Pascerella & Smart (1991), and Dobosz & Beaty (1999). These researchers indicated that involvement on campus through academics and leadership for both males and females are affected if not closely related to their attitudes toward involvement on campus.

## Conclusions

There were several different findings that emerged from this study. First, the study suggests that selected Rowan University student-athletes are involved in activities on campus both academically and socially. The activities that consumed the greatest amount of time were an internship, off campus, and on campus jobs. The rest of the activities did not consume a large amount of time. The finding also showed that all the student-athletes were involved in activities outside of athletics except for the study abroad program.

The second set of findings showed that the student athletes had attitudes toward the importance of involvement that were not rated very important. The combined average scores were nearly 2.60, which is between important and neutral in the five semantic differential scale, used to measure the importance of social, academic, and campus involvement. The third set of findings showed that the selected Rowan University student-athletes highest preferred leadership dimension was training and instruction. The student athletes felt that a coach should make sure a player works to capacity, corrects mistakes, and communicates daily and clearly to the players. On the other hand, the selected student-athletes did not prefer the autocratic leader, one who discourages questions and refuses to compromise.

The fourth set of findings showed that there was a significant relationship between student-athletes' gender and attitudes toward involvement. Also, a significant relationship was found between specific sport and attitudes toward involvement. This suggests that the attitudes toward involvement can be related to the gender of the athlete and the participating sport. The fifth set of findings showed that the greatest significant relationship was between gender and the leadership dimension of training and instruction. This suggests that gender of the athlete can have an impact on the leadership dimension the player prefers. The sixth set of findings showed that a weak relationship was found between the attitudes toward involvement and the five leadership dimensions. A correlation was found between attitudes of involvement, regarding adequate academic attitudes, and the leadership dimension of training and instruction.

Several of these findings were supported by previous research done by Astin (1984) (1999) (2003), Ryan (1989) (1991), Icavone (2007), Chelladurai and Saleh (1980), and others. Astin and Ryan focused on the impact of student involvement on campus and its affect on the student's education, retention, and satisfaction. Icavone studied the attitudes of Rowan University student-athletes toward involvement on campus. Chelladurai and Saleh presented research on the five dimensions of leadership and created an instrument to decipher the athlete's leadership preferences. However, most of the findings were not supported due to the lack of research done on student-athlete's involvement and student-athlete's and the leadership dimensions.

## Recommendations for Practice

1. Coaches at all levels should consider conducting the *Leadership Scale for Sport* (LSS) prior to the start of the season with their athletes to relate the coaching style with the players.
2. Coaches should familiarize themselves with the five dimensions of leadership to decide what style of leadership fits their personality as a coach.
3. Head coaches may want to use the LSS to decide what type of leadership dimension an assistant coach should relate to that would be the most beneficial for the program and players.

## Recommendations for Further Research

Based upon the findings and conclusions of the researcher the following suggestions are made:

1. Further studies should be made with a larger selection of student-athletes to confirm the accuracy of the findings.
2. A pretest can be conducted as athletes enter into the program and then once more as they enter their senior season.
3. A study can be developed to break down the demographic variables to research the impact of each variable.
4. A study should be conducted to test if there is a significant difference between involvement and leadership in a private school as compared to a public institution.
5. A study should be conducted to see if there are any difference between Divisions I, IA, IAA, II, and III institutions.

# REFERENCES


Answers.com. Retrieved July 2, 2007 from the World Wide Web: http://www.answers.com/topic/college-athletics.

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel, 25,* 297-308.

Astin, A. W. (2003) Studying how college affects students. *About Campus,* 21-28.

Beuachamp, M., Steven, B., Mark, E., & Carron, A. (2005). Leadership behaviors and multidimensional role ambiguity perceptions in team sports. *Small Group Research, 36*, 5-20.

Blann, W. (1985). Intercollegiate athletic competition and student's educational and career plans. *Journal of College Student Personnel, 26,* 115-118.

Cassel, R. (1999). Examining the basic principles for effective leadership. *College Student Journal, 33*(2), 288-301.

Chelladurai, P., & Saleh, S. (1980). Dimensions of leader behavior in sports: Development of a leadership scale. *Journal of Sport Psychology, 2*, 34-45.

Cooper, D., Healy, M., & Simpson, J. (1994). Student development through involvement: Specific changes over time. *Journal of College Student Development, 35*(2), 98-102.

Dobosz, R., & Beaty, L. (1999). The relationship between athletic participation and high school student's leadership ability. *Adolescence, 34*(133), 215-220.

Frontiera, J. (2006). *The relationship between leadership, efficacy belief, and performance among boys' high school basketball players.* Unpublished master's thesis, West Virginia University, West Virginia.

Graham, S., & Cockriel, I. (1996). Indexes to assess social and personal development and the impact of college. *College Student Journal, 30*, 502-515.

Icavone, T. (2007). *Involvement theory and student athletes*. Unpublished master's thesis, Rowan University, New Jersey.

Hawes, K. (2004). Ncaa division iii council enters phase two of the future of division iii discussions. Retrieved: October 5, 2007 from the World Wide Web: http://www.ncaa.org/wps/contentviewer?IFRAME_EMBEDDED=true&CONTENT_URL=http://www.ncaa.org/releases/diviii/2004/2004072101d3.htm

Knight, D. (1998). *The impact of co curricular experience on leadership development.* Unpublished doctoral dissertation, East Tennessee State University.

Knauss, D. (2007). Values- based leadership. *School Administrator, 64*(3), 50-51.

Marsden, D. (2007). Teaching students to be leaders. *American School Board Journal,* 20.

National Collegiate Athletic Association. Retrieved July 2, 2007 from the World Wide Web: http://www.ncaa.org.

Pascarella, E., & Smart, J. (1991). Impact of intercollegiate athletic participation for African American and Caucasian men: Some future evidence. *Journal of College Student Development, 32*(2), 123-130.

Pike, G. (2003). The relationship between institutional mission and students' involvement and educational outcomes. *Research in Higher Education, 44*(2), 241-244.

Rowan University Athletic Mission Statement. Retrieved July 2, 2007 from the World Wide Web: http://www.rowanathletics.com/Sports/gen/2007/PhilosophyMission.asp

Ryan, F. (1989). Participation in intercollegiate athletics: Affective outcomes. *Journal of College Student Development, 30*(2), 122-128.

Ryan, F. (1991). *Influences of intercollegiate athletic participation on the psychosocial development of college students*. Unpublished doctoral dissertation, University of California, Los Angeles.

Schyns, B., & Sanders, K. (2007). In the eyes of the beholder: Personality and the perception of leadership. *Journal of Applied Social Psychology, 37*(10), 2345-2363.

Wielkiewicz, R. (2000). The leadership attitudes and beliefs scale: An instrument of revaluating college student's thinking about leadership and organizations. *Journal of College Student Development, 41*(3), 335-347.

# APPENDIX A

## Institutional Review Board Approval Letter

Rowan University

January 2, 2008

Lindsay Hanson
Educational Leadership, Education Hall
Rowan Universtiy
201 Mullica Hill Road
Glassboro, NJ 08028

Dear Lindsay Hanson:

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 approved your project:

IRB application number: 2008-072

Project Title: Impact of Involvement in Athletics Upon Leadership Among Selected Rowan University Athletes

In accordance with federal law, this approval is effective for **one calendar year** from the date of this letter. If your research project extends beyond that date or 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.

Please retain copies of consent forms for this research for three years after completion of the research.

If, during your research, you encounter any unanticipated problems involving risks to subjects, you must report this immediately to the Associate Provost for Research (856-256-4053).

If you have any questions, please contact Karen Heiser (heiser@rowan.edu or 856-256-4167).

Sincerely,

Roberta Dihoff, Ph.D.
Chair, Rowan University IRB

c: Sisco, Burton, Educational Leadership, Education Hall

Office of the Associate Provost for Research
Memorial Hall
201 Mullica Hill Road
Glassboro, NJ 08028-1701
856-256-4053
856-256-4425 fax

# APPENDIX B

## Student Athlete Involvement Survey

## Student-Athlete and Involvement Theory

*While your participation in this survey is voluntary and you are not required to answer any 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, please understand that all responses are strictly confidential and no personally identifiable information is being requested. Your completion of this survey constitutes that you are 18 or above and you willingly participated in this voluntary survey.*

## Background Information

Directions: Mark all that apply.

What is your age?

[ ] 18
[ ] 19 to 20
[ ] 21 to 22
[ ] 23 & Older

What is your gender?

[ ] Male
[ ] Female

What class are you in?

[ ] Freshman [ ] Sophomore [ ] Junior [ ] Senior

Are you:

[ ] White / Caucasian
[ ] American Indian / Alaska Native
[ ] Pacific Islander
[ ] Puerto Rican
[ ] Other
[ ] African American / Black
[ ] Asian American / Asian
[ ] Mexican American / Chicano
[ ] Other Latino

What Intercollegiate Sport do you participate in here at Rowan?

[ ] Basketball
[ ] Soccer
[ ] Track and Field
[ ] Football
[ ] Field Hockey
[ ] Volleyball
[ ] Baseball
[ ] Cross Country
[ ] Lacrosse
[ ] Softball
[ ] Swimming and Diving

What is your Cumulative GPA?

[ ] 4.0 to 3.7 [ ] 3.6 to 3.4 [ ] 3.3 to 3.0
[ ] 2.9 to 2.7 [ ] 2.6 to 2.4 [ ] 2.3 to 2.0
[ ] 1.9 to 1.7 [ ] 1.6 to 1.4 [ ] 1.3 & Below

What is your role on your current team?

[ ] starter [ ]nonstarter

## 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 | [ ] | _____ |
| 2. Intramural Athletics | [ ] | _____ |
| 3. Student Government | [ ] | _____ |
| | YES | Hours per Week |
| 4. University Publication | [ ] | _____ |
| 5. College Productions or Performances (band, theater, etc) | [ ] | _____ |
| 6. Professional or Departmental Clubs | [ ] | _____ |
| 7. Social Clubs | [ ] | _____ |
| 8. Residence Hall Activities | [ ] | _____ |
| 9. Religious Organizations | [ ] | _____ |
| 10. Volunteer Service | [ ] | _____ |
| 11. Leadership Programs | [ ] | _____ |
| 12. Off-Campus Part-Time Job | [ ] | _____ |
| 13. On-Campus Part-Time Job | [ ] | _____ |
| 14. Internship | [ ] | _____ |
| 15. Field Experience | [ ] | _____ |
| 16. Participated in Independent Study | [ ] | _____ |
| 17. Participated in Study Abroad Program | [ ] | _____ |

SECTION II

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

| | How Often |
|---|---|
| 1. Worked with Classmates outside of class. | _____ |
| 2. Tutored of taught other students | _____ |
| 3. Participated in community-based projects as part of 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 members | _____ |
| 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

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.

| | Importance | | | | | Satisfaction | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Very Important | | | | Not at all Important | Very Satisfied | | | | Not at all Satisfied |
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

| | Importance | | | | | Satisfaction | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Social Involvement** | | | | | | | | | | |
| 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 |
| **Academic Involvement** | | | | | | | | | | |
| 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 |
| **Campus Atmosphere** | | | | | | | | | | |
| 1. Adequate Personal Security | 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 |

# APPENDIX C

Leadership Scale for Sport (LSS)

## Leadership Scale For Sports
(Preference Version)

Each of the following statements describe a specific behavior that a coach may exhibit. For each statement there are five alternatives:

**1. ALWAYS;**
**2. OFTEN** (about 75% of the time);
3. **OCCASIONALLY** (50% of the time);
4. **SELDOM** (about 25% of the time);
**5. NEVER**

Please indicate your preference by circling the appropriate number. Answer all items even if you are unsure of any. Please note that this is not an evaluation of your present coach or any other coach. It is your own personal preference that is required. There are no right or wrong answers. Your spontaneous and honest response is important for the success of the study.

| **Always (1)** **Often (2)** **Occasionally (3)** **Seldom (4)** **Never (5)** I prefer my coach to: | | | | | |
|---|---|---|---|---|---|
| 1. See to it that athletes work to capacity. | 1 | 2 | 3 | 4 | 5 |
| 2. Ask for the opinion of the athletes on strategies for specific competitions. | 1 | 2 | 3 | 4 | 5 |
| 3. Help athletes with their personal problems. | 1 | 2 | 3 | 4 | 5 |
| 4. Compliment an athlete for good performance in front of others. | 1 | 2 | 3 | 4 | 5 |
| 5. Explain to each athlete the techniques and tactics of the sport. | 1 | 2 | 3 | 4 | 5 |
| 6. Plan relatively independent of the athletes. | 1 | 2 | 3 | 4 | 5 |
| 7. Help members of the group settle their conflicts. | 1 | 2 | 3 | 4 | 5 |
| 8. Pay special attention to correcting athletes' mistakes. | 1 | 2 | 3 | 4 | 5 |
| 9. Get group approval on important matters before going ahead. | 1 | 2 | 3 | 4 | 5 |
| 10. Tell an athlete when the athlete does a particularly good job. | 1 | 2 | 3 | 4 | 5 |
| 11. Make sure that the coach's function in the team is understood by all athletes. | 1 | 2 | 3 | 4 | 5 |
| 12. Not explain his/her actions. | 1 | 2 | 3 | 4 | 5 |

| Always (1) Often (2) Occasionally (3) Seldom (4) Never (5) | | | | | |
|---|---|---|---|---|---|
| 13. Look out for the personal welfare of the athletes. | 1 | 2 | 3 | 4 | 5 |
| 14. Instruct every athlete individually in the skills of the sport. | 1 | 2 | 3 | 4 | 5 |
| 15. Let the athletes share in decision making. | 1 | 2 | 3 | 4 | 5 |
| 16. See that an athlete is rewarded for a good performance. | 1 | 2 | 3 | 4 | 5 |
| 17. Figure ahead on what should be done. | 1 | 2 | 3 | 4 | 5 |
| 18. Encourage athletes to make suggestions for ways to conduct practices. | 1 | 2 | 3 | 4 | 5 |
| 19. Do personal favors for the athletes. | 1 | 2 | 3 | 4 | 5 |
| 20. Explain to every athlete what should be done and what should not be done. | 1 | 2 | 3 | 4 | 5 |
| 21. Let the athletes set their own goals. | 1 | 2 | 3 | 4 | 5 |
| 22. Express any affection felt for the athletes. | 1 | 2 | 3 | 4 | 5 |
| 23. Expect every athlete to carry out one's assignment to the last detail. | 1 | 2 | 3 | 4 | 5 |
| 24. Let the athletes try their own way even if they make mistakes. | 1 | 2 | 3 | 4 | 5 |
| 25. Encourage the athlete to confide in the coach. | 1 | 2 | 3 | 4 | 5 |
| 26. Point out each athlete's strengths and weaknesses. | 1 | 2 | 3 | 4 | 5 |
| 27. Refuse to compromise on a point. | 1 | 2 | 3 | 4 | 5 |
| 28. Express appreciation when an athlete performs well. | 1 | 2 | 3 | 4 | 5 |
| 29. Give specific instructions to each athlete on what should be done in every situation. | 1 | 2 | 3 | 4 | 5 |
| 30. Ask for the opinion of the athletes on important coaching matters. | 1 | 2 | 3 | 4 | 5 |
| 31. Encourage close and informal relations with athletes. | 1 | 2 | 3 | 4 | 5 |

| Always (1) | Often (2) | Occasionally (3) | Seldom (4) | | Never (5) |
|---|---|---|---|---|---|
| 32. See to it that the athletes' efforts are coordinated. | 1 | 2 | 3 | 4 | 5 |
| 33. Let the athletes work at their own speed. | 1 | 2 | 3 | 4 | 5 |
| 34. Keep aloof from the athletes. | 1 | 2 | 3 | 4 | 5 |
| 35. Explain how each athlete's contribution fits into the total picture. | 1 | 2 | 3 | 4 | 5 |
| 36. Invite the athletes home. | 1 | 2 | 3 | 4 | 5 |
| 37. Give credit when it is due. | 1 | 2 | 3 | 4 | 5 |
| 38. Specify in detail what is expected of athletes. | 1 | 2 | 3 | 4 | 5 |
| 39. Let the athletes decide on plays to be used in a game. | 1 | 2 | 3 | 4 | 5 |
| 40. Speak in a manner which discourages questions. | 1 | 2 | 3 | 4 | 5 |

THANK YOU FOR YOU COOPERATION AND PARTICIPATION IN THIS STUDY! PLEASE RETURN COMPLETED SURVEY'S TO YOUR COACH IN THE ATHLETIC DEPARTMENT. THANK YOU!

APPENDIX D

Table 4.16
Correlations about Attitudes of Involvement and Leadership Patterns

Table 4.16

*Correlations about Attitudes of Involvement and Leadership Patterns*

| Variable | *r* coefficient | *p*-level |
|---|---|---|
| Every athlete works to capacity and personal relationship with peers | .218 | .014 |
| Every athlete works to capacity and faculty are available | .212 | .017 |
| Compliment in front of others and personal relationship with peers | .180 | .043 |
| Compliment in front of others and faculty are available | .180 | .044 |
| Explain to each athlete techniques and personal relationship with peers | .225 | .011 |
| Special attention to correct mistakes and personal relationship with peers | .225 | .011 |
| Get group approval before moving ahead and personal relationship with peers | .194 | .029 |
| Coaches function is understood by all athletes and personal relationship with peers | .208 | .018 |
| Look out for personal welfare of athletes and personal relationship with peers | .231 | .009 |
| Instruct athletes individually in the skills and personal relationship with peers | .214 | .015 |
| Figure ahead what should be done and personal relationship with peers | .190 | .033 |
| Expect athletes to carry assignments and personal relationship with peers | .185 | .037 |
| Special attention to correct mistakes and the importance of religious activities | -.217 | .015 |
| Special attention to correct mistakes and faculty being available | .178 | .046 |

| | | |
|---|---|---|
| Special attention to correct mistakes and academic advising | .226 | .011 |
| Special attention to correct mistakes and adequate personal security | .236 | .008 |
| Special attention to correct mistakes and adequate social atmosphere | .193 | .030 |
| Special attention to correct mistakes and adequate academic atmosphere | .222 | .012 |
| Coaches function is understood by all athletes and the importance of religious activities | -.177 | .048 |
| Athletes share in decision making and the importance of religious activities | -.188 | .036 |
| Figure ahead what should be done and the importance of religious activities | -.206 | .021 |
| Give specific instruction for every situation and the importance of religious activities | -.221 | .014 |
| Give specific instruction for every situation and social contact with faculty | .219 | .015 |
| Give specific instruction for every situation and adequate academic atmosphere | .196 | .028 |
| Coach explains in detail what is expected and the importance of religious activities | -.189 | .035 |
| Let athletes decide what plays to call and the importance of religious activities | -.186 | .038 |
| Let athlete try even if they make mistakes and being involved in student organizations | .197 | .027 |
| Coach points out strengths and weaknesses and getting involved in campus activities | -.225 | .011 |
| Coach points out strengths and weaknesses and adequate social atmosphere | .196 | .027 |

| | | |
|---|---|---|
| Coach points out strengths and weaknesses and adequate academic atmosphere | .212 | .016 |
| Coach explains to each athlete what is expected and getting involved in campus activities | -.197 | .027 |
| Coach explains to each athlete what is expected and having a job | -.217 | .014 |
| Coach asks for the opinion of players for strategy and social contact with faculty | .227 | .011 |
| Coach asks for the opinion of players for strategy and academic advising | .220 | .013 |
| Coach explains to each athlete techniques and adequate academic atmosphere | .221 | .012 |
| Coach gets group approval before moving ahead and faculty being available | .183 | .040 |
| Coach gets group approval before moving ahead and social contact with faculty | .180 | .047 |
| Coach tells an athlete when he/she did a good job and adequate academic atmosphere | .207 | .020 |
| Coaches function is understood by all athletes and academic advising | .236 | .008 |
| Coaches function is understood by all athletes and adequate personal security | .212 | .016 |
| Look out for the personal welfare of athletes and social contact with faculty | .240 | .007 |
| Look out for the personal welfare of athletes and academic advising | .249 | .005 |
| Look out for the personal welfare of athletes and adequate personal security | .242 | .006 |
| Look out for the personal welfare of athletes and adequate social atmosphere | .243 | .006 |

| | | |
|---|---|---|
| Coach instructs athletes on individual skills and faculty being available | .183 | .039 |
| Coach instructs athletes on individual skills and adequate academic atmosphere | .181 | .041 |
| Athletes share in decision making and social contact with faculty | .219 | .014 |
| Athletes share in decision making and academic advising | .185 | .038 |
| Athletes share in decision making and adequate academic atmosphere | .176 | .047 |
| Coach rewards athletes for good performance and social contact with faculty | .200 | .026 |
| Coach figures out what should be done ahead of time and faculty being available | .194 | .029 |
| Coach figures out what should be done ahead of time and academic advising | .198 | .027 |
| Coach figures out what should be done ahead of time and adequate social atmosphere | .175 | .050 |
| Coach lets athletes set their own goals and faculty being available | .245 | .006 |
| Coach lets athletes set their own goals and academic advising | .225 | .012 |
| Coach expects athletes to carry out assignments and faculty being available | .231 | .009 |
| Coach expects athletes to carry out assignments and academic advising | .186 | .038 |
| Coach expects athletes to carry out assignments and adequate personal security | .196 | .027 |
| Invite the athlete home and academic advising | -.178 | .047 |
| Invite the athlete home and adequate personal security | -.229 | .009 |

| | | |
|---|---|---|
| Invite the athlete home and adequate academic atmosphere | -.227 | .010 |
| Coach gives credit when due and adequate personal security | .205 | .021 |
| Coach gives credit when due and adequate social atmosphere | .223 | .012 |
| Coach gives credit when due and adequate academic atmosphere | .239 | .007 |
| Coach explains in detail what is expected and academic advising | .233 | .009 |
| Coach speaks to discourage questions | -.178 | .045 |