

ABSTRACT

Title of Thesis: SELF-PERCEPTIONS OF LEADERSHIP ABILITY AND
ACHIEVING STYLES OF FEMALE STUDENT-ATHLETES

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This study examined female student-athletes' self-reported leadership ability and achieving styles and the relationship of individual and team sport female student-athletes' self-perceptions of leadership ability and achieving style preferences. An on-line survey consisting of a composite variable of 12 leadership-indicator items and the Achieving Styles Inventory was used to examine the research questions. The sample included 30 female student-athletes competing in Division I National Collegiate Athletic Association athletics at a Mid-Atlantic public institution. The results indicated individual sport female student-athletes have a significantly greater preference for using the Competitive Direct Achieving Style than team sport student-athletes. While individual and team sport female student-athletes demonstrated a similar perception of leadership ability, the team sport student-athletes consistently saw their achieving practices as being leaderly while the individual sport student-athletes saw only the Power Direct achieving style as being leaderly. Implications for enhancing student-athletes' relational leadership capacities are discussed.

SELF-PERCEPTIONS OF LEADERSHIP ABILITY AND ACHIEVING STYLES OF
FEMALE STUDENT-ATHLETES

by

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CHAPTER I

INTRODUCTION

The positive and negative effects of participation in intercollegiate athletics on students' development have been widely debated (Richards & Aries, 1999; Sowa & Gressard, 1983). Specifically, there is a large base of literature examining the relationship between participation in college sports and student-athletes' ability to form mature career decisions (Sowa & Gressard), academic performance (Pascarella & Smart, 1991; Pascarella & Terenzini, 1991), campus involvement and psychosocial development (Petitpas & Champagne, 1988; Ryan, 1989). Although the results of these studies are complex, varied and contradictory (Petitpas & Champagne), it has long been articulated that participation in athletics enhances students' ability to work cooperatively in teams and leadership skills (Cornelius, 1995; Rees, Howell & Miracle, 1990; Ryan).

Despite the widely held belief that participating in intercollegiate athletics enhances students' leadership capacities, there is little supporting empirical evidence. Astin (1993) and Ryan (1989) found that participation in intercollegiate athletics showed positive correlations with leadership; however, leadership was enmeshed with several other constructs and the correlations were modest at best. In the work that does tease out the construct of leadership, the focus is on the effect of coaching leadership on player performance and team cohesion (Eiche, Sedlacek & Adams-Gaston, 1999; Glenn & Horn, 1993). With growing empirical support for the notion that participation in cocurricular activities enhances students' leadership skills (Astin & Astin, 2000; Moriarty & Kezar, 2000; Zimmerman-Oster & Burkhardt, 1999) it seems that the relationship of

participation in the cocurricular activity of intercollegiate athletics on leadership skills warrants more study.

As leadership development has long been articulated to be a component of higher education mission statements (Astin & Astin, 2000; Carry, 2003; Roberts, 1997; Zimmerman-Oster & Burkhardt, 1999), the study of leadership development and how institutions of higher education can enhance the leadership capacities of students continues to steadily increase (Howe, 1996; Zimmerman-Oster & Burkhardt). Reviewing the mounting studies of leadership, one notices that the paradigm of leadership has shifted (Komives, Lucas & McMahon, 1998; Rost, 1991). Earlier viewpoints describe leadership as an innate power reserved for a select few and that the actual act of leadership was one person presiding over others; contemporary definitions articulate leadership to be a learned relational process in which individuals share common goals (Allen et al., 1998; Drath, 1998; Komives et al.).

Congruent with contemporary leadership paradigms, current leadership educators are calling upon institutions of higher education to create learning opportunities that advocate a collaborative approach to leadership (Allen et al., 1998; Astin & Astin, 2000; Cherrey & Isgar, 1998; Komives et al., 1998; HERI, 1996). Although United States tradition may seem more in line with individualism and competition, a growing body of literature suggests that working collaboratively with others in teams is more desirable and leads to greater success than operating from a competitive framework (Komives et al.; Lipman-Blumen, 1996). Thus, one might wonder about the nature of collaboration in the context of athletics, an activity in which competition is a salient characteristic. In discussing competition, it is important to note that Kohn (1992) distinguished two types

of competition, structural and intentional. Kohn argued that structural competition describes a situation and intentional competition refers to an attitude. Additionally, Kohn suggested that competition may be intergroup, competition between groups, or intragroup, competition within one group. Thus, although athletics may be structurally competitive in that one team wins and the other team loses, the athletes engaged in the activity may not necessarily maintain a competitive framework with their teammates. Research seems to support this notion as Komives et al. reviewed literature that suggests:

even a group member who enjoys competition in athletics is not likely to enjoy working in a setting such as a sports team, committee, study group or job site where others are competitive and try to beat each other or use competitive practices like withholding information or degrading others' contributions. (p. 96)

A meta-analysis of 122 studies conducted over a 50-year period by Johnson, Maruyama, Johnson, Nelson and Skon (1981) supports this notion. Specifically, the meta-analysis suggested that cooperation was not only superior to competition with respect to promoting achievement, but cooperating with other participants in the internal functioning of the group was rated to be a more desirable process.

The concepts of competitive leadership versus collaborative leadership styles typically spark discussions about masculine versus feminine leadership styles. Specifically, upon further examination of the shift from hierarchical leadership models to collaborative leadership models, many researchers maintain that the earlier models reflect a more masculine leadership framework and that contemporary models are more inclusive of women's leadership styles (Astin & Leland, 1991; Kezar & Moriarty, 2000; Lipman-Blumen, 1996). Kezar and Moriarty argued that prior leadership research is

almost exclusively based upon male Caucasian samples and that generalizing the results of the studies to women and persons of color may not be appropriate. Namely, in their review of literature, Kezar and Moriarty cited several researchers who found that:

women's leadership tends to use (a) a more participatory, relational, and interpersonal style as well as different types of power and influence strategies; (b) emphasize reciprocity and collectivity; (c) tends to conceptualize leadership as collective rather than individualistic; (d) emphasizes responsibility toward others and empowering others to act within the organization; and (e) tends to de-emphasize hierarchical relationships. (p. 55)

Moreover, a meta-analysis of 162 studies of gender-related leadership research conducted by Eagly and Karau (1991) suggested that women leaders tend to emerge as more social leaders, are more likely to share decision making, and adapt a more collaborative leadership style compared to men.

Although many researchers agree that there are gender-related differences with respect to leadership styles, the literature is complex and complicated. Lipman-Blumen (1996) suggests that the context of a task may affect men's and women's leadership approach. With this in mind, several leadership studies have found the achieving style model developed by Lipman-Blumen, Handley-Isakesen and Leavitt (1983) to be a useful framework for understanding leadership styles of men and women (Beardsley, Stewart, & Wilmes, 1987; Komives, 1991, 1992, 1994; Offermann & Beil, 1992; Lipman-Blumen, 1992, 1996). Specifically, the achieving style model examines the way individuals approach tasks and accomplish goals. The model postulates three sets of achievement styles: direct, instrumental and relational. In turn, each set has three achieving styles for a

total of nine achieving styles: Intrinsic Direct, Competitive Direct, Power Direct, Collaborative Relational, Contributory Relational, Vicarious Relational, Personal Instrumental, Social Instrumental and Entrusting Instrumental (Lipman-Blumen, 1996.). Literature suggests that gaining insight into how individuals approach group goals within a group context (achieving styles) has implications for leadership educators (Beardsley et al.; Komives, 1991, 1992, 1994, Offermann & Beil; Lipman-Blumen, 1992, 1996). Specifically, Beardsley and associates suggested that understanding how students approach tasks provides “an alternate way of conceptualizing student leadership in working groups” (p. 418).

Noting the gap in the literature regarding the capacity of intercollegiate athletics to shape the leadership skills of student-athletes, it seems appropriate to use the achievement style framework to examine student-athletes’ leadership behaviors. Specifically, sport teams strive toward a shared goal, and team members are accountable for accomplishing tasks within the group context; examining how student-athletes prefer to approach individual and group tasks, that is, achievement style, may provide insight into the tendency of male and female student-athletes to use particular leadership capacities. Thus, the literature regarding the applicability of the achievement style framework to study leadership behavior and the gap in the literature regarding the nature of student-athletes’ leadership behaviors guide this research study.

Purpose of the Study

The purpose of this research study was to examine the leadership behaviors of male Division I intercollegiate student-athletes compared to female Division I intercollegiate student-athletes, particularly illuminating the tendency of student-athletes

to use collaborative achieving styles. Specifically, four questions guided this study: (a) What are student-athletes' self-reported perceptions of leadership ability (b) What are student-athletes' self-reported perceptions of using collaborative and competitive achieving styles? (c) Are there differences in the self-reported achieving styles of male student-athletes and female student-athletes? and (d) What is the relationship between male and female student-athletes' self-reported leadership ability and self-reported achievement styles?

Although the study was designed to examine gender difference as a predominant independent variable, the response rate reported in Chapter III led to a redesign of the analysis focusing on women athletes only. Chapter I and the literature review in Chapter II have been retained to discuss both men and women athletes.

Definition of Terms

Before engaging in this study, it is essential to first define salient terms and ideas that are being investigated. Such information enables the researcher to provide an appropriate context and clarification for examining the research questions. As such, the following section will articulate how this study defined the terms: student-athlete, revenue sports, non-revenue sports, team sports, individual sports, leadership, collaboration, and achievement style.

For the purpose of this study, the phrase *student-athlete* refers to any male or female varsity intercollegiate athlete who participates in NCAA Division I athletics at the institution of study. It is important to recognize that students who participate in club sports, intramurals and recreational sports are not included in this definition. Moreover, within varsity athletics, there was a distinction made as to which type of athletic team the

student-athlete belongs. Specifically, to further define the complexity of varsity sports at the institution of study, the term *revenue sport* refers to the sport teams that have the potential to generate large sums of money into an institution's athletic department (Howard-Hamilton & Watt, 2001). The revenue sports at the institution of study are men's basketball and football. The term *non-revenue sports* refers to all other sports at this institution (women's swimming, track and field, golf, soccer, lacrosse, field hockey, competitive cheerleading, water polo, tennis, gymnastics, volleyball, softball, and basketball, men's wrestling, baseball, swimming, track and field, golf, soccer, lacrosse and tennis).

Noting that the degree to which athletes must collaborate together towards a shared athletic goal varies by the specific structure of the sport group, clarification was also made regarding individual sport groups versus team sport groups. Based on the definition provided by Mull, Bayless, Ross and Jamieson (1987), *team sports* was defined as sports in which a group of student-athletes work directly together as a squad to compete against a group of student-athletes from another institution. Thus, team sports include football, basketball, baseball, soccer, field hockey, softball, lacrosse, volleyball water polo, and competitive cheer. *Individual sports* will refer to sport groups in which one athlete competes against another athlete on an individual basis, yet, the outcome of the contest contributes to an overall team score. For the purposes of this study, individual sports include wrestling, gymnastics, swimming, tennis, track and field, and golf.

As examined in Chapter II, the term *leadership* encompasses several definitions. However, for the context of this research study, leadership is viewed as being a relational process in which people are engaged toward accomplishing a common goal or task. This

definition is based upon contemporary leadership paradigms defined by noted research scholars (HERI, 1996; Komives et al., 1998; Kouzes & Posner, 2002; Lipman-Blumen, 1996; Rost, 1993). It is also important to note that this study views leadership as a process that involves multiple capacities and skills. Specifically, drawing from the work of Lipman-Blumen, leadership skills are learned behavioral strategies that are the source of leadership action. Examples of leadership skills include collaboration and empowerment.

The primary leadership capacity of interest in this study is collaboration. Based upon the work of Chrislip and Larson (1994) HERI (1996), Komives et al. (1998) and Lipman-Blumen (1996), *collaboration* was defined as a leadership capacity in which autonomous individuals engage in a shared interactive process towards achieving a common goal using shared norms. Additionally, it is important to note that this research study views collaboration as a process in which individuals share equal responsibility for the successes and shortcomings of the task.

Beardsley et al. (1987) argued that examining the achievement styles of individuals helps student-affairs professionals conceptualize student leadership behaviors. As such, the extent to which student-athletes self-report using collaborative leadership skills will be assessed by exploring the student-athletes' self-reported achieving styles. This study drew upon the work of Lipman-Blumen et al. (1983), and defined *achievement style* as the way in which an individual prefers to accomplish a goal or task.

Summary of Methods

This study examined the achieving styles of student-athletes through the framework of the Achieving Styles Inventory (ASI; Achieving Styles Institute, 2002).

The on-line survey instrument examines the means by which individuals approach tasks. Specifically, the ASI defines nine different styles of accomplishing goals. In turn, these styles have been linked to leadership behaviors (Beardsley et al., 1987; Komives, 1991, 1992, 1994; Lipman-Blumen, 1992, 1996; Offermann & Beil, 1992). To measure student-athletes' self-rated leadership behavior, one question was adapted from the nationally recognized Cooperative Institutional Research Program Survey (CIRP) and 11 questions were adapted from a prior study by Cress, Astin, Zimmerman-Oster and Burkhardt (2001).

The sample includes varsity student-athletes at a large, research intensive, Mid-Atlantic public university competing in Division I National Collegiate Athletic Association (NCAA) athletics. The athletic department includes 14 female teams fielding a total of approximately 302 female student-athletes and 11 male teams serving a total of roughly 346 male athletes (statistics based on fall 2003 institutional statistics). The two-part instrument was administered to the student-athletes via an on-line survey. The institution's Athletic Academic Support and Career Development academic counselors sent their student-athlete counseling caseload an e-mail written by the researcher requesting their participation in the study. Specifically, the e-mail explained the nature of the study, the instructions for participating in the study and a link to the on-line survey.

With respect to data analysis, means, standard deviations and one-way analyses of variance (ANOVA) were used to examine self-rated leadership ability and achieving styles for the total female student-athlete sample as well as for female individual sport student-athletes and team sport student-athletes. ANOVA statistics were conducted to examine the differences in the self-reported achieving styles of student-athletes across

sport team structure (individual sport versus team sport). Lastly, Pearson R Correlation statistics were calculated to analyze the degree to which female student-athletes' self-assessed leadership behaviors were related to female student-athletes' self-reported achieving styles; correlations were completed for the total sample as well as across sport team structure. More specific details regarding the methodology of this research study are presented in Chapter III.

Significance of Study

Noting the gap in the empirical literature regarding the relationship of participation in intercollegiate athletics and student leadership behavior, despite the widely held notion that involvement in sport improves participants' capacities for leadership, this study is exploratory in nature. Specifically, this study attempted to bridge the bodies of literature on the context of intercollegiate athletics and leadership development. Moreover, by examining student-athletes' achieving styles with the Lipman-Blumen et al. (1983) achievement styles framework, the distinction between collaborative and other leadership approaches was more thoroughly investigated.

Examining student-athletes' leadership through the achievement style framework informs the work of student affairs professionals who work with student-athletes. Specifically, having gained insight into how student-athletes prefer to approach tasks, professionals working with student-athletes can develop programming that capitalizes on the student-athletes' achievement profile strengths. Programming that is congruent with the student-athletes' achievement profiles may enhance the student-athletes' motivation to accomplish goals. Additionally, gaining insight into which achieving styles are less developed for student-athletes helps student-affairs professionals become aware of which

capacities need more refinement and attention. Programming can be developed to improve weaker achievement styles and build skill and comfort in drawing from multiple achievement styles.

Lastly, in addition to the breadth of literature suggesting there are gender differences with regards to leadership styles (Astin & Leland, 1991; Eagly & Johnson, 1990; Eagly & Karau, 1991; Lipman-Blumen et al., 1983), there is substantial research that indicates the female student-athlete experience differs from the male student-athlete experience (Cogan & Petrie, 1996; Duda, 1991, Parham, 1993; Person, Benson-Quaziana & Rogers, 2001; Petrie & Stoeber, 1997). Examining female student-athletes' self-rated leadership behaviors and achieving styles provides more insight into the female student-athlete experience. As such, student affairs professionals will be able to design more intentional programming to meet the specific needs of student-athletes.

Summary

In light of institutions of higher education placing an increased importance on the development of students' relational leadership capacities, and the widespread, yet under-tested belief that participation in intercollegiate athletics builds students' leadership skills, this study is significant. The following chapter will review the bodies of literature regarding student-development outcomes of participation in intercollegiate athletics, the evolution of the conceptualization of leadership, and gender-related leadership differences.

CHAPTER II

LITERATURE REVIEW

This chapter reviews the relevant literature regarding the relationship of participation in intercollegiate athletics and student development outcomes, the diverse ways leadership has been conceptualized, the role of collaboration in the leadership process and gender differences in leadership. Although there is an extensive body of literature regarding the nature of leadership and a popular notion that participation in intercollegiate athletics enhances students' leadership behavior, there is minimal empirical literature that examines the relationship of participation in college athletics and leadership development. It is this gap in the literature that lies at the core of this study.

Participation in College Athletics in Relationship to Student Development

The debate regarding the role and influence of athletics within the context of higher education is long-standing (Howard-Hamilton & Sina, 2000; Pascarella, Bohr, Nora & Terenzini, 1995; Pascarella & Smart, 1991; Pascarella, Terenzini, Edison & Hagedorn, 1999; Richard & Aries, 1999; Sowa & Gressard, 1983). In light of such discussion, the literature regarding the student development outcomes of participation in intercollegiate athletics continues to grow (Pascarella, et al., 1995; 1999). However, the literature regarding the influence of athletic participation is complex, inconsistent and contradictory (Howard-Hamilton & Sina; Petitpas & Champagne, 1988). Namely, some literature suggests a negative link between athletic participation and academic achievement and career maturity, while other literature suggests that participation in intercollegiate athletics increases satisfaction in the overall college experience, motivation to earn a college degree and the development of interpersonal skills and

leadership skills (Astin, 1993; Howard-Hamilton & Sina; Pascarella et al., 1995; Pascarella & Smart; Pascarella et al., 1999). So as to provide a context for understanding college outcomes and student-athletes, the following section will provide insight into the growing empirical literature regarding athletic participation and its relationship to academic achievement, career maturity, and leadership development.

Academic Achievement

The literature regarding the relationship between athletic participation and cognitive outcomes is mixed (Howard-Hamilton & Sina, 2001). Namely, Stuart (1985) compared a group of freshmen football players with nonathletic peers and found that despite having lower high school grade point averages and entrance exam scores, the athletes did not differ significantly in mean college grade point average, mean English grade, and mean semester credit hours in the first two years of college compared to nonathletic matched pairs. Controlling for gender, ethnicity, high school academic achievement and attitude test scores, Hood, Craig and Ferguson (1992) found that the average grades of student-athletes did not differ significantly from their nonathletic matched pairs.

On the contrary, assessing cognitive development from scores on standardized graduate school admissions and professional certification tests, Astin's (1993) analysis of a national sample from the Cooperative Institutional Research Program (CIRP) found that college athletic participation was negatively related to scores on the verbal portion of the Graduate Record Examination, the Law School Aptitude Test and the National Teachers' Examination. Controlling for pre-college test scores, ethnicity, academic motivation and institutional type, Pascarella et al. (1995) found that first-year male and female athletes

scored lower on year-end measures of reading comprehension and mathematics than nonathlete peers. However, when controlling for the type of sport, Pascarella et al. found scores were significantly lower for male athletes in revenue sports than female and male athletes in other sports. Pascarella et al. (1999), in a follow-up study, suggested that male revenue sport student-athletes' low cognitive scores extended into the second and third year of college; however, the year-end measures of second and third-year, female athletes and male athletes in nonrevenue sports did not differ significantly from nonathlete peers. Pascarella et al. (1999) reported that these findings held true across institutions of varying sizes. Although the literature regarding the cognitive outcomes of participation in sport is complex and varied, it seems apparent that the relationship of participation in sport on and academic achievement may vary across type of sport and gender.

Career Development

There is a substantial body of literature regarding the relationship between participation in intercollegiate athletics and student-athletes' ability to formulate realistic career plans and goals (Martens & Cox, 2000). Most studies suggest that student-athletes score lower on instruments that measure career maturity and certainty of vocational choice compared to non-athlete peers (Blann, 1985; Chartrand & Lent, 1987; Kennedy & Dimick, 1987; Martens & Cox; Sowa & Gressard, 1983). Specifically, Sowa and Gressard compared the scores of 48 athletes and 43 nonathletes on the Student Development Task Inventory, an instrument that measures one's ability to develop mature career and educational plans among several other developmental constructs, and found that student-athletes scored lower than nonathletes in both of these areas. However,

considering the small sample size and that there was a lack of control for year in school, one must be cautious when generalizing the results of this study.

Noting that student-athletes' career maturity might vary across age, gender, and competition level, other researchers have further refined studies regarding the relationship between participation in athletics and career development. Specifically, Blann (1985) studied a sample of NCAA Division I and Division III male and female student-athletes. Congruent with the findings of Sowa and Gressard (1983) Blann found that male freshmen and sophomore athletes at both competition levels were less able to formulate mature educational and career plans than nonathlete freshmen and sophomore students. However, Blann's work also found that ability of male junior and senior student-athletes at both competition levels did not significantly differ compared to the ability of junior and senior nonathlete peers. Thus, it might seem that as male student-athletes approach the end of their junior and senior years, the athletes gain a more realistic perspective of career plans after sport. However, it is important to note that Blann speculated that these older male student-athletes are not the freshmen and sophomore student-athletes with immature goals; he argued that the freshmen and sophomore athletes with underdeveloped career goals may not persist in the university.

Kennedy and Dimick (1987) argued researchers must also consider the relationship of participating in a revenue sport and aspirations to advance to a professional sports career when examining the career maturity of student-athletes. Namely, Kennedy and Dimick found that despite the fact that it is generally accepted that the probability of a college athlete advancing to the professional level is approximately 2 %, 25 of the 38 Black male football and basketball players (66%) and 33 of the 84 White

male football and basketball players (39%) in their study indicated an expectation to have a professional sports career. Upon comparison of scores on a measure of career maturity, the male football and basketball student-athletes' scores were significantly lower than the scores of nonathlete. However, although the results of Kennedy and Dimick do suggest that the revenue sport student-athletes scored lower on measures of career maturity compared to nonathlete peers, it is interesting that few studies compare the career majority of revenue sport student-athletes and nonrevenue sport student-athletes.

With respect to student-athletes' career maturity varying across gender, it is important to note that Blann (1985) did not find any significant differences in the ability of female student-athletes to formulate mature educational and career plans compared to nonathlete peers; this finding held constant regardless of year in school. It should also be recognized that Blann's work is one of the few studies that considers the experience of female student-athletes. A major limitation of the work regarding the relationship between career development and participation in intercollegiate athletics is the absence of women athletes and athletes of color. Recently, researchers have recognized that the intercollegiate sport experience differs for different subgroups of athletes (Chartrand & Lent, 1987; Parham, 1993; Person et al., 2001).

Leadership Development

Ryan (1989) suggested that "coaching folklore maintains that the influence of the athletic environment successfully develops interpersonal skills through experiences in cooperative task group processes, exposure to media contacts and interactions with fans, alumni and administrators" (p. 123), and Reese et al. (1990) argued that "there is a deep-seated belief in U.S. culture that participation in interscholastic athletics has a positive

effect on changes in prosocial personality traits” (p. 303). Work by Astin (1993) and Ryan seems to show support for such hypotheses finding a positive link between participation in intercollegiate athletics and leadership development. However, on the whole, there is a very limited body of literature regarding student-athletes’ leadership behavior.

Ryan (1989) and Astin (1993) both used nationally collected CIRP data. CIRP utilizes over 100 pre-college input variables, including individual demographic characteristics and institutional demographics, and from approximately 200 environmental characteristics, such as interaction with faculty members and engagement in co-curricular activities, to examine how the college environment affects more than eighty different measures of attitudes, values, achievement, career development, and behavior (Astin). One of the measures on the CIRP survey asks students to self-rate their leadership ability. Drawing data from the 1985 Follow-up Survey (FUS) of the 1981 freshmen cohort, Ryan (1989) found that athletic participation was significantly related to positive self-reports of leadership abilities. Using CIRP data collected in 1985 and 1989, Astin (1993) also found a positive relationship between participation in intercollegiate athletics. Although Astin and Ryan were able to control for numerous pre-college attributes such as student demographic and institutional characteristics, and the large sample size allowed for a very strict confidence level of $p < .0001$, the construct of leadership was enmeshed with other variables and it is difficult to ascertain the salience of leadership. Moreover, the methodology of the studies did not allow the relationship of athletic participation and leadership skills to be examined with respect to sport, gender, scholarship status, institutional type, or competitive level (Ryan).

A handful of studies have examined the issue of peer leadership effectiveness in the sport domain (Glenn & Horn, 1993). Namely, in an attempt to examine the relationship of leadership behavior and the effectiveness of a sport team to achieve tasks, Kim (1992) investigated four types of leadership by junior high, high school and university sport team captains and the captains' effect on performance norms in athletic teams. Kim found that performance norms were highest under leaders who balanced behaviors related to winning a specific goal (goal achievement) and behaviors associated with reflecting team members' opinions in running the team (group orientation). However, one must be very cautious when generalizing the results of this study to all intercollegiate athletes. Specifically, the sample is very limited in that all participants were from Japan and there was a lack of control on the age of the participants; junior high, high school and university Japanese students were compared in one large group.

To determine the identifiable factors that distinguish sport leaders from their non-leader team peers, Yukelson, Weinberg, Richardson and Jackson (1981) investigated the leadership behavior of an entire 21 member collegiate male baseball squad and an entire 24 member collegiate male soccer squad. Yukelson et al. found that athletes who were identified to have leadership status by their athletic peers, were typically the most skilled players on the team, were of junior or senior status and scored high on a measure of internal locus of control. However, with such a small sample size of only male athletes from two sport teams, and limited information regarding the methodology used to examine peer nominated leadership, one must heed great caution when generalizing the results of this study to other populations.

Noting some of the methodological limitations of Yukelson et al. (1981) and speculating that coaches and players may differ in their perspectives of effective leadership behavior, Glenn and Horn (1993) measured student-athlete sport leadership effectiveness through coach, peer and self-ratings. Specifically, using a sample of 106 female high school soccer athletes from seven different teams, Glenn and Horn examined the relationship between perceived competence, global self-worth, competitive anxiety, actual sport skill competence and centrality of position on the athletes' leadership tendencies by means of the Sport Leadership Behavior Inventory (SBLI). Specifically designed for the study, the SBLI consists of 25 items, 19 of which describe personal characteristics and behaviors articulated to be desirable for soccer team leaders and 6 "filler" items. A smaller SBLI was developed to measure coach and peer ratings of each athlete's leadership behaviors. Using Cronbach's alpha, Glenn and Horn determined the internal consistency of the self-rating, peer-rating and coach-rating SBLI to be fairly high and acceptable. Results of the study revealed that athletes who rated high in competence, femininity, and masculinity scored higher in self-rated measures of leadership ability and athletes who were rated high in leadership ability by their peers, exhibited high levels of competitive trait anxiety, masculinity, sport skill, and perceived competence. Although the study by Glenn and Horn is one of the few that seeks to examine leadership behavior of athletes, the study's sample was confined to high school female soccer players.

Eiche et al. (1999) conducted one of the few studies that sought to provide more descriptive information regarding what was associated with being an intercollegiate student-athlete with leadership behaviors. Specifically Eiche et al. correlated items on the SBLI, developed by Glenn and Horn (1996), the leadership scale from the Noncognitive

Questionnaire (NCQ), and an open-ended item concerning leadership positions held, with criterion on the sample institution's New Student Census survey. Eiche et al. found that leadership in university athletes was associated with expecting higher grades, certainty of college major, decreased self-perceived need for emotional/social counseling, increased social adjustment, and lower expectancy for transferring to another institution. However, it is important to note the sample for this study was relatively small; the sample consisted of 51 male student-athletes and 22 female student-athletes. In addition to the relatively small sample size, no attempt was made to examine the behaviors and attitudes associated with leadership across gender, and no data were collected regarding the specific sports in which the participants were engaged. As aforementioned, there is a growing body of literature that suggests the student-athlete experience varies across gender, race, sport, and competition level (Chartrand & Lent, 1987; Parham, 1993; Person et al., 2001).

Thus, although it appears that developing leadership is one of the intended outcomes of participation in intercollegiate athletics, little empirical research has been conducted to assess this outcome. Work that does examine leadership in sport typically addresses the relationship of the coaching leadership and player performance (Eiche et al., 1999; Glenn & Horn, 1993), and the handful of studies that explore student-athlete leadership behaviors is very limited and narrow in scope. However, despite the lack of literature regarding the relationship between intercollegiate athletics and student-athletes' leadership behavior, numerous scholars have examined leadership theoretically and empirically in several other areas (Glenn & Horn). In particular, with institutions of higher education placing increasing significance on student leadership development, there is a growing body of leadership literature (Astin & Astin, 2000; Carry, 2003; Roberts,

1997; Zimmerman-Oster & Burkhardt, 1999). Understanding how leadership has been conceptualized in other settings may provide a clearer understanding of effective leadership attitudes and behaviors that college educators should seek to shape through intercollegiate athletics.

Conceptualization of Leadership

Leadership is an extremely complex phenomenon that has been conceptualized in hundreds of varying frameworks (Bass, 1998; Komives et al., 1998; Northouse, 2001; Rost, 1991; Yukl, 1998). Specifically, after a comprehensive review of leadership literature, noted leadership scholar Bass remarked “there are almost as many different definitions of leadership as there are persons who have attempted to define the concept” (p. 11). Rost suggested that leadership has been conceptualized by at least 221 definitions. Although it is beyond the scope of this study to review all of the leadership theories, the following section will present a brief summary of how the leadership theories evolved from a hierarchical trait approach to the relational theories of today.

Trait Approach

From the 1920s to the 1940s, most research was based on the assumption that leadership is a trait (Bass, 1990; Komives et al., 1998; Northouse, 2001; Yukl, 1998). Specifically, the aim of leadership research was to find significant correlation between individual leader attributes such as intelligence, height, self-confidence, foresight, energy, persuasion, etc., and a criterion of leader success (Bass; Komives et al., Yukl). Bass explained that two main questions guided research studies, “what traits distinguish leaders from other people? [and] What is the extent of those differences?” (p. 38). However, most studies failed to control for intervening variables and researchers

gradually concluded that leader behavior could also impact leadership (Komives et al., Yukl).

Behavior Approach

Leadership research in the 1950s and 1960s was marked by an attempt to describe “what managers actually do on the job” (Yukl, 1998, p. 8). The majority of leadership research conducted in this timeframe revolved around management and was based on descriptive and comparative methodologies (Yukl). Specifically, researchers utilized descriptive methods to determine what managers did on a daily basis and how the managers accomplished goals (Yukl). Comparative methods were used to delineate the difference between effective and ineffective managers (Yukl). Most work utilized questionnaires which evaluated the effect of task-oriented versus relations-oriented managerial behavior, that is, concern for how production affected subordinate satisfaction and performance versus concern for people (Komives et al, 1998; Yukl). Though the results of such studies suggest a balance of both behaviors is preferred, the studies were primarily inconclusive (Komives et al., Yukl). Gradually, the researchers recognized that leader behavior often depends upon situational variables and group process (Komives et al. Yukl).

Situational Approach

Situational theorists argue that leadership behaviors fluctuate depending upon the context of the environmental demands (Bass, 1998; Komives et al., 1998). Namely, researchers frame studies based upon the assumption that the “leader is the product of the situation” (Bass, p. 38); the primary research question of situational studies seeks to determine how the nature of leadership changes with respect to the nature of the situation

(Yukl, 1998). A very hierarchical approach, the underlying assumption of situational theories is that leaders must not only adapt to the task structure and group environment, but also to the development and capabilities of subordinates (Komives et al., Northouse, 2001). Northouse argued that with few research studies conducted from this framework, it is difficult to ascertain if the assumptions of the situational approach are valid. Moreover, researchers have struggled to determine how this approach works in group settings (Northouse).

Influence Approach

Influence leadership, more commonly referred to as charismatic leadership, initially developed out of situations of crisis in which a leader would emerge to provide a solution to a pressing problem (Bass, 1990; Komives et al., 1998; Yukl, 1998). House (1977) proposed one of the most recognized and comprehensive charismatic leadership theories (Komives et al.; Yukl). Including a proposed set of testable propositions that involve observable processes, House considered traits, behaviors and situational conditions. Specifically, House sought to describe the behavior of charismatic leaders, describe the conditions in which the behavior occurs and compare the behavior to other individuals. Although charismatic leadership seems to be more comprehensive than previous theories, some argue that the power differential between the leader and the follower can create a situation in which the leader might misuse the power and take advantage of or harm other group members (Komives et al.). Yukl cautioned that charismatic leaders can have negative effects on an organization just as often as positive effects.

Reciprocal Approach

In the 1970s, a group of theories focusing on the reciprocal nature of the leader-follower interaction emerged (Komives et al., 1998). Specifically, the theories viewed leadership as being more than a behavior that a leader performed to followers. Rather, leadership was described as being a process in which power is shared between leaders and group members and each group member is thought to contribute to the group's goals and decision-making process (Komives et al.). Some of the major relational theories that have emerged include transformational leadership (Burns, 1978), servant leadership (Greenleaf, 1977), the Social Change Model of leadership (HERI, 1996), connective leadership (Lipman-Blumen, 1996) and the Relational Leadership Model (Komives et al.). These new leadership paradigms stress non-positional leadership, team work, collaboration and change for the common good (Astin & Leland, 1991; Moriarty & Kezar, 2000).

Transformational leadership was among one of the first reciprocal leadership approaches (Komives et al., 1998). As defined by Burns (1978), transformational leadership “occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (p. 20). One of the key elements of Burns' theory is the concept of morality. Namely, Burns argued that morality differentiates transformational leadership from transactional leadership, a type of leadership that focuses solely on the exchange between leaders and followers (Burns). In contrast to a transactional relationship based upon the simple exchange of goods, Burns argued that transforming leadership enhances the “level of human conduct and ethical aspiration of both leader and led, and thus it has a

transforming effect on both of them” (p. 20). Moreover, in contrast to the trait theories, Burns argued that transformational leadership “can be practiced at all levels of an organization and by both leaders and followers” (p. 19). Leadership is viewed as a constantly evolving process rather than a set of individual acts (Burns).

Bass (1985) expanded Burns’ theory by focusing on the followers and arguing that the outcome of transformational leadership may not always be positive. Namely, Bass proposed that transformational leadership: (a) informs followers to be more aware of the value of defined tasks, (b) influences followers to transcend personal self-interest for the group’s well-being, and (c) induces the followers to address higher order needs. Unlike other leadership models, transformational leadership does not define a clear set of assumptions regarding ways a leader should act; rather, the approach emphasizes broad ideals about how one might conceptualize leadership (Northouse, 2001). Research on transformational leadership typically revolves around the Multi-Factor Leadership Questionnaire (MLQ), an instrument designed to measure aspects of transformational and transactional leadership behavior (Yukl, 1998). Some of the leadership behavior thought to be related to transformational leadership includes charisma, individualized consideration, and intellectual stimulation (Bass). Although several studies have been conducted with the MLQ, Yukl cautions that the instrument has several limitations as some of the transformational behaviors are highly intercorrelated and the instrument neglects to measure the underlying influence processes for the leadership behavior.

Recognizing that the conceptualization of leadership was beginning to evolve into a collective process and that the mission statement of several institutions articulates a desire to foster student leaders for a diverse and civic-minded society, several noted

leadership scholars collaborated to develop the Social Change Model of Leadership (HERI, 1996). Specifically, the new model was designed to “prepare a new generation of leaders who understand that they can act as leaders to effect change without necessarily being in traditional leadership positions of power and authority” (HERI, 1996, p.12). The Social Change Model views leadership as a collective process in which one is self-aware, empowers others, and works collaboratively with group members towards social goals (HERI). However, although the model provides clear descriptions of how leadership should be conceptualized, further research needs to be completed to determine the effectiveness with respect to students’ leadership development (Moriarty & Kezar, 2000).

The Relational Leadership Model (RLM), as framed by Komives et al. (1998), is one of the few models that seeks to help college students conceptualize their own potentials for leadership. Grounded in literature regarding how conventional leadership theories are changing in an increasingly diverse and complex society, the RLM views leadership as being: (a) inclusive of people and unique ideas, (b) empowering of others, (c) purposeful towards a common goal, (d) ethical and (e) process-oriented (Komives et al.). Much like the work regarding the Social Change Model, the RLM presents a broad spectrum of how students might reconceptualize leadership, but more research needs to be conducted to test the effectiveness of the model.

Collaboration

In considering leadership in the context of the 21st century, most leadership scholars illuminate the need to conceptualize leadership in a way that parallels societal trends towards greater diversity, complexity, unpredictability, and interdependence (Allen & Cherrey, 2000; Cherrey & Isgar, 1998; HERI, 1996; Komives et al., 1998;

Kouszes & Posner, 2002; Lipman-Blumen, 1996, Lipman-Blumen & Leavitt, 1999).

More specifically, a salient theme in contemporary leadership literature is the critical need to practice collaborative leadership. In a review of literature for a book regarding the role of higher education in creating leaders for a global and complex society, Astin and Astin (2000) cite several authors who suggest that “practically, all of the modern authorities on leadership, regardless of whether they focus on the corporate world or the nonprofit sector, now advocate a collaborative approach to leadership, as opposed to one based on power and authority” (p. 4).

Collaboration is often viewed as being antithetical to competition (HERI, 1996). From as early as the 1920s, scholars have tried to determine if cooperative or competitive relationships are more effective with respect to goal achievement and productivity (Johnson et al., 1981). In an attempt to interpret the conflicting findings of the extensive body of literature regarding this debate, Johnson and associates conducted a meta-analysis on 122 North American studies on the role of competitive, cooperative and individualistic goal orientations in a wide-range of settings. Noting that these constructs are typically approached from either a field study framework or an extrinsic behavioral learning framework, Johnson and associates used the field study terminology. Specifically, Johnson et al. defined cooperation as a situation in which a group participant can only achieve his or her goal if the other participants achieve their desired goals. In contrast, competition involves a negative link between participants’ goal attainments; an individual can achieve his or her goal only if other participants do not achieve their goals (Johnson et al.).

The meta-analysis included studies conducted between 1924 and 1980 (Johnson et al., 1981). In the studies that compared cooperative goal orientations to competitive goal orientations, 65 studies found that cooperation led to higher achievement, eight studies implied competition fostered higher achievement and 36 studies did not find a statistically significant difference between the two goal orientations. As such, the meta-analysis suggested that cooperation leads to more achievement than competition (Johnson et al.). Moreover, with respect to internal functioning within teams that are competing against other teams, cooperative within-group relationships were also found to be superior to competitive relationships (Johnson et al.).

Kohn (1992) also argued that competition fails to promote superior achievement compared to cooperation. Among several other explanations for his defense against competition, Kohn suggested that “competition precludes the more efficient use of resources that cooperation allows” (p. 61). Work by Johnson and Johnson (1989) suggested that cooperation draws upon the unique skills and resources of all members of the group, whereas competition often scatters resources. However, despite an overwhelming number of studies that suggest cooperation is more effective than competition to achieve tasks, Johnson and Johnson argued that certain conditions must be present for cooperation to be effective. Namely, Johnson and Johnson maintained that for group efforts to be more productive than individual efforts the situation needs to: (a) promote mutual responsibility for a task, (b) allow for interaction between group members to share ideas and resources, and (c) include space for group members to process and evaluate their work together to improve future effectiveness.

In considering the conditions that increase the effectiveness of working collectively, Chrislip and Larson (1994) argued that one must delineate a difference between collaboration and cooperation. Specifically, Chrislip and Larson suggested:

It [collaboration] is a mutually beneficial relationship between two or more parties who work toward common goals by sharing responsibility, authority and accountability for achieving results. Collaboration is more than simply sharing knowledge and information (communication) and more than a relationship that helps each party achieve its own goals (cooperation and coordination). (p. 5)

Thus, drawing upon the work of Chrislip and Larson, HERI (1996), Komives et al. (1998) and Lipman-Blumen (1996), this research study defined collaboration as a leadership capacity in which individuals engage in an interactive process towards achieving a common goal using shared norms and assume equal responsibility for the successes and shortcomings of the task.

Gender Differences in Leadership

Embedded in the literature regarding collaborative leadership paradigms versus hierarchical directive models, are gender preferences. Namely, Astin and Leland (1991) argued that the traditional leadership models that emphasize directive power, competition for rewards, one-way communication and separation between leaders and followers are based on research using primarily White male participants. Illuminating research by Belenky, Clinchy, Goldberger and Tarule (1986) and Gilligan (1982), work that challenged cognitive and moral development models based on research using primarily White male samples and broadened the view of women's cognitive and moral development, many researchers have questioned if leadership behavior varies across

gender. As such, numerous studies have been conducted by social scientists, management consultants and other researchers simply to understand the relationship of gender and leadership behavior (Indvik, 2001).

Literature suggests there are some differences between women's leadership and men's leadership; however the differences are complex and not clear cut (Lipman-Blumen, 1996). In an effort to integrate and summarize the growing and complex research regarding gender and leadership styles, Eagly and various associates have completed numerous meta-analysis studies. Specifically, in a meta-analysis of over 160 studies, the only difference Eagly and Johnson (1990) found in the organizational studies regarding men's and women's leadership styles was women were more apt to use participative and democratic styles and less prone to use autocratic and directive leadership styles. A following meta-analysis of 162 studies found that women were more likely than men to use collaborative leadership behaviors and share decision making tasks with other group members (Eagly, 1991).

The findings regarding feminine leadership styles (democratic) and masculine leadership styles (autocratic and directive) are especially interesting when reviewing the literature regarding the evaluation of male and female leaders. A third meta-analysis by Eagly, Makhijani and Klonsky (1992) found the evaluation of female leaders was more positive when the women used "feminine leadership styles" and women leaders were evaluated more negatively when the women used masculine leadership styles. Women leaders were rated more negatively in male-dominated environments; the gender of the leader did not seem to matter to women leadership raters (Eagly et al.).

In a fourth meta-analysis on gender-related leadership literature, Eagly, Karau, and Makhijani (1995) found that overall leadership effectiveness did not vary across gender. However, male leaders were rated more effective than women leaders under three conditions: (a) when the setting was male dominated (b) when a high percentage of the subordinates were male and (c) when the role was viewed as being more tailored to masculine leadership, that is, the role required self-assessed competence, high requirements for control and low requirements for cooperation (Eagly et al.). Moreover, when the above conditions were reversed, effectiveness comparisons favored women (Eagle et al.).

Lastly, in the most recent meta-analysis, Eagly, Johannesen-Schmidt, and van Engen (2003) examined the literature regarding transformational, transactional and laissez-faire leadership styles. Defining leadership styles as “relatively stable patterns of behavior displayed by leaders” (p. 569), the authors reviewed 45 studies and found that female leaders were more prone than men to exhibit transformational leadership styles. Further, women leaders were also found to engage in more contingent reward behaviors such as acknowledging and recognizing subordinate’s good performance, compared to male leaders. Eagly and associates argue that while some of the findings in the meta-analysis are small, the differences in men’s and women’s leadership styles have far reaching implications as a growing body of literature suggests that aspects of transformational leadership have been positively linked to leader effectiveness.

Although the aforementioned meta-analysis studies provide critical insight into the nature of leadership behavior across gender, it is important to note the studies were primarily based upon managerial leadership frameworks and laboratory observation

studies. Work by Kezar and Moriarty (2000) expands the understanding of student leadership development in the realm of higher education. Specifically, in a study based on the CIRP 1987 Freshmen Survey and 1991 follow-up survey with a sample of 9,731 students at 352 institutions, Kezar and Moriarty found that leadership development varies across gender and race. The study found that both Caucasian and African-American men tend to have a higher self-rating of leadership ability compared to Caucasian and African-American women. Moreover, although holding a student office was a significant factor in developing leadership skills for Caucasian men, being active in a student organization in a non-positional leadership role emerged as a slightly more significant influence on the formation of Caucasian women's leadership behaviors (Kezar & Moriarty). This finding seems congruent with the assumption that women prefer more collaborative leadership styles than directive leadership styles.

Achievement Style as a Framework to Examine Leadership Behavior

The concept of achievement motivation is often closely linked to literature regarding gender-related leadership behavior. Early research describes achievement motivation as the outcome of what was accomplished, that is, successful leadership was related to achieving a task (Beardsley et al., 1987). With respect to gender stereotypes and achievement motivation, Lipman-Blumen (1996) cited an unpublished dissertation by Horner in the late 1960s that suggested women were fearful of competition and, consequently, women were motivated to avoid success in competitive situations. While suggesting that the women in the Horner study most likely did not prefer the competitive behavior, Lipman-Blumen et al. (1983) argued that the women were probably motivated to accomplish the task; the women simply wanted to achieve the task by a different

approach. More specifically, Lipman-Blumen and associates argued that exploring the concept of achievement styles, the *process* of accomplishing a goal, would provide a clearer description of achievement compared to only examining the internal motive or outcome of *what* is achieved (achievement motivation).

Thus, growing out of a desire to understand gender differences in the process of how something is achieved, Lipman-Blumen et al. (1983) proposed a model of achieving styles. Specifically, Lipman-Blumen et al. suggest that there are three achievement styles: direct, instrumental and relational. In turn, each achievement style has three individual achieving styles. The following section will provide a brief description of each style as well as provide insight into how an individual using each style would define success. Table 2.1, adapted from Beardsley et al. (1987), provides a description of each style as well as an application to student-athletes.

Achieving Styles Theoretical Framework

Direct Achieving Styles

The three direct achieving styles, intrinsic, competitive and power, are task-oriented styles. Specifically, direct achievers are concerned with both the completion and the mastery of a task and enjoy engaging in the task head-on (Lipman-Blumen et al. 1983). Individualism, creativity, and innovation are the ideals of direct achievers (Lipman-Blumen, 1996).

Intrinsic direct achieving style. The intrinsic style emphasizes personal mastery of a task and measures success by internalized standards of excellence (Lipman-Blumen et al. 1983). Intrinsic achievers are more focused on overcoming the challenge of the task rather than measuring their performance against others; completion of the task is an end

Table 2.1
Achieving Style Descriptions and Student-Athlete Behavioral Examples

Achieving Style	Description	Example
<i>Direct Domain</i> Intrinsic Direct	Prefers to accomplish tasks individually and defines success by achieving one's personal best	A student-athlete tries to earn his or her highest semester GPA to date
Competitive Direct	Prefers tasks in which one's performance is measured by external standards; success is defined as outperforming others	A student-athlete attempts to get the most votes for being named team captain
Power Direct	Prefers to accomplish tasks by emerging as the person "in-charge"; success is achieved by taking control and directing others	A student-athlete delegates tasks of a group project to others
<i>Relational Domain</i> Collaborative Relational	Prefers to develop shared goals and norms with all group members; task responsibilities are shared equally among all group members	Two or more student-athletes work on a presentation for new recruits
Contributory Relational	Prefers to provide support and encouragement to others; success is defined as helping others achieve their goals	A senior student-athlete helps a first-year student-athlete with a chemistry lab report
Vicarious Relational	Prefers to engage in activities in which one can identify with others' accomplishments and goals	Football team members celebrate the women's volleyball team member's national championship victory
<i>Instrumental Domain</i> Personal Instrumental	Prefers to accomplish tasks by drawing upon previous achievements, attributes or characteristics	Team Captain uses positional title to get a newspaper editor to write a story about a community service project the soccer team is completing
Social Instrumental	Prefers to draw upon one's relationships with others to achieve tasks	A student-athlete asks the student government president for information regarding a surprise pep-rally for the team
Entrusting Instrumental	Prefers to draw upon the talents, knowledge and skills of others to achieve tasks	A student-athlete seeks direction from the community service office regarding a volunteer project

Adapted from Beardsley, K.P., Stewart, G.M., & Wilmes, M.B. (1987). Achieving styles of students and student affairs professionals. *Journal of College Student Development*, 28, 412-419.

in itself (Lipman-Blumen et al.). As such, achievement, according to an intrinsic achiever, is marked by perfect execution of a task (Lipman-Blumen et al.). Intrinsic achievers are primarily self-reliant and rarely seek external support (Lipman-Blumen, 1996).

Competitive direct style. In stark contrast to intrinsic achievers, competitive achievers measure success by an external frame of reference (Lipman-Blumen et al. 1983). The hallmark of the competitive style is outperforming others. Specifically, competitive achievers do not consider completing a task to the best of one's ability sufficient; competitive achievers must "win" (Lipman-Blumen, 1996). Competitive achievers typically perceive all tasks as a contest and strive towards "besting" others (Lipman-Blumen).

Power direct style. Power achievers tend to take on a dominating role in which they assume responsibility for organizing the task, delegating assignments to others, and seeking to take overall control of the situation (Lipman-Blumen et al. 1983). However, it is important to note that in the process of delegating tasks to others, power achievers are not as concerned with empowering others as they are about accomplishing their own vision. Power achievers tend to view situations as an opportunity to use their "natural" leadership skills and take control (Lipman-Blumen, 1996).

Relational Achieving Styles

Unlike the individualistic direct styles, relational styles are focused on engaging in group goals and working with others to achieve a task (Lipman-Blumen et al. 1983). Specifically, relational achievers prefer to accomplish tasks through their relationships with others. However, Lipman-Blumen (1996) argued that relational achievers do not

need to be affectionate toward others, rather identifying with others is sufficient. The three relational styles are collaborative, contributory and vicarious (Lipman-Blumen).

Collaborative relational style. Collaborative achievers are propelled to accomplish tasks by working in teams or groups (Lipman-Blumen et al., 1983). In contrast to direct and instrumental achievers who thrive on individual goals, collaborative achievers typically find success in developing group goals (Lipman-Blumen, 1996). As such, Lipman-Blumen argued that when collaborative achievers are charged with a task, the first response is to join a team or group; it is from group interaction that collaborative achievers draw energy and intensity. Moreover, collaborative achievers share both the rewards for the group's successes and the responsibility for the group's mistakes (Lipman-Blumen).

Contributory relational style. The hallmark of the contributory style is helping another individual directly achieve his or her goal (Lipman-Blumen, 1987). According to Lipman-Blumen (1996), contributory leaders identify their goals to be the goals that others have prescribed. As such, an individual who accomplishes tasks by the contributory style views success as helping another individual achieve that individual's goal (Lipman-Blumen, 1996).

Vicarious relational style. Taking pleasure in the success of others' accomplishments as if the achievements were one's own describes the vicarious achievement style (Lipman-Blumen, 1996). Namely, vicarious achievers reel in the triumphs of others and identify with the goals the other individuals defined and accomplished (Lipman-Blumen). Success is defined as supporting and endorsing the accomplishments of others (Lipman-Blumen).

Instrumental Achieving Styles

Instrumental achievers typically draw upon personal attributes and accomplishments as well as relationships with others to accomplish desired goals (Lipman-Blumen et al. 1983). Specifically, Lipman-Blumen et al. argued that instrumental achievers constantly evaluate individual aspects as well as their relationships with others in terms of usefulness of working towards a task; instrumental achievers are “maximizers, deftly making the most of their own and everyone else’s strengths” (Lipman-Blumen, 1996, p. 195). The three styles that make up the instrumental set are entrusting, social and personal (Lipman-Blumen).

Personal instrumental style. Personal achievers draw from individual attributes, talents, characteristics and other aspects of self (Lipman-Blumen et al. 1983). Specifically, personal achievers will rely upon charm, wit, physical attractiveness, previous successes, family background, financial status, educational level etc. as means to achieve future goals (Lipman-Blumen, 1996). As such, success is largely determined by the degree to which one can gain recognition and enhance relationships (Lipman-Blumen, 1987).

Social instrumental style. Relationships are the means by which social achievers accomplish their goals (Lipman-Blumen, 1996). Namely, every new acquaintance is viewed as having the potential to help a social achiever work towards an end such that new contacts are categorized by special talents (Lipman-Blumen). Social achievers have a sound understanding of group dynamics and strive to create social networks to operate both within and between complex organizations (Lipman-Blumen). However, Lipman-

Blumen argued that social achievers readily share contacts with others and view networks as a means to help others achieve tasks as well.

Entrusting instrumental style. Although entrusting achievers also rest upon their relationships with others, unlike social achievers, entrusting achievers are not concerned with network building (Lipman-Blumen, 1996). Rather, entrusting achievers hold that all constituents readily want to help them and will do so if presented an opportunity (Lipman-Blumen). Entrusting achievers will articulate an overview of his or her vision and then rely on other members of the group to naturally assume ownership for the rest of the details (Lipman-Blumen).

Empirical Applications of Achievement Styles Framework

Although the achieving styles are explained in categories, it is important to note that most individuals have the potential to draw from each style (Lipman-Blumen, 1996). Based upon their research, Lipman-Blumen and associates (1984) argued that individuals have two or three preferred style to accomplish a task and these achieving style preferences are developed through early learning experiences; thus, although individuals may primarily only draw upon one or two achieving styles, it is possible to develop other achieving styles. To measure the achievement behavior of individuals, Lipman-Blumen and Leavitt (1979) developed the L-BL Achieving Styles Inventory (ASI). The validated instrument has since undergone 14 revisions and been used with more than 40,000 participants (Achieving Styles Institute, 2002). Many researchers have found the instrument to be a useful framework for examining how achieving styles vary across gender as well as consider how achievement styles might be related to leadership styles

(Beardsley et al., 1987; Komives, 1991, 1992, 1994; Lipman-Blumen, 1992, 1996; Offermann & Beil, 1992).

In one of the first research studies to use the ASI in the student-affairs context, Beardsley et al. (1987) argued the achieving styles model provides practitioners with a new lens through which one can examine student leadership behaviors. Specifically, the authors used the achieving styles framework to explore the achieving styles of students active in student activities and the profiles of the student-affairs practitioners who interact with the students. In a non-probability convenience sample at one institution, the researchers found that the student-affairs professionals presented a wider range of achieving styles than the students, and the professional staff members presented a strong relational domain score with high tendencies to rely on intrinsic direct and power direct styles. Beardsley et al. argue “the group of scores reflects a population that is targeted toward task supportiveness and group effort rather than toward power, competition and political ploy” (p. 417).

Considering that the students in Beardsley et al. (1987) presented preferences for styles in the direct domain, the authors argued a complementary relationship seems to occur between the students and the student-affairs professionals; the students define the goals for the group and the professionals are able to provide support and contribute to the goals. Work by Stewart (1984) seems congruent with this belief as Stewart found that students indicate a preference for Relational Achieving Styles when selecting most preferred coworkers. In considering such findings in both studies, Beardsley and associates argued that by gaining insight into each group member’s preference for achieving tasks, the student-affairs practitioner, in the supportive and contributory role,

might work with the individual students to identify other achieving styles that may be more effective for working in the group. Thus, although the core research question of Beardsley et al. did not explicitly seek to examine the link between leadership behavior and achievement styles, the authors implied that the framework provides a useful way of conceptualizing group members' leadership behavior.

Komives (1991) examined the link between self-reported achieving styles and self-assessed leadership behaviors more explicitly. Among several research questions, Komives explored the relationship between residence hall directors' achieving styles and transformational leadership behavior. Also illuminating gender effects, Komives found that the Relational Achieving Styles were preferred by both male and female hall directors; however, the female hall directors in the study indicated the relational domain styles contributed to their transformational leadership behavior, whereas the male hall directors highlighted Power Direct Styles as influencing their transformational leadership behavior. It is especially interesting to note that upon first glance, the correlation between the Relational Achieving Scale and transformational factors did not seem significant, but once gender effects were accounted for, there were significant findings. Namely, Komives reported that the male hall directors report a significantly negative correlation on the exact item which women hall directors show a significantly positive correlation.

The results of Komives (1991), that women tend to rely on the relational domain of achieving styles, seem consistent with the findings of Varwig's (1989) study of 62 female class presidents. Varwig found that the young women leaders relied most frequently on Intrinsic Direct, Power Direct and Collaborative Relational styles. Further, in a study examining the achieving styles of male and female leaders, Offermann and

Beil (1992) found that although women leaders self-reported similar achieving style profiles on eight of the nine achieving styles, the women leaders were significantly less likely to develop satisfaction from a competitive approach compared to the male leaders. In a non-probability, convenience sample of 34 women leaders at a campus-based women student leaders' conference, Komives (1994) found that like most college student leaders report, the women favored an Intrinsic Direct and a Power Direct approach. Collaborating with others was the third favored approach; however Collaborative Relational was strongly linked to leadership behavior that contributes to empowering others and connects group members with each other. Interestingly, although the women in the study presented a strong preference for Contributory Relational and Entrusting Relational, the women did not self-report these styles as contributing to their leadership behavior.

Komives (1991) paralleled the findings regarding the relationship of gender and achievement styles with literature on traditional gender-role leadership expectations in which women are expected to adopt collaborative leadership behaviors over competitive styles and men are expected to take on a more aggressive and direct approaches. Although there are several limitations in the convenience samples in the aforementioned studies, the rich gender data analysis in all of the exploratory studies highlights the need for further investigation of how leadership behavior and achieving styles vary across gender.

Summary

Understanding that current leadership paradigms examine leadership as a relational and collaborative process in which individuals work together towards a common goal, it seems appropriate that sport teams, a "set of interpersonal interactions

structured to: (1) maximize members' athletic performance and (2) coordinate and integrate each members' efforts with those of the other team members" (Johnson & Johnson, 1994, p. 505), could facilitate leadership capacities. Dr. Bernard Bass, a noted leadership scholar, argued this very point in an interview stating that "[the sport] field is a tremendous setting for leadership exploration and application" (Weese, 1994, p. 187). In considering the leadership skills student-athletes develop and enhance, one might also wonder about gender-related differences as the leadership and achievement style literature suggests that men are more likely to derive satisfaction from competitive and power leadership styles than women. However, a review of the literature yields very little empirical research on the relationship of participation in intercollegiate athletics and participants' leadership development. Rather, the majority of the literature regarding the relationship between participation in intercollegiate athletics and student development has focused on developmental issues related to academic achievement and career maturity. When the construct of leadership is explored in the athletic context, the primary focus revolves around the leadership behaviors of coaches or the studies are extremely limited and narrowly focused; the argument that participation in intercollegiate athletics enhances leadership remains to be extensively tested (Eiche et al., 1997; Glenn & Horn, 1993).

Noting this gap in the literature and considering the role of collaboration in contemporary leadership paradigms, it was the intent of this study to examine the leadership capacities of student-athletes, particularly illuminating the extent to which student-athletes exhibit collaborative achievement styles.

CHAPTER III

METHODOLOGY

The literature regarding leadership paradigms and the relationship between participation in intercollegiate athletics and student development outcomes, as discussed in Chapter two, supports the notion that participation in intercollegiate athletics may be related to the leadership behaviors of student-athletes. Considering the literature regarding gender-related leadership differences, one might also wonder how the leadership styles of male student-athletes compare to the leadership styles of women student-athletes. However, few studies have posed these questions and explicitly explored the leadership styles of intercollegiate athletes. As such, this study aimed to provide more insight into the nature of student-athletes' self-reported leadership abilities, particularly illuminating the achieving styles of the athletes. Specifically, this study sought to examine the extent to which student-athletes self-report using a collaborative achievement style as well as the ways in which achievement styles vary across gender. Lastly, the study intended to explore the relationship between student-athletes' self-assessed leadership capacities and self-reported achievement styles across gender. This chapter will also highlight how the focus of the study was modified due to the low response rate from male participants.

Research Design

Using a cross-sectional non-experimental design, this study is both descriptive and comparative. Specifically, four questions guided the original design of this study: (a) What are student-athletes' self-reported perceptions of leadership ability? (b) What are student-athletes' self-reported perceptions of using collaborative and competitive

achieving styles? (c) Are there differences in the self-reported achieving styles of male student-athletes and female student-athletes? and (d) What is the relationship between male and female student-athletes' self-reported leadership ability and self-reported achievement styles?

Hypotheses

The following section presents the original hypotheses for this research study. Revisions in hypotheses follow in a later section. Hypotheses are stated in the null form.

Hypothesis 1: There is no difference in preference for using collaboration as an achievement style by gender of student-athletes.

Hypothesis 2: There is no difference in preference for using competition as an achievement style by gender of student-athletes.

Hypothesis 3: There is no relationship between self-assessed leadership ability and the achievement style profiles of male student-athletes.

Hypothesis 4: There is no relationship between self-assessed leadership ability and the achievement style profiles of female student-athletes.

Sample

The population for this study was varsity student-athletes at a large, research intensive, Mid-Atlantic public university competing in Division I National Collegiate Athletic Association (NCAA) athletics. The athletic department included 11 male teams, 346 male athletes and 14 female teams, 302 female athletes. The sample population included seven female athletic teams consisting of a total 150 female student-athletes and three male athletic teams consisting of 142 male student-athletes. The study included these teams because their athletic counselors were willing to participate. Sampled teams

included these women's sports: competitive cheerleading, gymnastics, lacrosse, soccer, softball, swimming and water polo; along with men's football, soccer, and swimming. The participants selected for this study were based on a non-probability, convenience sampling strategy by the researcher.

Responses to the leadership part of the two-part online survey were received from 26% of the female athletes ($n = 39$) and 9.4% of the male student-athletes ($n=14$). Matched cases possible from the response to the entire two-part instrument were received from 20% of the female athletes ($n=30$) and 7% of the male student-athletes ($n = 10$). The respondent sample consisted of athletes from women's competitive cheerleading, gymnastics, lacrosse, softball, swimming and water polo and men's football and swimming.

Of the total 30 analyzed female respondents, 16 student-athletes played team sports, which included, lacrosse, water polo, softball, and competitive cheerleading and ten of the student-athletes played individual sports which included swimming and gymnastics. Four of the student-athletes were listed on both the swimming and water polo rosters and identified as dual sport student-athletes. However, for data analysis purposes, it was decided to code two of the dual sport athletes as team sport water polo players and the other two dual sport athletes as individual sport swimmers.

Although it is recognized that assigning the dual sport student-athletes to only one of the sport structures is a limiting factor, it was determined to be an appropriate adjustment. Specifically, water polo was in its inaugural season and many swimmers were recruited to fill in gaps in the roster; the inaugural roster is larger than a typical established competitive varsity sport roster. Moreover, at the time the survey was

administered, water polo was in the peak of their competition cycle and swimming was nearing the end of their competitive season; two of the dual sport athletes contributed significant playing time for the water polo team and the other two dual sport athletes did not participate in varsity water polo competitions, but were listed as reserve players for the inaugural roster. Since water polo was in season, one might argue that the two student-athletes who are active members of the water polo team might be operating more from a team sport mindset, whereas the reserve water polo/swimmers might view swimming as their primary competitive sport. Thus, of the 30 total respondents, 18 were coded as team sport student-athletes (60%) and 12 were coded as individual sport student-athletes (40%). See Table 3.1 for an overall response rate by sport and gender.

Revised Sample

Although this study sought to examine the nature of female student-athletes' self-reported leadership capacities and achievement styles compared to male student-athletes' behaviors, it was determined that there was an inadequate number of matched cases of male student-athletes in the respondent sample. The small respondent sample size of male athletes increases the potential for sampling error and greatly limits the generalizations that can be made from this study to other male athletes at this particular institution as well as other institutions (Upcraft & Schuh, 1996). Moreover, the majority of the male student-athletes who participated in the study received instructions for completing the survey in a handout upon entering mandatory ASCDU study hall; study hall consists primarily of freshmen student-athletes and all other student-athletes with a 2.5 GPA or below. The nature of the men who participated therefore was determined not to be generalizable to the male student-athlete study.

Table 3.1

Overall Usable Responses and Response Rate by Sport

Sport	Number of Student-Athletes In Population	Usable Cases (Response Rate)
Women's Individual Sports	46*	12** (26.1%)
Gymnastics	16	9 (56.3%)
Swimming and Diving	30*	3 ** (10%)
Women's Team Sports	119*	18** (16.5%)
Competitive Cheer	22	3 (13.6%)
Lacrosse	31	6 (19.4%)
Soccer	12	0 (0%)
Softball	15	1 (6.7%)
Water Polo	39*	8** (20.5%)
Men's Individual Sports	28	2 (7.1%)
Swimming and Diving	28	2 (7.1%)
Men's Team Sports	114	8 (7.0%)
Soccer	24	0 (0%)
Football	90	8 (8.9%)
Total Women Student-Athletes	150***	30*** (20%)
Total Men Student-Athletes	142	10 (7.0%)
Total Student-Athletes	292***	40 *** (13.7)

*15 student-athletes are listed on both the Women's Swimming and Diving roster and the Women's Water Polo roster; **4 respondents are listed on both the Women's Swimming and Diving roster and the Women's Water Polo roster, but 2 were recoded as primary Swimmers and 2 were recoded as primary Water Polo players; ***total figures are adjusted to represent actual number of participants

As such, there was concern that the male respondent sample, mostly freshmen athletes, was too limited and biased so only the female student-athletes' respondent sample was analyzed. This required adjustment to the original statement of the hypotheses.

Revised Hypotheses

With the focus of the study shifting to a study on only female student-athletes, it was necessary to revise the hypotheses. As such, the revised hypotheses are as follows:

Hypothesis 1: There is no relationship between self-assessed leadership ability and achievement style profiles of female student-athletes.

Hypothesis 2: There is no relationship between self-assessed leadership ability and achievement style profiles of female individual sport athletes

Hypothesis 3: There is no relationship between self-assessed leadership ability and achievement style profiles of female team sport student-athletes.

Hypothesis 4: There is no difference in female student-athletes' self-assessed leadership ability by sport structure (individual versus team).

Hypothesis 5: Preference for using collaboration as an achievement style does not vary across the structure of the sport team (individual versus team).

Hypothesis 6: Preference for using competition as an achievement style does not vary across the structure of the sport team (individual versus team).

Instruments

Leadership

Leadership behavior was examined by adapting 11 questions from the prior work of Cress et al. (2001) and one question from the nationally recognized Cooperative Institutional Research Program (CIRP) Survey for a total of 12 developmental self-rated

leadership items. The items were on a 7-point Likert scale, ranging from one (strongly agree) to seven (strongly disagree). Item scores were then reversed such that a response of one was recoded to seven and vice versa. Recoded scores were summed for one leadership composite variable, such that, the greater the score of the leadership composite variable, the greater the degree of self-rated leadership ability.

The Cress et al. (2001) items were deemed appropriate to assess students' leadership development as the researchers developed the items in congruence with the views of several leadership program directors as well as in alignment with the American College Personnel Association (ACPA) Student Learning Imperative. Thus, validity of these items is asserted by Cress et al. One item was adapted from the CIRP survey as several researchers have identified the item as one of valid indicators of leadership skills (Astin, 1993; Cress et al.; Kezar & Moriarty, 2000; Ryan, 1989).

The items were posted on a webpage using the institution's on-line survey generator. Cronbach alphas were calculated to determine the reliability of these questions for this student-athlete population. Specifically, the reliability coefficient was determined to be .83 for the female student-athlete respondent sample. Refer to Appendix B for the items used to assess student-athletes' self-reported leadership behaviors.

Achieving Styles

The dependent variable, achievement style, was measured using the on-line Achieving Styles Inventory (ASI), Form 13 (Achieving Styles Institute, 2002). The ASI is an on-line, 45-item, 7-point Likert-type instrument, ranging from never (1) to always (7), that is used to measure respondents' preference to use particular approaches when accomplishing a task or goal (achievement style) (Lipman-Blumen, 1987). The ASI

conceptualizes achievement style into three styles (Direct, Instrumental and Relational) which each consist of three substyles (Lipman-Blumen et al., 1983). The ASI has five assessment questions for each substyle. Questions either describe behaviors used to approach tasks or accomplish goals, or describe feelings about specific approaches for accomplishing tasks. For example, “I am not happy if I don’t come out on top in a competitive situation” would assess a Competitive Direct style whereas “My way of achieving is by coaching others to their own success” measures Contributory Relational achievement (Lipman-Blumen). In terms of scoring, each participant’s scores across the five items in each scale were summed and divided by the number of items answered (Lipman-Blumen). The scores on the three styles within the set are averaged for a set score (Lipman-Blumen). Refer to Appendix C to review the ASI.

Developed from over 25 years of research, including 14 revisions, and used with more than 40,000 participants, the Achieving Style Institute (2002) reported that the validity and reliability of the instrument were very strong. Specifically, for populations aged 30 years old or younger, Lipman-Blumen et al. (1983) reported that Cronbach alphas from the nine subscales ranged from .72 (Reliant Instrumental scale) to .84 (Collaborative Relational scale). Moreover, a 15-week test-retest estimate of 90 high school student participants yielded stability coefficients ranging from .58 (Intrinsic Direct) to .73 (Social Instrumental and Competitive Direct), with an alpha range across time between .66 and .90 for the scales (Lipman-Blumen et al.). Cronbach alphas were calculated to determine the reliability of the ASI for the female student-athlete respondent population in this study. Specifically, reliability coefficients were found to be as follows: .84 (Intrinsic Direct), .74 (Competitive Direct), .92 (Power Direct), .82 (Personal Direct),

.84 (Social Intrinsic), .73 (Entrusting Instrumental), .91 (Collaborative Relational), .81 (Contributory Relational), and .72 (Vicarious Relational).

Procedures

A request was sent to the institution's Athletic Academic Support Unit describing the nature of the study and asking for support and assistance in recruiting student-athletes to participate. The researcher requested that all students be contacted via e-mail so that web link connections to the survey would be easy for potential participants. Seven female athletic teams consisting of 150 female student-athletes and three male athletic teams comprising 142 male student-athletes were contacted. All of the female student-athletes were contacted by their athletic academic counselor via e-mail. Two male athletic teams consisting of 52 male student-athletes were sent an e-mail from their athletic academic counselor asking them to engage in this study. One male athletic team consisting of 90 student-athletes received a hard-copy handout of the e-mail upon entering the athletic academic support center.

The e-mail encouraged the student-athletes to participate in the study, provided instructions for completing the two-part on-line survey and included a live web link to the first part of the instrument. The first part of the instrument contained the informed consent form, the 12-leadership items, and instructions for completing the ASI. Upon completing the first part of the survey, participants were directly connected to the on-line ASI. Refer to Appendix A for the instructions and Appendix C for the instrument.

As an incentive to participate in the study, student-athletes received three CHAMPS/Life Skills points for completing the survey. If 85% of an athletic team completed the instrument, bonus points were awarded. CHAMPS/Life Skills is a NCAA

program implemented differently at participating institutions to enhance intercollegiate athletes' college experience (Carodine, Almond & Gratto, 2001; Carr & Bauman, 1996). At the institution of study, CHAMPS/Life Skills points are awarded to athletes for participating in educational workshops, community service projects, career development activities, and other personal development initiatives. At the end of the academic year, CHAMPS points are tallied and the athletic team with the greatest number of points per percentage of team is recognized by the Athletic Department with a CHAMPS/Life Skills Cup of Champions Award. NCAA regulations prohibit giving individual incentives to students for anything connected to their athletic involvement. These group incentives have proven to be useful motivations in other projects.

Data Analysis

Both descriptive and inferential statistics were used to analyze the data. With respect to descriptive statistics, means were used to report self-rated leadership ability and achieving styles for the total female student-athlete sample as well as individual sport female student-athletes and team sport female student-athletes. Standard deviations were calculated to provide insight into the variability of the group scores. An ANOVA was conducted to compare the means of self-assessed leadership ability and achieving style scores of female individual sport and team sport student-athletes. Pearson R correlation statistics were conducted to examine the relationship between student-athletes' self-assessed leadership ability and preferred achieving styles. Despite the numerous ANOVAs and correlation analyses conducted, this study was exploratory in nature and it was desired to minimize the chance for Type II error. As such, there was no control for Type I error and there is some concern regarding the possibility of rejecting the

hypotheses due to chance. The following section details the data analysis for each hypothesis. (see Table 3.2). A 95% confidence level was established for significance in the data for all analyses.

Hypothesis 1: There is no relationship between self-assessed leadership ability and achievement style profiles of female student-athletes.

Analysis 1: A two-tailed Pearson R Correlation statistic was calculated between each of the nine achieving style inventory scales and leadership ability for all participants.

Hypothesis 2: There is no relationship between self-assessed leadership ability and achievement style profiles of female individual sport athletes

Analysis 2: A two-tailed Pearson R Correlation statistic was calculated between each of the nine achieving style inventory scales and leadership ability for the participants who were members of individual sport teams.

Hypothesis 3: There is no relationship between self-assessed leadership ability and achievement style profiles of female team sport student-athletes.

Analysis 3: A two-tailed Pearson R Correlation statistic was calculated between each of the nine achieving style inventory scales and leadership ability for the participants who were members of team sports.

Hypothesis 4: There is no difference in female student-athletes' self-assessed leadership ability by sport structure (individual versus team).

Analysis 4: A one-way ANOVA was conducted to examine if there was a difference by sport group structure (independent variable) and female student-athletes' self-assessed leadership ability (dependent variable).

Table 3.2

Summary of Revised Hypotheses, Variable Descriptions and Statistical Tests (confidence level .05)

Hypothesis	Independent Variable	Dependent Variable	Statistic
<i>Hypothesis 1</i> There is no relationship between self-assessed leadership ability and achievement style profiles of female student-athletes.	Achieving Style Profile*	Self-assessed leadership ability	Pearson R Correlation
<i>Hypothesis 2</i> There is no relationship between self-assessed leadership ability and achievement style profiles of female individual sport student-athletes.	Achieving Style Profile	Self-assessed leadership ability	Pearson R Correlation
<i>Hypothesis 3</i> There is no relationship between self-assessed leadership ability and achievement style profiles of female team sport student-athletes.	Achieving Style Profile	Self-assessed leadership ability	Pearson R Correlation
<i>Hypothesis 4</i> There is no difference in female student-athletes' self-assessed leadership ability by sport structure (individual versus team).	Structure of Sport Team	Self-assessed leadership ability	ANOVA
<i>Hypothesis 5</i> There is no difference in preference for using collaboration as an achievement style by the structure of the sport team (individual versus team).	Structure of Sport Team	Collaboration	ANOVA
<i>Hypothesis 6</i> There is no difference in preference for using competition as an achievement style by the structure of the sport group (individual versus team).	Structure of Sport Team	Competition	ANOVA

*achieving style profile includes scores on each of the three sets (Direct, Relational, and Instrumental) as well as each of the three subscales in each set.

Hypothesis 5: Preference for using collaboration as an achievement style does not vary across the structure of the sport team (individual versus team).

Analysis 5: A one-way ANOVA was conducted to examine the relationship of sport team structure (independent variable) and preference for a Collaborative Achieving Style (dependent variable).

Hypothesis 6: Preference for using competition as an achievement style does not vary across the structure of the sport team (individual versus team).

Analysis 6: A one-way ANOVA was conducted to examine the relationship of sport team structure (independent variable) and preference for a Competitive Achieving Style (dependent variable).

Summary

This chapter outlined the methods used in the study of the nature of leadership behaviors and achieving styles of student-athletes. The ASI, a survey that measures achievement styles, was used to measure the nature of student-athletes' achieving styles as well as gain insight into the extent to which student-athletes use collaborative and competitive achieving styles. A total of 12 leadership items were adapted from Cress et al. (2001) and the nationally recognized CIRP Survey. The two-part instrument was administered to participants as an on-line survey. Student-athletes received an e-mail with an active link to the two-part on-line survey from their athletic academic counselor.

Due to an unacceptable male student-athlete completed survey response rate along with bias in that sample, the focus of the study shifted to a study on only female student-athletes. Hypotheses were revised to examine the nature of female student-athletes' self-rated leadership ability and achievement style profiles. More specifically, relationships

between sport team structure (individual versus team) and female student-athletes' self-rated leadership ability and achieving styles were examined. Means, standard deviations, Pearson R correlations and ANOVAs were conducted to determine the findings of the research questions. The following chapter presents the results obtained through these procedures.

CHAPTER IV

RESULTS

The original purpose of this study was to examine the nature of student-athletes' self-assessed leadership capacities and achieving styles particularly examining male and female student-athletes' tendency to use collaborative achieving styles. Based upon the small scope of literature examining student-athletes' leadership capacities, it was hypothesized that (a) preference for using collaboration as an achievement style does not vary across gender of student-athletes, (b) preference for using competition as an achievement style does not vary across gender of student athletes, (c) there is no relationship between self-assessed leadership ability and the achievement style profiles of male student-athletes, and (d) there is no relationship between self-assessed leadership ability and the achievement style profiles of female student-athletes.

Although intentionally designed, the procedures yielded an extremely small male student-athlete respondent sample size for matched cases on the two-part instrument, ($n=10$; response rate = 7%). It was determined that such a small male student-athlete respondent sample size had a large margin for error and that generalizing results from the intended analyses would be inappropriate. As such, the focus of the study shifted to examining the self-rated leadership abilities and achievement style profiles of only female student-athletes ($N = 30$; response rate = 20%). The female respondent sample was also small and generalizations of results must be made with caution, but it was determined that analyses could be made to examine the nature of women student-athletes' self-rated leadership abilities and achieving styles across sport structure (individual sport versus team sport). Of the sports that received the request to participate, 26.1% ($n=12$) of

the possible individual sport female student-athletes and 16.5% ($n=18$) of the possible team sport student-athletes were in the analyzed sample.

Revised hypotheses included: *Hypothesis 1*: There is no relationship between self-assessed leadership ability and achievement style profiles of female student-athletes; *Hypothesis 2*: There is no relationship between self-assessed leadership ability and achievement style profiles of female individual sport athletes; *Hypothesis 3*: There is no relationship between self-assessed leadership ability and achievement style profiles of female team sport student-athletes; *Hypothesis 4*: There is no difference in female student-athletes' self-assessed leadership ability by sport structure (individual versus team); *Hypothesis 5*: Preference for using collaboration as an achievement style does not vary across the structure of the sport team (individual versus team); *Hypothesis 6*: Preference for using competition as an achievement style does not vary across the structure of the sport team (individual versus team).

Descriptive statistics, ANOVA analyses, and Pearson R correlation statistics were conducted using SPSS 11.5 to examine the revised hypotheses. The chapter will begin with a description of the sample's demographic characteristics, followed by the results of the descriptive statistics detailing the nature of the participants' self-assessed leadership behaviors and achieving styles. Lastly, the results of each hypothesis will be presented.

Sample Characteristics

The analyzed sample of this study consisted of 30 female undergraduate students who participate in NCAA Division I athletics at a large, Mid-Atlantic public university. It is important to note that nine additional surveys from women student-athletes were not analyzed in this study because only one-half of the instruments were completed; the

students completed the leadership indicator items, but not the items on the ASI. Additionally, this study did not include 14 partially-completed surveys and 10 completed surveys returned by male-student-athletes. The 10 completed surveys returned by male student-athletes were not included as it was determined the small sample size had a large margin for error and that generalizing results from the intended analyses would be inappropriate.

With respect to age, the 30 total female student-athlete respondents ranged from 18 to 22 years old with a mean age of 19.70 years old ($SD = 1.26$). The mean age of the individual female sport student-athletes was 19.67 years old ($SD = 1.30$) and the mean age of the team sport female student-athletes was 19.72 years old ($SD = 1.27$).

Unfortunately, although the ASI asked participants to indicate their race/ethnicity, the returned ASI data file was missing this information. For a comprehensive breakdown of the analyzed female student-athlete respondent sample, see Table 4.1.

Female Student-Athletes' Self-Assessed Leadership Abilities

One of the primary purposes of this research study was to examine the nature of student-athletes' self-assessed leadership ability. As noted in Table 4.2, the mean leadership composite score for the 30 female respondents who completed both the leadership and ASI instruments was 71.00 with a standard deviation of 5.88. Individual sport female student-athletes scored mean of 71.17 with a 6.01 standard deviation. The mean leadership composite score of female team sport student-athletes was 70.89 with a 5.97 standard deviation. These data will be used in the analysis of hypotheses to be presented below.

Table 4.1

Sample Characteristics by Sport

Sport	Number in Population	Usable Cases	Percent in Study	Mean Age
Individual Sport Groups	46*	12**	40%**	19.67 (<i>SD</i> = 1.30)
Women's Gymnastics	16	9	30%	
Women's Swimming and Diving	30*	3**	10%**	
Team Sport Groups	119*	18**	60%**	19.72 (<i>SD</i> = 1.27)
Women's Competitive Cheer	22	3	10%	
Women' Lacrosse	31	6	20%	
Women's Soccer	12	0	0%	
Women's Softball	15	1	3.3%	
Women's Water Polo	39*	8**	26.7%**	
Total Women Student-Athletes	150**	30**	100%	19.7 (<i>SD</i> = 1.26)

*15 student-athletes are listed on both the Women's Swimming and Diving roster and the Women's Water Polo roster **reflects recoding of 4 dual sport student-athletes into one primary sport-2 coded as Swimming and Diving and 2 coded as Water Polo

Table 4.2

Relationship Between Sport Team Structure and Self-Rated Leadership Ability (N = 30)

Variable	All Women <i>N</i> =30 Mean (<i>SD</i>)	Individual Sport <i>n</i> = 12 Mean (<i>SD</i>)	Team Sport <i>n</i> = 18 Mean (<i>SD</i>)	<i>F</i> Ratio (df)	Sig.
Self-Rated Leadership Ability	71.00 (5.88)	71.17 (6.01)	70.89 (5.97)	.016 (1, 28)	.90

Female Student-Athletes' Self-Assessed Achieving Style Profiles

Female student-athletes reported the Direct Achieving Style set as their most preferred achieving style ($M = 4.97$, $SD = .69$) followed by the Relational Achieving Style set ($M = 4.66$, $SD = .68$). A description of each achieving style appears in Table 2.1. The women student-athletes had two achieving styles they most preferred to use to accomplish their goals; the scores on two achieving styles tied. They most preferred to measure success compared to others' performances (Competitive Direct: $M = 5.01$, $SD = .79$) and engage in activities in which they could identify with others' accomplishments (Vicarious Relational: $M = 5.01$, $SD = .67$). A preference for accomplishing tasks individually followed closely behind (Intrinsic Direct: $M = 4.95$, $SD = .84$) as did a preference for emerging as the person "in charge" (Power Direct: $M = 4.93$, $SD = 1.06$). The least preferred achieving styles set was the Instrumental Achieving Style set ($M = 4.55$, $SD = .75$). Namely, female student-athletes indicated that drawing upon one's relationships with others is the least preferred style to achieve tasks (Social Instrumental: $M = 4.37$, $SD = .92$). See Table 4.3.

Both individual and team sport female student-athletes reported the Direct Achieving Set as their most preferred achieving style; yet, individual sport student-athletes reported their second preferred set was the Instrumental Achieving Style ($M = 4.84$, $SD = .61$) whereas team sport student-athletes rated the Relational Achieving Style Set ($M = 4.62$, $SD = .70$) as their second favorite achieving style. Moreover, individual sport women athletes reported accomplishing tasks by drawing upon previous achievements (Personal Instrumental: $M = 5.15$, $SD = .80$) to be among their most preferred styles where as this achieving style was among the least preferred achieving

styles by team sport student-athletes (Personal Instrumental; $M = 4.40$, $SD = .92$).

Individual student-athletes reported a high preference for a Competitive Achieving Style ($M = 5.15$, $SD = .50$) but accomplishing tasks in which goals are set and shared by group members to be their lowest preference (Collaborative Relational: $M = 4.33$, $SD = 1.08$).

Team sport student-athletes reported the Intrinsic Direct Achieving Style ($M = 4.93$, $SD = .78$) to be their most preferred style, closely followed by Competitive Direct ($M = 4.92$, $SD = .94$) and Vicarious Relational ($M = 4.92$, $SD = .65$). However, the only style in which individual student-athletes scored significantly greater than team sport athletes was the Competitive Direct Achieving Style ($p < .05$). (see Table 4.3).

Table 4.3

One-Way Analysis of Variance with Means and Standard Deviations for Female Student-Athletes' Self-Assessed Achieving Style Profiles by Sport Structure (N = 30)

Achieving Style	All Women $N = 30$ Mean (SD)	Individual Sport $n = 12$ Mean (SD)	Team Sport $n = 18$ Mean (SD)	F Ratio (df)
Direct Set	4.97 (.69)	5.11 (.52)	4.87 (.79)	.795 (1, 28)
Intrinsic direct	4.95 (.84)	4.98 (.95)	4.93 (.78)	.025 (1, 28)
Competitive direct	5.01 (.79)	5.15 (.50)	4.92 (.94)	.583* (1, 28)
Power direct	4.93 (1.06)	5.18 (.78)	4.77 (1.21)	1.111 (1, 28)
Relational Set	4.66 (.68)	4.72 (.69)	4.62 (.70)	.133 (1, 28)
Collaborative relational	4.46 (1.09)	4.33 (1.08)	4.54 (1.12)	.263 (1, 28)
Contributory relational	4.51 (.83)	4.68 (.90)	4.40 (.79)	.834 (1, 28)
Vicarious relational	5.01 (.67)	5.13 (.70)	4.92 (.65)	.713 (1, 28)
Instrumental Set	4.55 (.75)	4.84 (.61)	4.36 (.80)	3.073 (1, 28)
Personal instrumental	4.70 (.94)	5.15 (.80)	4.40 (.92)	5.307 (1, 28)
Social instrumental	4.37 (.92)	4.70 (1.01)	4.16 (.81)	2.686 (1, 28)
Entrusting instrumental	4.59 (.84)	4.67 (.73)	4.53 (.93)	.176 (1, 28)
ASI Total	4.73 (.60)	4.88 (.44)	4.63 (.69)	1.302 (1, 28)

* $p < .05$

Results of Revised Hypotheses

The first three hypotheses were tested using a Pearson R Correlation at a two-tailed 95% confidence level to examine the relationship between female student-athletes' self-assessed leadership ability and achievement style profiles. All three analyses showed some positive significant correlations (see Table 4.4). However, as this study was exploratory in nature, there was a desire to minimize Type II error; the lack of control for Type I error increases the possibility of rejecting the hypotheses by reason of chance.

Hypothesis 1: There is no relationship between self-assessed leadership ability and achievement style profiles of female student-athletes.

Result 1: The results of the bivariate correlation indicated a significant positive correlation, $r=.636$, $p<.05$ between female student-athletes' self-assessed leadership ability and the Direct Achieving Style Set as well as the Relational Achieving Style Set, $r=.377$, $p<.05$. There was also a positive correlation between the student-athletes' self-assessed leadership ability and a reported preference for the Power Direct Set, $r=.738$, $p<.05$. Additionally, the Contributory Achieving Style, $r=.462$, $p<.05$ and the Social Instrumental Achieving Style $r=.463$, $p<.05$ correlated significantly with the leadership ability score. Lastly, the overall ASI total score was found to have a significantly positive relationship with the student-athletes' self-assessed leadership ability score $r=.551$, $p<.05$. Based upon the significant correlations, the null hypothesis was rejected. However, it should be noted that the significance level found for the total female student-athlete sample is heavily driven by the high correlation of self-rated leadership ability and achieving style of team sport student-athletes.

Table 4.4

Pearson Correlations of Female Student-Athletes' Self-Assessed Leadership Ability and Achieving Style by Sport Structure

	All Women N =30	Individual Sport n = 12	Team Sport n = 18
Leadership Mean (SD)	71.00 (5.88)	71.17 (6.01)	70.89 (5.97)
Achieving Style			
Direct Set	.636*	.287	.810*
Intrinsic direct	.312	-.050	.601*
Competitive direct	.350	-.033	.501*
Power direct	.738*	.653*	.810*
Relational Set	.377*	.007	.615*
Collaborative relational	.186	-.007	.312
Contributory relational	.462*	-.016	.826*
Vicarious relational	.281	.050	.442
Instrumental Set	.332	.155	.439
Personal instrumental	.121	-.115	.258
Social instrumental	.463*	.411	.536*
Entrusting instrumental	.252	-.053	.410
ASI Total	.551*	.239	.709*

* $p < .05$ (2-tailed)

Hypothesis 2: There is no relationship between self-assessed leadership ability and achievement style profiles of female individual sport athletes.

Result 2: None of the three achieving style set scores correlated significantly with the individual sport female student-athletes self-assessed leadership score. However, the Power Direct style, that is, emerging as the person “in-charge,” scored a positive correlation with the student-athletes’ leadership score $r=.653$, $p<.05$. It is also interesting to note that several styles related negatively to self-rated leadership ability scores, although not at a significant level. More specifically: (a) Intrinsic Direct, (b) Competitive Direct, (c) Collaborative Relational, (d) Contributory Relational, (e) Personal Instrumental, and (f) Entrusting Instrumental each showed weak, although nonsignificant, negative relationships to individual student-athletes’ leadership ability scores. However, based upon the significant correlation between Power Direct and self-rated leadership ability the null hypothesis was rejected.

Hypothesis 3: There is no relationship between self-assessed leadership ability and achievement style profiles of female team sport student-athletes.

Result 3: The Direct Achieving Style Set showed a relatively strong significant positive correlation $r=.810$, $p<.05$ with team sport student-athletes’ self-rated leadership ability. More specifically, all of the Direct Achieving Styles had a significant positive correlation with self-rated leadership ability at the $p<.05$ confidence level; Power Direct $r=.810$, Intrinsic Direct, $r=.601$ and Competitive Direct, $r=.501$.

The Relational Achieving Style Set also showed a significant positive relationship with team sport student-athletes’ self-rated leadership ability $r=.615$, $p<.05$. Preferring to

help others achieve their goals (Contributory Relational) scored a strong positive relationship $r=.826, p<.05$ with self-assessed leadership ability. With respect to achieving styles in the Instrumental Achieving Style Set, only the Social Instrumental Style correlated significantly with self-rated leadership ability, $r=.536, p<.05$. Lastly, the total ASI score showed significant positive correlation to team sport student-athletes' self-rated leadership ability, $r=.709, p<.05$. Based upon the significant correlations, the null hypothesis was rejected.

The fourth hypothesis was examined using an ANOVA at the 95% confidence level to compare the self-rated leadership ability of female individual sport student-athletes to female team sport student-athletes. (see Table 4.2)

Hypothesis 4: There is no difference in female student-athletes' self-assessed leadership ability by sport structure (individual versus team).

Results 4: The self-rated leadership ability means of female individual and team sport student-athletes did not differ significantly, $F(1,28)=.016, p>.05$. As such, one fails to reject the null hypothesis. (see Table 4.2)

The final two hypotheses were examined using one-way analysis of variance (ANOVA) tests to compare the means of female individual sport and female team sport student-athletes' achievement style profiles. One of the two analyses was significantly different ($p<.05$). (see Table 4.3)

Hypothesis 5: Preference for using collaboration as an achievement style does not vary across the structure of the sport group (individual versus team).

Results 5: The Collaborative Achieving Style mean of female individual sport student-athletes was not significantly different from the Collaborative Achieving Style mean of female team sport student-athletes, $F(1,28) = .263, p > .05$. As such, one fails to reject the null hypothesis.

Hypothesis 6: Preference for using competition as an achievement style does not vary across the structure of the sport group (individual versus team).

Results 6: The Competitive Achievement Style mean of female individual sport student athletes ($M=5.15$) was significantly greater than the Competitive Achievement Style mean of female team sport student-athletes ($M=4.77$), $F(1,28) = .583, p < .05$. The null hypothesis was rejected.

Summary

Based upon the statistical analyses, four of the six revised null hypotheses were rejected. Specifically, Pearson R Correlation statistics indicated a significant relationship between (a) female student-athletes' self-assessed leadership ability and preferred achieving styles, (b) female individual sport student-athletes' self-assessed leadership ability and preferred achieving styles, and (c) female team sport student-athletes' self assessed leadership ability and preferred achieving styles. ANOVA statistics indicated female individual sport student-athletes may have a greater preference for using competition as an achievement style compared to team sport student-athletes. Despite the lack of significance in (a) the relationship between sport group structure and self-assessed leadership behavior and (b) the relationship between preference for using collaboration as an achieving style and sport group structure, the results lead to future research questions.

Moreover, there were also several weak, although nonsignificant, relationships between individual sport student-athletes' self-assessed leadership ability and preferred leadership ability that are interesting. An interpretation of these results, within the realm of the study's methodological limitations, and implications of the results for practice and future research are presented in the next chapter.

CHAPTER V

DISCUSSION

This study originally intended to examine the leadership behaviors of male and female Division I intercollegiate student-athletes, particularly illuminating the relationship between gender and student-athletes' preference for using collaborative and competitive achieving styles. However, due to a low male student-athlete response rate and a biased male respondent sample, the focus of this study shifted solely to women student-athletes. Research questions were revised to the following (a) What is the nature of female student-athletes' self-reported leadership ability and self-reported achieving styles? (b) Are the differences in the self-reported leadership ability and achieving styles of individual and team sport female student-athletes (c) What is the relationship of individual sport female student-athletes' self-perceptions of leadership ability and preference for using collaborative and competitive achieving styles? and (d) What is the relationship of team sport female student-athletes' self-perceptions of leadership ability and preference for using collaborative and competitive achieving styles

Student-athletes' self-assessed leadership ability was measured by a composite variable comprised of 12 leadership-indicator items adapted from Cress et al. (2001) and the nationally recognized CIRP survey. Achievement style preferences were assessed by the on-line ASI (Achieving Styles Institute, 2002) developed from the achieving style theoretical framework of Lipman-Blumen et al. (1983). The instruments were administered on-line; the Academic Counselors of the institution's Athletic Academic Support and Career Development Unit (ASCDU) sent student-athletes an e-mail

containing a direct link to the instrument. Descriptive statistics, ANOVA analyses, and Person R Correlation statistics were completed using SPSS 11.5 to test the hypotheses.

Based upon the findings presented in the previous chapter, it is the intent of this chapter to more closely examine the results with regards to the revised research questions. However, as this study is exploratory in nature, it is important to recognize and discuss the study's methodological limitations when interpreting and generalizing the results. Lastly, this chapter will highlight implications for practice and provide suggestions for future research. Caution must be used in interpreting all of these findings due to the low response rate of the participants.

Female Student-Athletes Self-Reported Leadership Ability

Without a comparison group of male student-athletes or a sample of nonathlete female students, it is difficult to fully ascertain the female student-athletes' perception of leadership practices. However, considering the highest composite score possible on the leadership scale is 84, the overall female student-athletes' sample mean leadership score of 71.00 seems moderate to high. Moreover, as there was no significant difference between the female individual sport student-athletes' and team sport student-athletes' mean leadership scores, the female student-athletes in this study seemed to have similar perceptions of leadership ability regardless of sport group structure or age.

Female Student-Athletes' Self-Reported Achieving Style Preferences

Although there was no statistical analysis conducted to examine the order effect of student-athletes' achieving styles, and one must be cautious generalizing results based upon comparing the means alone, it is interesting to note that it seems the most preferred achieving style set for the female student-athletes was the Direct Set. This finding

indicates the female student-athletes in this study treasure the mastery of a challenge head-on without necessarily relying upon others to assist in the final outcome of the task. Komives (1994) suggested this individualistic approach is typical for traditional-aged college students. In the traditional college learning environment, students are frequently confronted with papers, examinations, homework and other projects that must be tackled alone. Students are challenged to set and manage their own personal goals. As such, it seems understandable that the student-athletes would feel comfortable and accustomed to using the direct styles to accomplish their goals. Likewise, athletes have a heightened sense of responsibility to keep their own individual skills and physical abilities in top shape in order to perform whether individually or as a team. Preference for Direct Set of achieving styles is also congruent with the work of Lipman-Blumen (1996) who suggested athletes typically score high on the Intrinsic Direct and Competitive Direct scales.

However, one might argue that female student-athletes' preference for power and competitive strategies is contrary to traditional gender-norms. In comparing the leadership styles of men and women, Eagly and Johnson (1990) found that women had a tendency towards more participative and democratic leadership styles and less comfort with autocratic and directive leadership styles. Contemporary women's leadership researchers found similar results suggesting that women's leadership styles are often relational and collaborative in nature (Astin & Leland, 1991; Helgesen, 1990; Indvik, 2001). Considering the results of this study in the context of existing literature, one might wonder about comparing female student-athletes' achieving style preferences to the achieving style preferences of a matched sample of nonathlete female peers.

It seems logical that the Relational Achieving Style was the second preferred achieving style set for team sport female student-athletes whereas the Instrumental Achieving Style was the second preferred set for individual sport female student-athletes. Namely, these findings seem reflective of the unique group dynamics of individual and team sport groups. As aforementioned, individual sports include those in which one athlete competes one-on-one with other athletes in a single match; individual athletes do not rely upon fellow teammates to achieve the athletic goal, yet, an individual athlete's performance typically contributes to an overall team score (Mull et al., 1987). On the contrary, team sport athletes work directly together as a squad to compete against a group of student-athletes from another institution (Mull et al.). Thus, whereas team sport student-athletes must concentrate on working cooperatively to achieve group goals, an individual sport student-athlete might focus on previous personal accomplishments in which she prevailed as a source of motivation as well as entrust her teammates to rise to their personal athletic challenges to contribute to the overall individual sport team score.

Interestingly, Competitive Direct was the only achieving style in which there was a significant difference for preference of achieving style by sport group structure; individual sport student-athletes scored significantly higher on the Competitive Direct scale than team sport student-athletes, $F(1, 28)=.583, p<.05$. However, it should be noted that despite the numerous ANOVA analysis conducted, there was no control for Type I error. It is possible that the significant difference between scores was due to chance and one must be cautious interpreting the results. Although there was no significant difference in the preference for using collaboration as an achieving style by sport group structure, team sport female student-athletes ($M= 4.54, SD = 1.12$) scored slightly higher

on the Collaborative Achieving Style scale than the individual sport student-athletes ($M = 4.33$, $SD = 1.08$). One might infer that using a Competitive Achieving Style seems congruent for an individual student-athlete for whom success is directly measured by the ability to outperform an opponent.

The moderate range of the female student-athletes' achieving style scores (4.33 to 5.18) may indicate a need for higher education professionals to design programming to help student-athletes broaden their achieving styles. Further, the large variability in the female student-athletes' score on the Collaborative Achieving Style ($SD = 1.09$) indicates that although some student-athletes feel comfortable working with others to achieve tasks, extra-effort may be needed to help more female team sport student-athletes build skill and comfort in accomplishing tasks through collaboration. The small standard deviation of individual sport student-athletes' Competitive Achieving Style score (.50) indicates the majority of the female individual sport student-athletes feel confident drawing upon the Competitive Achieving Style. In thinking about the individual sport student-athletes' strong tendency to use a Competitive Achieving Style, it would seem extra effort might be needed to help these student-athletes broaden their skills and feel more comfortable working with others to accomplish a task.

Self-Assessed Leadership Ability in Relation to Preferred Achieving Styles

Although the individual sport and team sport female student-athletes in this study have similar perceptions of leadership abilities, it is interesting to note that the results indicate the individual sport and team sport female student-athletes go about accomplishing leadership very differently. Most notably, whereas there were several positive significant correlations between team sport female student-athletes' self-rated

leadership ability and achieving styles, such as Intrinsic Direct, Competitive Direct, Power Direct, Contributory Relational, and Social Instrumental, the only achieving style subscale to correlate significantly positive with individual sport student-athletes' self-rated leadership ability was Power Direct. These findings suggest that team sport female student-athletes have an ability to draw from a broad range of achieving styles and embrace a more versatile view of leadership whereas, the individual sport student-athletes in this study view leadership as mostly a leader-centric process.

Framed in the work of Lipman-Blumen (1996), it seems the team sport female student-athletes in this study practice more connective leadership than the individual sport student-athletes. Lipman-Blumen argued that connective leaders are able to draw from a variety of achieving styles and have a more versatile style of leadership. This is not to mean that individual sport student-athletes are practicing 'bad' leadership; however, by being able to draw on a greater variety of achieving styles, team sport student-athletes have a more flexible style of leadership that is critical in today's interdependent society.

It is also intriguing that there were several negative, though nonsignificant, correlations between individual sport female student-athletes' achieving styles and self-rated leadership ability. The Intrinsic Direct, Competitive Direct, Collaborative Relational, Contributory Relational, Personal Instrumental, and Entrusting Instrumental achieving styles had weak negative, nonsignificant correlations with individual sport student-athletes' self-rated leadership ability. Although extreme caution should be used in drawing meaning from these nonsignificant results, these negative correlations might

indicate that the individual student-athletes do not view the practices signaled by these achieving styles to be “leaderly.”

Again, these findings seem logical considering the unique group dynamics of individual and team sport groups. Individual student-athletes’ view of Power Directive being “leaderly” may reflect the need to emerge as the individual “in charge” in a one-on-one athletic contest. Moreover, it seems consistent that there is a positive correlation, although relatively weak and nonsignificant, between individual sport student-athletes’ preference for identifying with others’ accomplishments (Vicarious Relational) and self-rated leadership ability; this relationship may be due in part to individual sport student-athletes’ cheering on teammates and celebrating their accomplishments. It seems natural that there is a significant positive correlation between team sport female student-athletes’ self-rated leadership ability and the Relational Achieving Style Set as team sport student-athletes must work cooperatively to successfully achieve shared athletic goals.

Some of the findings regarding team sport female student-athletes’ broader sense of leadership also seems reflective of work regarding the nature of team leadership theory. In a literature review of studies regarding team leadership theories, Kogler-Hill (2001) found that most leadership scholars articulate that there are two primary functions of team leadership-tasks function, efforts to help the team achieve the goal, and maintenance functions, efforts to develop team cohesion and foster moral. Although both functions would seem important in both individual and team sport groups, one might argue that the group building roles are especially critical in team sport groups in which effective team cohesion is especially important to the sport group achieving success. If team sport student-athletes do not share responsibility, or recognize the valuable

contributions and talents each member brings to the group, it would seem the sport group might not achieve much. This is not to mean that a cohesive environment in individual sport groups is less valued; however, the one-on-one context of the individual sport group exposes student-athletes to situations in which they must exhibit expertise in their own event and concentrate on personal success as it is through achieving personal goals that the student-athlete contributes to their sport group. One might argue that the collaborative nature of team sport groups encourages student-athletes to have a greater awareness of the diverse ways team members can contribute to the group's success.

The findings regarding female student-athletes' view of leadership are also illuminated by the recent research of Komives, Casper, Longenecker and Osteen (2004) that examines the lifespan leadership identity development (LID) of students. The six stage LID model, developed from a grounded theory, observes how students' leadership identity shifts from leader-centric beliefs to an awareness of leadership as a group process. Namely, students in stage three of the model view leadership as leader-centric with the positional leader responsible for group outcomes and for followers to seek and support the direction of the leader (Komives et al.). The data from this study may indicate that the individual sport environment may be a good fit for students who have stage three thinking about leadership. It is encouraging that Contributory Relational and Social Instrumental correlated significantly with the team sport student-athletes' view of leadership. This finding may suggest that the team sport environment supports and promotes stage four leadership views which show a shift in consciousness toward more complex group leadership processes (Komives et al.). Although it is encouraging to see the team sport female student-athletes recognize some group aspects of leadership, the

lack of a significant relationship between the Collaborative Relational Achieving Style and self-rated leadership ability suggests the student-athletes may need help in broadening their views of leadership to be more congruent with contemporary leadership expectations. This will be an interesting line of research to pursue as the LID model is tested more directly.

Although caution must be used when generalizing the results of this study, it is important to recognize that this study is one of the first to examine student-athletes' leadership capacities from a flexible and dynamic perspective. Most work regarding leadership in the context of athletics is leader-centric in nature and focuses on the effect of coaching leadership on player performance (Eiche et al., 1999; Gleen & Horn, 1993). This study contributes a new lens through which to view student-athletes' leadership capacities and also leads to many other research questions. Namely, the preliminary, results regarding the relationship between different types of sport environments and student-athletes' view of what behaviors are "leaderly", leads to interesting questions regarding the relationship between the type of organization or group structure and leadership style preferences.

Limitations

Although this study was intentionally designed and efforts were made to control confounding factors, several methodology limitations remained. Most of the limitations surround the sample as getting access to sample student-athletes can sometimes be difficult. Student-athletes must balance considerable time commitments between athletic and academic responsibilities and contend with a high-profile existence (Carodine et al., 2001). Concerned about protecting the confidentiality of the student-athletes as well as

recognizing that student-athletes have demanding schedules that limit the time they can spend on non-academic and non-athletic endeavors, the athletic department carefully limits the access of the student-athlete population to researchers. As such, the cross-sectional non-experimental research design, non-probability convenience sampling strategy seemed appropriate. However, interpretations from the results of this study should be taken with caution as the participants in this study do not represent a random sample of all student-athletes.

As the respondent sample in this study illustrates, convenience sampling strategy does not guarantee that subgroups (gender, teams, race/ethnicity, academic class standing, etc.) will be adequately represented (Upcraft & Schuh, 1996). The institution studied had approximately 346 male student-athletes and roughly 302 female student-athletes (statistics based on fall 2003 institutional statistics); however, the procedures yielded matched surveys from only 10 male student-athletes and 30 female student-athletes. As aforementioned, based upon the biased and small male student-athletes respondent sample, the focus of the study shifted to an examination of the self-rated leadership ability and achieving style profiles of only female student-athletes. However, generalizing or applying results to the entire female student-athlete population at the institution of study should be made with extreme caution as the small 30 participant sample size does not represent a random sample of all female student-athletes.

Moreover, although there were some interesting significant differences with respect to achieving style preferences between individual sport and team sport female student-athletes, the analyses are based on 12 female student-athletes from gymnastics and swimming and 18 female student-athletes from lacrosse, softball, competitive cheer

and water polo. Results cannot be generalized to the female golf, tennis, track and field, cross country, field hockey, soccer, basketball, or volleyball student-athletes. One must also remain cognizant that two dual sport student-athletes were coded as individual sport student-athletes and two were coded as team sport athletes. Because the four athletes participate in both a team sport and an individual sport, there is concern that their experiences may not be reflective of a student-athlete who participates in only an individual sport or a team sport. Ideally, these dual sport student-athletes should have been analyzed in a separate group; future studies might also include a comparison sample of such dual sport student-athletes.

Unfortunately, the data regarding the participants' race and ethnicity was missing in the returned ASI data file. Kezar and Moriarty (2000) articulate that students' self-perception of leadership and leadership development differs not only across gender, but also race. It should be noted that the number of women student-athletes of color would have been low and likely insufficient to conduct data analysis. However, gaining insight into the participants' race and ethnicity would help further delineate the findings and inform the understanding of student-athletes' leadership practices.

Although the leadership indicator items were determined to have an acceptable Cronbach Alpha reliability score (.83), and validity is asserted by CIRP and Cress et al. (2001), it is important to acknowledge that this is one of the first known studies to combine these items as a stand-alone measure of leadership. The small sample size prohibited the ability to conduct a factor analysis; a factor analysis would have provided more insight into the degree to which the items relate. Moreover, noting that Bass (1991) suggested participants' self-reports of leadership behaviors are typically higher in

assessing strengths and lower in measuring weaknesses, there is concern about the confounding effect of social desirability.

Although the ASI has been used with more than 40,000 participants, there is little research with student-athletes. In addition to establishing reliability and validity of the instrument with this population, it is also important to be aware of the multiple lenses the student-athletes might use to complete the survey. Although the survey directions instructed the student-athletes to select the responses on the survey that best describe their behaviors overall and not just their behaviors in the athletic domain, some students may have responded to the survey with only their athletic behaviors in mind. This study aimed to examine the relationship of the competitive context of sport and the overall leadership styles of student-athletes, not the leadership styles of student-athletes within the context of athletics. It is difficult to discern if the student-athletes completed the survey through their general lens or through their athletic lens; perhaps student-athletes use some achievement style behaviors in the athletic domain that they do not use outside the context of athletics.

Despite these methodological limitations, this study provides insight into the nature of female student-athletes' leadership behaviors, an area that has received little attention. This study is also one of the few known studies to closely examine the relationship between sport structure and female student-athletes' achieving styles. Although limited in nature, the results of this study signal implications for student-affairs professionals working with student-athletes as well as illuminate areas for future research.

Implications for Practice

Over the past decade, there is a growing body of literature that suggests leadership development programs, workshops and intentionally planned activities can help students develop and enhance leadership capacities (Cress et al., 2001; Zimmerman-Oster & Burkhardt, 1999). The findings of this study are valuable for higher education professionals interested in developing and enhancing student-athletes' leadership capacities to be more congruent with today's relational leadership expectations. Contemporary leadership paradigms value empowering others (Contributory Relational) and sharing responsibility for group tasks (Collaborative Relational) as important leadership capacities (Allen & Cherrey, 2000; HERI, 1996; Kouzes & Posner, 2002; Komives et al., 1996; Lipman-Blumen, 1996). It is interesting to note that, despite needing to collaborate with teammates to achieve a common athletic goal, team sport female student-athletes did not seem to think these skills contributed to their leadership. Moreover, individual sport student-athletes showed a negative, though nonsignificant, relationship between self-assessed leadership and preference for using a Collaborative Achieving Style.

Although literature suggests that women are typically more comfortable with such relational leadership styles (Astin & Leland, 1991; Eagly & Johnson, 1990; Helgesen, 1990; Indvik, 2001), educators working with the somewhat leader-centric thinking female student-athletes in this study, may need to help the student-athletes deepen their self-awareness of their collaborative skills and develop more complex understandings of leadership. When framed in the LID context, the female individual sport student-athletes seem to exhibit stage three leader-centric thinking. Educators working with these student-

athletes should strive to help the student-athletes broaden their views of leadership to recognize and value group processes (Komives et al., 2004). The team sport student-athletes in this study seemed to exhibit some stage four leadership thinking, but the variance in the mean of preference for using a Collaborative Achieving Style indicates the team sport student-athletes could still use more help and support for developing comfort in shared group leadership processes and explicitly connecting the concept of collaboration to team leadership.

A NCAA initiative designed to promote student-athletes' personal growth and development, Challenging Athletic Minds for Personal Success (CHAMPS/Life Skills), would seem an appropriate forum for educators to implement intentional programming to enhance student-athletes' understanding of leadership processes (Carodine et al., 2001; Carr & Bauman, 1996). Life Skill Coordinators should consider interactive workshops that teach and create group process experiences and engage student-athletes in active reflection on what they think leadership is and how this might be different or similar to what they used to think leadership was (Komives et al. 2004). Student-athletes might also be encouraged to meet and work together in their specific sport teams (both individual sport groups and team sport groups) to set team expectations, discuss shared responsibilities, and engage in a dialogue regarding the contributions each member makes to the group process (Komives et al.). The intent of these activities is to help the students develop a shifting consciousness toward interdependence which is critical to the development of relational leaders (Komives et al.).

Although the results of this study indicate a positive significant relationship between the team sport female student-athletes' self-rated leadership ability and

preference for achieving goals by helping others towards their goals(Contributory Relational), the results indicate the individual sport female student-athletes in this study may need more help in recognizing the value of empowering others. Perhaps mentoring relationships could be established between older student-athletes and newer sport group members. Komives et al. (2004) indicate students in stage three often value the influence of older peers and mentors, seeking guidance and direction towards goals and that over time, such interactions with these mentors help the students in stage three make meaning of their experiences. Moreover, Komives et al. argues the mentor relationships might help older students, typically at a more complex LID stage, recognize their potential to influence others and value building and establishing relationships and networks to accomplish goals.

Although it is difficult to discern if the student-athletes completed the instrument through their general leadership framework or through their specific athletic leadership lens, it would seem that if educators wish to enhance the overall leadership practices of student-athletes, educators must be sure to frame leadership development activities in a context that extends beyond the realm of athletics. For example, to help student-athletes recognize and understand the transferability of some of the leadership skills they gain through the context of sport groups, it is critical that educators challenge student-athletes to actively reflect upon what they have learned about leadership through their interactions with their teammates that might help them in other aspects of their life. Engaging in purposeful self-reflection and gaining a conscious understanding of one's strengths, talents, skills and values is argued to be a critical preliminary step for understanding

others and identifying common purpose- all processes of contemporary relational leadership paradigms (HERI, 1996, Komives et al., 1998).

Suggestions for Future Research

Although the results of this study are exploratory and preliminary, it is important to recognize that this study is one of the first to examine student-athletes' leadership capacities from a flexible and dynamic perspective. Most work regarding leadership in the context of athletics is leader-centric in nature and focuses on the effect of coaching leadership on player performance (Eiche et al., 1999; Gleen & Horn, 1993). This study contributes a new lens through which to view student-athletes' leadership capacities and illuminates several other areas of inquiry.

Leadership is a complex construct to measure. Researchers have sought succinct ways to measure this construct. The composite variable created for this study from items determined to be valid by leadership scholars had high reliability and prove useful in other research. Although a larger sample size would have been needed to conduct a factor analysis for this composite variable, it should be pursued by other scholars and could become a useful brief measure.

The small, homogenous sample size of this study prohibited independent analysis on self-assessed leadership behaviors and achieving styles across multiple subgroups. To ensure a more representative sample, future studies might sample the entire student-athlete population and include several follow-up strategies such as more targeted e-mails and handouts to increase the response rate and representation of subgroups. One might also wonder about sampling student-athletes while they are "in season." Perhaps, student-athletes might be more willing to participate in research studies when they are not in the

midst of their competitive season; the student-athletes already have limited time to balance their academic and athletic responsibilities. Future studies might consider extending the length of the data collection process to sample student-athletes over a greater time period.

Moreover, future studies might consider additional incentives beyond CHAMPS/Life Skills points for participating in the study. Although uncertainty regarding the low male student-athlete respondent rate remains, one might speculate about the male student-athletes' perceived value of the CHAMPS/Life Skills points incentive. Namely, perhaps earning CHAMPS/Life Skills points are more valued by some of the women student-athletes in this study than the male student-athletes and an additional incentive would have increased the response rate. However, when providing incentives for student-athletes to engage in research studies, it is strongly advised to consult athletic compliance rules and regulations as student-athletes are prohibited from receiving monetary gifts and rewards; violating such compliance rules could jeopardize the students' athletic eligibility.

Future studies might also examine strategies to simplify the two-part survey into one document. Student-athletes were required to complete several steps to progress from the leadership component of the survey to the actual ASI component. Perhaps had students been able to proceed directly to the ASI without several extra steps, more student-athletes would have completed the entire instrument.

One might consider comparing student-athletes' self-assessed leadership abilities and achieving styles to the mean scores of a matched population of nonathlete students. Comparing the scores to a matched nonathlete sample might provide clearer insight into

how the context of intercollegiate athletics might relate to student-athletes' self-rated leadership ability and achieving style preferences. This type of analysis would more directly address the gap in the literature regarding the assumption that participation in intercollegiate athletics enhances student-athletes' sense of leadership ability and comfort in working in teams.

Noting that Watt and Moore (2001) argue the student-athlete experience might differ across divisional status, it might be of interest to repeat this study at a Division II or III institution. For example, it is commonly assumed that Division I student-athletes face heightened external pressures to excel in their athletic responsibilities and have fewer opportunities to engage in traditional college activities than Division II and III athletes (Watt & Moore). Additionally, very little research compares the experience of intervarsity athletes with club sport and intramural athletes. Heller and Hill (1987) argue that the context of club sports provide tremendous opportunities for students to engage in task elements of leadership such as scheduling contests, organizing practice, coaching, governing the team and so forth. The preliminary results regarding the different views individual sport and team sport female student-athletes have of what behaviors are leaderly, leads to interesting questions regarding the relationship between type of organization and leadership style preferences. Perhaps, the degree of organized complexity and emphasis on competition within a specific environment are related to student-athletes' perspective on leadership and opportunity to practice and enhance collaborative achieving styles.

Although this study provides basic insight into the degree of female student-athletes' self-perceptions of leadership ability, it is clear that future studies should be

more comprehensive. Specifically, future studies should be expanded to explore the factors that might contribute to student-athletes' self-perceptions of leadership. For example, Kezar and Moriarty (2000) highlight the importance of positional leadership opportunities to the self-perceptions of leadership development among African-American women and White men, and the influence of nonpositional leadership experiences on the perceptions of leadership ability among African American men and White women. Cress et al. (2001) found that students involved in leadership education and training programs showed significantly increased leadership skills. This study offers no insight into the female student-athletes' prior positional leadership roles or experiences in leadership education programs because it was desired to focus on relational leadership processes rather than a leader-centric approach. However, asking such questions might help delineate how student-athletes process their behaviors and experiences and inform higher education professionals on how to enhance student-athletes' awareness of leadership and their leadership abilities.

Summary

This study contributed to a small body of literature regarding the nature of student-athletes' self-assessed leadership abilities. Exploratory in nature, this study provided insight into the nature of female individual sport and team sport student-athletes' self-rated leadership ability and achieving style preferences. Although results from this study must be interpreted with caution as there are several methodological limitations with the small, non-probability, convenience sample of female student-athletes, it is interesting to note that while the individual sport and team sport female student-athletes in this study have similar perceptions of leadership abilities, the

individual sport and team sport female student-athletes seem to go about accomplishing leadership differently. Specifically, while individual sport student-athletes indicated a significant positive relationship between using a Power Direct Achieving Style and self-rated leadership ability, team sport student-athletes indicated a significant positive relationship between the Intrinsic Direct, Competitive Direct, Power Direct, Contributory Relational, and Social Instrumental achieving styles and their self-rated leadership ability. Framed in the LID model of Komives et al. (1994) the results of this study seem to indicate that individual sport groups might be a good fit for students who have leader-centric staged thinking, whereas team sport groups might be a conducive environment for students who have slightly more confidence in working towards interdependent leadership processes. Further research can facilitate a deeper understanding of student-athletes' leadership practices as well as help delineate how much of the variance in leadership is predicted by student-athletes' achieving styles. The results of this study inform the practices of educators interested in developing more intentional programming to help individual and team sport female student-athletes develop skill and comfort in drawing upon a broad range of direct, relational, and instrumental leadership capacities.

APPENDIX A: INSTRUCTIONAL/RECRUITMENT E-MAIL SENT TO PARTICIPANTS

Earn your team CHAMPS points! The Athletic Academic Support and Career Development Office is excited to support a research study conducted by Shandol Swalley that will help student-athletes learn more about achievement and leadership. Student-athletes are very important to the University and studies such as this one will enhance the overall student-athlete experience. **Additionally, by completing the short 10-minute survey, you will be awarded 3 CHAMPS points. If your 85% of your team completes the survey you will get bonus points.** Your participation is VERY important!

1. It is recommended that you print this page for quick reference as you complete the survey
2. You will first be directed to a link to complete a consent form as well as some initial questions
3. You will be instructed to enter your first and last name. This information is only needed to correlate information and award CHAMPS points to your team. Your information will remain confidential.
4. After you complete the consent form and the initial questions, you will be directed to another link
5. Once on the Achieving Styles Institute page, please select "Use an ASI Inventory online"
6. Enter **athletes** as the username and **terps** as the password
7. Click on "Use an inventory as part of a pre-paid group"
8. Click on "Take the ASI"
9. Please type the same first and last names you entered on the first part of the survey. You do not need to complete any of the other personal data
10. Click "Begin section 2 to complete the survey"
11. Follow the instructions to complete section 2

If you should experience any technical difficulties while completing this survey, please contact Shandol Swalley at sswalley12@yahoo.com or 301-314-1454

Thank you very much for your assistance and cooperation! You will earn your team CHAMPS points and your responses will help college educators enhance the overall student-athlete experience. Please only complete the survey once. Click on the link below to start the survey. Thank you for your participation!

<http://cgi.umd.edu/survey/display?Swalley/Terps>

APPENDIX B: LEADERSHIP INSTRUMENT

Thank you very much for your participation in this study. Please note you will be asked to enter your name on this survey. This information is needed only to match the two-part survey. Your name will NOT be used in the reported results and your information will remain CONFIDENTIAL.

A. Please enter your last name:

B. Please enter your first name:

Please mark the choice that you feel best describes the extent to which you agree that you have the following capacities. Please mark only one choice for each question.

1. Leadership ability

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

2. Understanding of self

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

3. Ability to set goals

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

4. Interest in developing leadership skills in others

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

5. Commitment to civic responsibility

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

6. Sense of personal ethics

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

7. Clarity of personal values

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

8. Conflict resolution skills

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

9. Decision-making abilities

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

10. Ability to deal with complexity, uncertainty, and ambiguity

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

11. Ability to plan and implement programs and activities

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

12. Willingness to take risks

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

BACK DONE

You may want to print this page for reference. You are about to be directed to the second part of this survey on the Achieving Styles Institute Page.

After you click DONE you will continue to the second part of this survey

Once on the Achieving Styles Institute page, click USE AN ASI INVENTORY ONLINE

Please enter athletes as the username and terps as the password

Click on USE AN INVENTORY AS PART OF A PRE-PAID GROUP

Click on TAKE THE ASI

Please type your first and last name exactly as you entered on the first part of the survey

Click BEGIN SECTION TWO TO COMPLETE THE SURVEY

The second part of the survey will ask you to mark the choice that best describes how you approach tasks. Please respond with the choice that captures your behavior in general, that is, in addition to your athletic responsibilities, please consider how you approach tasks related to your academics, other extra-curricular activities, your family members, volunteer activities, roommates, etc.

Please click DONE to continue with the second part of the survey

BACK DONE

APPENDIX C: ACHIEVING STYLES INVENTORY

The Inventory is split into three sections.

*The fields in blue are required to submit the inventory.

Section 1: Personal Data

*First name:

*Last name:

E-mail:

Street Address:

City:

State:

Zip/Postal Code:

Country:

Daytime Phone:

Section 2

The ASI Individual Leadership Inventory

Please respond to the following statements about your leadership styles. There are no 'right' or 'wrong' answers, nor any trick items and please select the answer that comes immediately to mind.

For each question, fill in the bubble which best describes how well the statement reflects your behavior.

There are forty-five questions in this inventory, split into groups of five. Finish each group, then click the 'Next 5 Questions' button.

Although the L-BL Achieving Styles Inventory can usually be completed in approximately ten minutes, 60 minutes are allowed for you to complete each section.

Please do not use the 'Back' or 'Previous' button in your browser.

Your answers could be erased and the test may be corrupted and need to be re-taken from the start.

ASI

	Never						Always
1. For me the most gratifying thing is to have solved a tough problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I get to know important people in order to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I achieve my goals through contributing to the success of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. For me, winning is the most important thing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When I want to achieve something, I look for assistance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I work hard to achieve so people will think well of me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I want to be the leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. More than anything else, I like to take on a challenging task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Faced with a task, I prefer a team approach to an individual one	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I seek out leadership positions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Winning in competition is the most thrilling thing I can imagine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I feel the successes or failures of those close to me as if they were my own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I strive to achieve so that I will be well liked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. The more competitive the situation, the better I like it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Real team effort is the best way for me to get a job done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I achieve by guiding others towards their goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. For me, the most exciting thing is working on a tough problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I seek guidance when I have a task to accomplish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I have a sense of failure when those I care about do poorly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I develop some relationships with others to get what I need to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I seek positions of authority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I am not happy if I don't come out on top in a competitive situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. My way of achieving is by coaching others to their own success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. For me, group effort is the most effective means to accomplishment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I look for support from others when undertaking a new task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I establish some relationships for the benefits they bring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I try to be successful at what I do so that I will be successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I want to take charge when working with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. When a loved one succeeds, I also have a sense of accomplishment although I make no direct contribution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I strive to achieve in order to gain recognition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- | | Never | Always |
|--|-----------------|--------|
| 31. I look for reassurance from others when making decisions | O O O O O O O O | |
| 32. For me, the greatest accomplishment is when the people I love achieve their goals | O O O O O O O O | |
| 33. I go out of my way to work on challenging tasks | O O O O O O O O | |
| 34. I succeed by taking an active part in helping others achieve success | O O O O O O O O | |
| 35. I use my relationships with others to get things done | O O O O O O O O | |
| 36. Working with others brings out my best efforts | O O O O O O O O | |
| 37. I select competitive situations because I do better when I compete | O O O O O O O O | |
| 38. Being the person in charge is exciting to me | O O O O O O O O | |
| 39. I work to accomplish my goals to gain the admiration of others | O O O O O O O O | |
| 40. I establish a relationship with one person in order to get to know others | O O O O O O O O | |
| 41. My way of achieving is by helping others to learn how to get what they want | O O O O O O O O | |
| 42. The accomplishments of others give me a feeling of accomplishments as well | O O O O O O O O | |
| 43. For me, the greatest satisfaction comes from breaking through to the solution of a new problem | O O O O O O O O | |
| 44. When I encounter a difficult problem, I go for help | O O O O O O O O | |
| 45. My best achievements come from working with others | O O O O O O O O | |

Section 3: Demographic Data

1. Sex: Male Female
2. Age:
3. Citizenship:
4. Race / Ethnicity:

<input type="radio"/> American Indian	<input type="radio"/> Alaskan Native
<input type="radio"/> Black, not of Hispanic origin	<input type="radio"/> Asian or Pacific Islander
<input type="radio"/> Hispanic / Spanish	<input type="radio"/> White, not of Hispanic Origin
5. Current Marital Status
6. Number of children you have
7. Completed years of Education
(e.g., 12 = high school graduate)

Developed by Jean Lipman Blumen, Alice Handley-Isaksen, and Harold J. Leavitt.
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