Does participation in athletics imbue leadership

Scott E. Zimmer

University of Richmond

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Does Participation in Athletics
Imbue Leadership
by
Scott E. Zimmer

Senior Project
Jepson School of Leadership Studies
University of Richmond
Richmond, VA

April 1994
Does Participation in Athletics Imbue Leadership?

Senior Seminar Project

Dr. Ciulla

Jepson School of Leadership Studies
University of Richmond

By
Scott E. Zimmer

Spring 1994
Acknowledgements

This project could not have been accomplished without the help of a number of individuals. Most importantly, thanks go to Drs. Eastman and McGowan in the Health and Sport Science Department of the University of Richmond for all of their interest, advice, and help in making this project a reality.
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Statement of Purpose

The purpose of this paper is two-fold. First, a survey of current and past research and literature in the area of sport and leadership will be conducted. This analysis will serve to depict the current state of sport and leadership inquiry, as well as to offer background into, and justify the need for, the second purpose of this paper. The second purpose of this paper is to determine the extent to which, if at all, participation in organized athletics imbues leadership qualities and skills into athletes.
**Introduction**

Sport and athletics is among the largest and fastest growing industries in the United States. Millions of Americans participate in physical activities of varying degrees every day. The National High School Federation estimated that some 5.13 million young people participate in high school sport alone (Smoll, et al., 1988). In addition, over 900 colleges and universities sponsor athletic teams which compete through the National Collegiate Athletic Association (NCAA), the nation’s foremost governing body of intercollegiate athletics—a figure which does not even include the hundreds of other schools that participate through various other governing organizations, such as the National Association of Intercollegiate Athletics (NAIA) and the National Junior College Athletic Association (NJCAA) (Lessing and Alsop, 1990). Indeed, few phenomena in contemporary society touch as many people, both vicariously and directly, as does sport. According to Smith and Smoll (1978), "Sport has become an increasingly integral part of Western culture and must be regarded as a social institution of major import" (Smith and Smoll, 1978). Equally, Lessing and Alsop (1990) write that, "...sport seems to generate more interest and enthusiasm than just about any other area of endeavor" (Lessing and Alsop, 1990).

Equally, the term "leadership" has emerged as, "...one of the most observed and studied concepts in the modern world" (Rosenbach and Taylor, 1989). Such extensive interest in the
topic is chronicled by Joseph Rost (1991) in his book, *Leadership for the Twenty-First Century*, who states: "I doubt any other specialized subject in the behavioral and social sciences could equal the number of works devoted to the subject of leadership in the 1980s" (Rost, 1991). The considerable interest and preoccupation with leadership is perhaps made possible by the lack of a singular definition of the concept, whereas the term is applied and reapplied to instances which in fact may or may not actually be "leadership." Nevertheless, leadership is a topic of considerable inquiry and study.

Rost (1991) cites that the increased interest in and study of the concept has evolved into the discipline-specific study of leadership, that is, for example, "business leadership," "educational leadership," "political leadership," and the like (Rost, 1991). This specialization, as it were, has also made its way into the realm of sport and athletics. Thus, the joint concept of sports and leadership has itself been dissected, pored over, and analyzed, and subsequently emerged as a sub-discipline in its own right.

*Sport in Leadership Analysis*

Nevertheless, a paucity of research into the area of leadership and sport has come to the attention of a number of researchers. Danielson (1974), and Chelladurai and Carron (1978) have been among the most vocal in expressing the need for more leadership
research in sport (Case, 1987). Loy, McPherson, and Kenyon (1978) have stated that, "Although the concept of leadership has been discussed frequently and various leadership theories have been casually referred to in the sport literature, there has been a lack of consistent thrust in the study of leadership in sports" (Chelladurai and Saleh, 1980). Straub (1980) laments that leadership is "one of the most neglected topics in sport psychology" (Straub, 1980), and Horne and Carron (1985) maintain that, "Very little systematic research has examined leadership in sport" (Horne and Carron, 1985). As well, Chelladurai (1984) has called the study of leadership in an athletic context, "sporadic and peripheral" (Chelladurai, 1984), with most of the leadership research in the athletic environment occurring primarily in the last 15 years (Weiss and Friedrichs, 1986).

These revelations of scholarly neglect in the realm of sport and leadership are surprising given the favorable nature of athletics in terms of leadership analysis. Ball (1975) has stated that athletic teams "provide a natural yet manageable setting for organizational research in leadership" (Ball, 1975), and Chelladurai (1984) adds that "any insight gained regarding leadership in athletics may also be profitably used in other settings" (Chelladurai, 1984). Indeed, Ball (1975) has noted how the sport team fits the general description of a formal organization, writing that:

Sports teams are characterized by, (a) an unequivocal identity, (b) an exact roster of members including a roster of positions or statures, (c) a planned program of activity and a division of labor to achieve
specified goals, and (d) procedures for replacing members and for transfer of members from one position to another (Ball, 1975).

In addition, Klonsky (1991) makes a case for the advantages afforded the study of leadership by the sport setting. He cites that sport offers an ample time frame for evaluating leadership, extends high psychological involvement on the part of the athlete, and presents the opportunity to operationally define and investigate leadership in a number of ways (Klonsky, 1991).

Current Scope of Sport and Leadership Study

Despite this, however, the scope of research has remained remarkably short-sighted. Much of the inquisition and study into leadership and sport has centered around the personality and leadership style of the coach and its effect on team performance. Stated Case (1987): "...leadership behaviors of coaches are one of the most frequently discussed and least understood" (Case, 1987) aspects of the field. Furthermore, a majority of studies on leadership in sports have focused on the personality of the coach (e.g. Sage, 1975), or the coaches' decision style--autocratic versus democratic (e.g. Link, 1977) (Chelladurai and Saleh, 1980). Chelladurai (1990), before reiterating his own method, stated that research in sport leadership had traditionally taken two approaches. The first, that of Smith and Smoll, et.al. (1979), is based on the Coaching Behavior Assessment System (CBAS). This system assesses and codes the
behaviors of the coach, trains the coach to improve these behaviors, reassesses their behaviors, and measures the effects of these changes on player enjoyment and satisfaction. The second approach proposed the normative model of decision style in coaching, and is epitomized by the work of Chelladurai and Haggerty (1978). By asking subjects to indicate preferences among various decision styles in given situations, this approach sought to measure the extent of participation in decision-making preferred by athletes and/or allowed by coaches in varying situations (Chelladurai 1990).

The predominate tendency of sport and leadership researchers to focus largely on the coach as leader is perhaps best exemplified by the Multidimensional Model of Leadership proposed by Chelladurai (1978) (Figure 1). With this model, Chelladurai proposes that, "optimal performance and satisfaction on the part of athletes will be achieved if the leadership behaviors exhibited by the coach [my ital.] are congruent with the behaviors preferred by his/her athletes and are appropriate for the particular sport context" (Horn, 1992). Thus, this approach has as its focus, "the analysis of the varying behaviors of the coach [my ital.] which are appropriate to the different athletic situations" (Chelladurai and Saleh, 1980).

To facilitate testing of the multidimensional leadership model, Chelladurai and Saleh (1980) developed the Leadership Scale for Sport (LSS), an adaptation of which was developed and implemented to aid in my research, which will be discussed later
Fig. 1 Chelladurai's (1978) Multidimensional Model of Leadership
in this paper. However, it is important at this point to note that the LSS, in its original form, describes leadership in sport solely in terms of the coach. This "unidimensional" nature of multidimensional leadership model and the LSS is further illustrated by the dimensions of leader (coach) behavior (Chelladurai, 1989), which is presented in Figure 2.

Fig. 2 - Chelladurai's dimensions of leader behavior in sports (Chelladurai 1990).

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and</td>
<td>Coaching behavior aimed at improving the athlete's performance by emphasizing and facilitating hard and strenuous training; instructing them in the skills, techniques, and tactics of the sport.</td>
</tr>
<tr>
<td>Instruction</td>
<td></td>
</tr>
<tr>
<td>Democratic</td>
<td>Coaching behavior which allows greater participation by the athletes in decisions pertaining to group goals, practice methods, and game tactics and strategies.</td>
</tr>
<tr>
<td>behavior</td>
<td></td>
</tr>
<tr>
<td>Autocratic</td>
<td>Coaching behavior which involves independent decision-making and stresses personal authority.</td>
</tr>
<tr>
<td>behavior</td>
<td></td>
</tr>
<tr>
<td>Social support</td>
<td>Coaching behavior characterized by a concern for the welfare of individual athletes, positive group atmosphere, and warm interpersonal relations with members.</td>
</tr>
<tr>
<td>Positive feedback</td>
<td>Coaching behavior which reinforces an athlete by recognizing and rewarding good performance.</td>
</tr>
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</tbody>
</table>

To be sure, though, Garland and Barry (1990) write that Chelladurai's (1978) multidimensional leadership model "is one of the few paradigms developed for application to sport settings," citing that most models come from management science research (e.g. Fiedler's (1967) Contingency Model; House's (1971) path-goal theory; and Hershey and Blanchard's (1977) situational theory) (Garland and Barry, 1990). In addition, Dwyer and Fischer (1990) lauded the model, stating that it "has played a
major role in advancing the study of leadership in sports" (Dwyer and Fischer, 1990). The multidimensional model has certainly been well utilized in the sport and leadership literature. Horn (1992), in her text *Advances in Sport Psychology*, makes nearly exclusive reference to the multidimensional leadership model. Gordon (1986) utilized the multidimensional leadership model in studying university varsity soccer players to determine what type of coaches' behaviors were prevalent on more successful and less successful teams (Chelladurai, 1990). Likewise, Weiss and Friedrichs (1986) used the model to ascertain the extent to which a coach's perceived leadership was a predictor of win/loss percentage and team satisfaction (Chelladurai, 1990). The list of additional researchers who have utilized the Multidimensional Model of Leadership is considerable, including, among others, Schleismann (1987), Robinson and Carron (1982), and Horne and Carron (1985) (Chelladurai, 1990). With all of these studies, one commonality is immediately evident, that each has as its focus the coach-as-leader.

*Refocusing?*

This is not to say that all research in sport and leadership is restricted to the leadership style of the coach. Recently, the focus of sport leadership research has shifted somewhat to include the leadership styles of female coaches and administrators. Using Chelladurai's (1978) Multidimensional
Model of Leadership, Gabriel and Brooks (1986) analyzed the leadership behavior of collegiate women's tennis coaches, determining that there are no significant differences between the leadership styles of male coaches and female coaches (Gabriel and Brooks, 1986). Thorngren (1993) surveyed females in leadership positions in sports, reflecting on the legacy of past female leaders in sport, defining current challenges, and envisioning how women are changing sport for tomorrow (Thorngren, 1993). Similarly, Kluka (1992) discussed women's roles in the Olympics as participants or leaders (Kluka, 1992), and Gill and Perry (1979) focused on the characteristics of leadership status within a university women's intercollegiate softball team (Gill and Perry, 1979). As well, both the March 6, 1992 edition of the Congressional Quarterly Researcher and the March, 1993 edition of the Journal of Physical Education, Recreation, and Dance (JPERD) were devoted entirely to the issue of women in sports leadership. This partial listing illustrates a conscious shift in much of the sport leadership research toward a female gender that had been neglected by much of the earlier research. This has occurred at a time when the number of women entering positions of leadership in sports has increased noticeably (Le Clair, 1992).

However, despite an apparent shift-of-focus in the sport and leadership research along the lines of gender, inquiry continues to focus on the leadership of the coach on the athletic team. This begs the question, are coaches the only leaders in sport? What of the athletes themselves? Do they not practice
leadership? Quite obviously, there is leadership in sport that does not emanate solely from the coach—a fact evidenced by the continued practice among sport teams of naming "captains" or "player representatives."

Nevertheless, research into the leadership styles of players has received remarkably little attention in the literature. This assertion is corroborated by Klonsky (1991), who concurs, saying that, "The study of correlates of player's leadership has received little research attention" (Klonsky, 1991). To be sure, there has been some, albeit slight, interest in this line of inquiry. Nelson (1965) studied the personality and physical characteristics of high school basketball leaders and non-leaders. Among his most "relevant" findings was the pronouncement, inspired by trait theory, that, "Leaders averaged 6 feet in height and weighed 171 pounds. Nonleaders averaged 6 feet 1 inch in height and weighed 168 pounds" (Nelson, 1965).

More meaningful research into athletes' leadership has been conducted by Kim (1992), Klonsky (1991), and Griffin (1985). Kim's (1992) study assessed whether four types of leadership by team captains affected performance norms (i.e. attitudes shared among group members about how high a level of performance the group should achieve). His results indicated that the athlete's leadership does significantly affect the performance norms of the team (Kim, 1992). Klonsky (1991) attempted to identify some of the "social and emotional characteristics that best discriminate between leaders and nonleaders in same-sex youth sport teams."
By having high school coaches rate members of 11 boys' varsity baseball teams and 10 girls' varsity softball teams, Klonsky (1991) was able to identify the best discriminators between leaders and nonleaders which included aspiration level, competitiveness, emotional expressiveness, daring, responsibility, acceptance, and dominance (Klonsky 1991). Lastly, Griffin (1985) studied middle school-aged boys' participation in physical education classes to identify the type of individuals whom other students treated as leaders in the class. Deemed "Machos," these boys were highly skilled and enthusiastic about team sports, engaged in a great deal of rough physical and verbal interaction with other students, and most always played the highly skilled, highly visible positions (i.e. quarterback) (Griffin, 1985).

Such studies are important first steps in the analysis of leadership as it is practiced by the athlete. This research has both successfully identified the participant-leader in some sport settings and has identified his/her leadership behavior and its effects on the team. If nothing else, they serve to create an awareness to the lack of research in this area. I intend to take this investigation a step further, attempting to determine whether participation in organized athletics [I will limit my study to intercollegiate varsity athletics] develops leadership qualities in athletes. In other words, how accurate is the popular nineteenth-century English public school contention that, "The battle of Waterloo was won on the playing fields of Eton"
Sport: The Builder of Character?

The debate over the leadership-instilling ability of sport is not unlike the debate over the capability of sport to "build character." The question could be asked, if sport does (or does not) indeed build character, then does it build leadership? The latter is an important consideration in determining the leadership-building capacity of sport.

"Character," like "leadership," tends to be a culturally-relative concept that is somewhat difficult to define. However, when describing those components of character which sport would develop, the terms "discipline," "sportsmanship," "cooperation," "honesty," and "work ethic" are often mentioned (Wandzilak, 1985). While these terms are by no means the only describers of the developed character, or of a leader for that matter, they have been used to describe the behavior of a leader. Behavioral scientists have for years studied the sports-builds-character assertion, and in doing so, have attempted to measure the components of personality and behavior of athletes that would constitute "good" and "bad" character. This type of behavioral research could certainly be applied to leadership, as the characteristics of the leader are typically measured in terms of his/her personality and behaviors (Chelladurai, 1984). With this in mind it is of major import to the study of leadership...
development through sport to determine whether sports actually do build character.

As stated, the character building faculties of sport participation have been the subject of a running debate which has spanned the ages. Plato was one of the first individuals to expound on the benefits of participation in physical activity and sport, contending that:

"...It serves to harmonize the conflicting psychological elements of reason, desire, and spirit; develops an intelligent courage acting with reason and intelligence in the face of fears, hopes, and pleasures; engraves habits of right thought and action into the good character; develops organic strength; and insures training in the necessary life skills" (Zeigler, 1964).

Other individuals have echoed his sentiments. Margaret Clark Gannett, who studied the effects of sports and physical education at a state teacher's college, believed that sport provides opportunities for choice and the development of judgement, as well as "recognizing the supreme worth of personality" (Zeigler, 1964). As well, Alfred North Whitehead held that in sport, "...there are the instrumental values of strong and healthful physical functions as they provide the physical and psychological energies, drives, emotions, feelings, and desires to carry on the intellectual, moral, social, domestic, and other functions of man" (Zeigler, 1964)

United States' presidents have espoused the virtue of athletics. In his essay "The Soft American," President John F. Kennedy mulled the decline of the physical fitness of citizens of the United States. He wrote:
"For the physical vigor of our citizens is one of America's most precious resources. If we waste and neglect this resource, if we allow it to dwindle and grow soft, then we will destroy much of our ability to meet the great and vital challenges which confront our people" (Zeigler, 1964).

As well, President Gerald Ford had this to say of the importance of athletics:

"Outside of a national character and an educated society, there are few things more important to a society's growth and well-being than competitive athletics. If it is a cliche to say athletics builds character as well as muscle, then I subscribe to the cliche" (Ford, 1974).

Defenders of the value of athletics participation have also stemmed from the realm of the religious. Indeed, Christianity has been shown to place much stock in the value of sport. Young Men's Christian Associations (YMCA) sprung up across the country in the 19th Century on the premise that, "athletic activity...was believed to exert a definite influence on the development of the Christian character" (Zeigler, 1964). To be sure, Harold T. Friermood, the United States National YMCA Secretary for Physical Education, included among his five objectives for physical education: 1) personality adjustment (learning to live with self and others), and 2) development of responsible citizenship and group participation (Zeigler, 1964). Along these lines, Wilton M. Wilton stated that the participation in sports and recreation offers a unique opportunity "to encourage proper moral and spiritual growth" (Zeigler, 1964). Pope Pius XII, himself, once stated that, "...Sports is a school for loyalty, courage, endurance, determination, universal brotherhood; all natural virtues, but which serves as a solid foundation for the
supernatural virtues and prepares one to withstand without weakness the weight of more serious obligations" (Zeigler, 1964).

Thus, it is evident that the celebration of the merits of athletics participation has been one characterized by extensive and ongoing musing, theorizing, and contemplating. They also share the distinction of being largely anecdotal, having no base in empirical evidence or scientific experiment. However, in the past thirty years, such research and experimentation has been undertaken with increasing ferocity and diligence. A tremendous influx of research as to the psychological effects of sport on the individual has resulted in varying opinions.

Certainly, many of the recent studies seem to reinforce the traditional anecdotal accounts. Research conducted by Sanford, et.al. concluded that participation in sport, "can favor development of the whole person," and that athletics teaches people to be self-critical which is "very important in the development of people" (Sanford et. al.). Brown and Frankel (1989), in a study of 685 adults in a mid-size Canadian city, reported results which indicated that, "Participation in physical and other types of leisure activities...is related to life satisfaction and psychological well-being" (Brown and Frankel, 1989). Larson, Spreitzer, and Snyder (1976) looked at the short-term and long-term consequences of participation in youth sports among preadolescents (age 12 and under). They concluded that athletic participation has a positive perceptible socialization effect continuing into adulthood (Larson, et.al. 1976). The
findings of Vilhjalmsson and Thorlindsson (1992) were consistent with social integration theory, concluding that sports participation positively relates to life satisfaction and negatively relates to any psychophysiological symptoms (i.e. anxiety and depression) (Vilhjalmsson and Thorlindson, 1992). Citing the increased emphasis on work in the post-industrial society, Deci and Ryan (1985) concluded that sports represents a possibility for recovering the self-esteem that is lost in the work lives of many individuals. Sports also, they found, provides an excellent opportunity to be self-determining, to get competence feedback, and to have social involvements (Deci and Ryan, 1985).

In deciding upon the validity of such research, it is interesting to note the findings of McCormack and Cholip (1988). According to their research 96 percent of Americans believe that sport serves society by teaching good citizenship, pride in belonging to a particular organization, and values pertinent to the specific class of the participant (McCormack and Cholip, 1988). Such beliefs, however, as to the virtue of sport participation are not solely indigenous to Americans. School textbooks in the former Soviet Union read that, "...favorable conditions are created during participation in physical culture and sports for developing high moral qualities," and that, "sports activity, occupying an essential part in a man's life, becomes one of the main factors of moral education..." (McCormack and Cholip, 1988). Equally, a recent United Nations Education,
Scientific, and Cultural Organization (UNESCO)-sponsored study concluded that, "...it is clearly evident that physical education and sport are not confined to physical well-being and health, but also contribute to the full and well-balanced development of the human being" (McCormack and Cholip, 1988).

Nevertheless, as stated, despite this inundation of positive empirically-based analysis of sport participation, there has come an equally great amount of research which refutes the traditional assumptions. To be sure, much of the research found that not only did sport participation not "build character," but it actually undermined it. Robin Vealey (1992) conceded that certain personality attributes may be developed or modified through sport participation, but cautioned, "the notion that 'sports builds character' has not been well-substantiated in research literature." In addition, Vealey stated that competition reduces prosocial behavior (i.e. helping and sharing), while it increases rivalrous, antisocial behavior (Horn, 1992). The findings of Zaharopoulus and Hodge (1991), too, differed with traditional proponents of the sports-builds-character theory, refuting the assumption that "sport participation enhances self-concept in general" (Zaharopoulus and Hodge, 1991). Rees, Howell, and Miracle (1990) assessed the sports-builds-character myth by sampling over 1,600 male high school varsity athletes. Their results suggested that participation in varsity athletics, "...is unrelated to changing personality characteristics in individuals during the high school
year," and that, in fact, there were a few significant variables reflecting antisocial outcomes (i.e. values for self-control were reduced by participation) (Rees, Howell, and Miracle, 1990). In his study of the socialization effects of sport on college athletes, Stevenson (1985) concluded that, "there is little research to suggest that participation in college athletics has any effect upon character" (Stevenson, 1985). In addressing the empirical evidence and ideological formulations underlying the type of character being built by sport, Sage (1988) vehemently concluded that, "...there [sports] real essence is that they provide a lot of excitement, joy, and self-fulfillment for the participants, and their primary purpose is human expression. They do not need to, and should not, be a justified on any other basis" (Sage, 1988). Ogilvie and Tutko (1971), as well, concluded that there is no empirical support for the belief that sport builds character. However, they do contend that under the intense pressure of athletics, both personality flaws and virtues manifest themselves quickly, thus providing a "splendid laboratory for experimentation with self-change," given the rapidity and clarity of feedback (Ogilvie and Tutko, 1971).

Leadership Development

Along these lines, there has been some debate as to the question of whether leadership can be learned through athletics. Ryan (1989) stated that, "...participation in intercollegiate
athletics [is] related to a positive self-report if changes in interpersonal skills and leadership abilities," adding that, "athletic involvement may make a fairly strong contribution to affective goals, in terms of development of leadership abilities" (Ryan, 1989). Alley (1974) also commented on the leadership-through-participation question, saying that, "a person can learn that he must discipline himself to meet his responsibilities if the group is to achieve success" (Alley, 1974).

In light of this and the data and analysis offered in the preceding pages, I tend to believe that participation in sport and athletics cannot by itself imbue leadership, or at the very least, it is not something that can be reliably measured. My feelings regarding leadership and sport run along the lines of those of Sheehan and Alsop (1972) (in Wandzilak, 1985) regarding personality characteristics--that sport is a vehicle not for the teaching of leadership, but rather for the display of already developed leadership characteristics. Hence, the thesis of this study will be that participation in sport does not instill leadership into participants.

Leadership Defined

Before one can commence the study of a concept, such as leadership, one must first define that which is to be studied. In fact, this may or may not be true. What is leadership? How is it defined? What are the characteristics of a leader? These
questions represent a major dilemma in any study involving leadership. As earlier indicated, a consensus on the definition of the phenomena has not yet been reached among leadership scholars, a condition lamented upon by Stogdill (1974) who reports that, "there are almost as many definitions of leadership as there are people who have attempted to describe the concept" (Rosenbach and Taylor, 1989). Opinions as to the nature of the phenomena are often as diverse as the backgrounds of the people who make them.

In light of this dilemma, Yukl (1989) offers a solution. He suggests that, "it is better to use the various conceptions of leadership as a source of different perspectives on a complex and multifaceted problem" (Yukl, 1989). He adds that, "in research, the operational definition of leadership will depend to a great extent on the purpose of the researcher" (Yukl, 1989). In essence, then, the task of defining leadership is left to the devices of the researcher.

Surprisingly, though, in the sport and leadership literature definitions of the phenomena have been relatively uniform. To be sure, many of the definitions in the research are borrowed from those individuals who studied leadership of a non-athletic nature, such as Fiedler (1967) and House (1971) (Rice, 1984). However, sport and leadership literature has produced its own original definitions. Typically, sport and leadership scholars have focused on leadership as the process of influence. Barrow (1977) defined leadership as "the behavioral process of
influencing individuals and groups toward set goals" (Chelladurai and Saleh, 1980). Horn (1992) deviated little from that definition, writing that leadership is "the behavioral process in influencing individuals and groups toward a set of goals" (Horn 1992). Similarly, Nelson (1965) thought leadership to be "the wielding of influence and power so that the team members will achieve the goals of the sport," adding that the goal, "unfortunately sometimes, is only winning" (Nelson, 1965). But like much of the sport and leadership research, definitions of leadership are often coach-intensive, like that of Straub (1980) who defined leadership as "the influence the coach has on his/her players" (Straub, 1980). In the interest of this study, Barrow's (1977) definition will suffice, as it was the definition of choice of Chelladurai (1980), whose Leadership Scale for Sport I have adopted.

The Study

As indicated, I have attempted to ascertain the leadership-building capacity of sport participation through the use of a modified form of Chelladurai's Leadership Scale for Sport (1980). Figure 3 depicts the preference version of the LSS in its original form (from Chelladurai and Saleh, 1980), while Figures 4a, 4b, and 4c represent the modified version used in this study. This scale was chosen for a number of reasons. First, the LSS is one of the only leadership-measuring instruments geared
specifically toward sport, and has been widely used by sport and leadership researchers, as indicated previously. Second, the behaviors about which are inquired in the scale tend to be more sports-specific (i.e. practices, competition strategies, and athletic techniques and tactics), hence the athlete might have an easier time relating his/her experiences to them. While this may seem a minor point, any measure which might facilitate ease of completion of the form was thought to be prudent. Third, there was reason to believe that the scale could be altered to suit the needs of the study, an assumption made after consideration of the versatility of the scale. In the past the LSS had been used to measure 1) the preference of athletes for specific leader behavior, 2) the perception of athletes regarding the actual leader behavior of their coach, and 3) the perception of the coach regarding his/her own behavior. This was an important consideration in my selecting the LSS, as I hoped to gain the athlete’s perception of his/her own behavior with regard to leadership, and so thought that a modification of the scale would not be problematic. Fourth, it was thought that the behaviors included in the forty items properly reflected those behaviors which could be called "leadership qualities." Furthermore, each item of the LSS has as its basis one of the five leader behaviors as described in Chelladurai’s (1980) Multidimensional Model of Leadership (Figure 2). Of the 40 items comprising the LSS Garland and Barry (1990) write that they are "the most salient dimensions of [leadership] behavior...which are the most
meaningful" (Garland and Barry, 1990). Fifth, the modified LSS was thought to be relatively simple and straightforward. Past research conducted by this researcher involving college students has indicated that a survey form which expedites completion will result in more enthusiastic participation and possibly more accurate data. Lastly, the modified LSS afforded the athletes themselves the opportunity to comment on their own perceived behavior. Fowler (1977) found that players can judge themselves more accurately than either their coach or peers where internal psychological factors are analyzed, as they are in the LSS (Fowler, 1977). Ogilvie and Tutko (1971), too, found that coaches and other athletes were unable to recognize certain psychological traits, and concluded that personal observation was more reliable than that of coaches observations (Ogilvie and Tutko, 1971).

The modification of the LSS was necessary in order to test the hypothesis. The thrust of this study was not necessarily the identification of the leadership behaviors of coach or athlete. Rather, it was to determine whether the athlete practiced certain behaviors in participating in their sport, and furthermore to ascertain whether those practiced behaviors, in the perception of the athlete, were learned through participation in sports. In modifying the LSS, the Likert scale was thrown out entirely. This aspect of the LSS was considered extraneous to the purposes of this inquiry, as it was not the focus of this study to learn the extent to which the athlete repeated the behavior (i.e.
always, seldom), just whether they engaged in it.

Procedure and Sample

Subjects for this study were members of varsity athletic teams and undergraduate students at the University of Richmond and the College of William and Mary. This sample was chosen for two reasons. First, it was reasoned that intercollegiate varsity athletes have attained a near pinnacle amateur level in their sport, and as such had a wealth of experience participating in their chosen sport. The fact that most have played sports for a number of years on the youth, interscholastic, and/or intercollegiate levels, afforded the athlete ample time, in the mind of the researcher, to "gain" leadership characteristics. Secondly, the relative proximity and availability of the sample subjects to the researcher was also an issue. As part of the procedure, the researcher was present when the surveys were completed in the case of any questions that would arise. Thus, it was for the benefit of both the subjects and the researcher that this sample was chosen.

Additionally, sub-samples of subjects were sought. The researcher made a conscious effort to petition an equal number of male and female subjects. Whether this was a necessary precaution is not known, in light of a study by Gabriel and Brooks (1986), alluded to earlier, which found that the leadership styles of male and female coaches do not significantly
differ (Gabriel and Brooks, 1986). However, it was decided that such a step would not skew the results and so was carried out. Next, an equal number of athletes participating in sports team-oriented in nature and individually-oriented in nature was sought. Those sports that were sampled and deemed team-oriented included soccer, field hockey, lacrosse, football, and baseball. Individually-oriented sports consisted of tennis (men’s and women’s), swimming, and track and field/cross country. This distinction was thought necessary based upon Ogilvie and Tutko’s (1971) conclusion that there is a difference between the team sport personality and the individual sport personality (Ogilvie and Tutko, 1971). The total number of respondents equalled 34.

Upon determination that the subject was indeed a varsity athlete, the individual was asked to complete the modified LSS. To reiterate, the researcher was present at this time to answer any questions of the subject. The subject was assured complete anonymity in the final analysis. In completing the modified LSS, the subject would first indicate gender, class standing, and the varsity sport in which they participated. They would then read each item, preceded by the heading, "In practicing and competing in my sport, I..." At this time the subject would decide whether a) he/she typically engaged in the behavior, in which case the provided response "Yes" would be circled, or b) he/she did not typically engage in the behavior, in which case the provided response "No" would be circled. Next, for each item, the subject completed the statement, "This behavior was
learned...," and was then to make the determination as to whether the behavior was learned inside sport ("IS"), outside sport ("OS"), or does not apply ("DNA"). This step was contingent upon the subject's original yes/no response. Should he/she have circled "No," then the subject was to automatically circle "DNA" (Does Not Apply) in the corresponding column. If the subject circled "Yes," then the individual was told to make the determination whether this behavior had been learned inside sport ("IS") or outside sport ("OS"). Upon completion of the 40 items, the survey was collected.

Results

The results accrued from the survey indicate that leadership can in fact be developed, or "built," through participation in sports and athletics. However, it is important to consider that the survey, more a structured interview than a quantitative measure, simply reflects the opinions and beliefs of the athletes themselves. While these opinions are certainly credible and important, they do not constitute unbiased, quantitatively-based evidence. Thus, while the hypothesis may technically have been disproved, the findings, in my mind, have not totally settled the debate over the leadership-building capacity of athletics and sport.

Nevertheless, there were interesting significant differences that occurred in certain responses according to the gender, class
standing, and/or the nature of the sport played by the respondent.

[For the purpose of analyzing these differences at this time, the behavior listings in the first segment of the survey form, to which the respondent answered "Yes" or "No," will be considered: Q1, Q2, Q3,...Q40. The behavior listings in the second segment of the study, to which the respondent answered "inside of sport," "outside of sport," or "does not apply," will be considered: B1, B2, B3,...B40.]

The data was analyzed using the various statistical tests of the Statistical Package for the Social Sciences (SPSS) computer program. A t-test analyzing differentiation according to gender indicated significant difference occurring in items Q20, B5, B13, B20, B30. According to the analysis, males reportedly were more likely than females to, "Explain to my teammates what should be done and what should not be done" (Q20). Neither gender significantly credited sport participation with their learning this behavior. As well, males credited the learned behavior of, "Explain to each teammate the techniques and tactics of the sport" (B5) to their experiences in athletics, while females reported a greater likelihood of learning the behavior away from athletics. Females reportedly more often acquired the behaviors, "Look out for the personal welfare of my teammates" (B13) and "Ask for the opinion of teammates on important playing matters" (B30) through their participation in athletics than did males.

Conducting a Multi-variate Analysis of Variance (MANOVA) of variables Q1 to Q40 according to the class standing of the respondents also produced some significant differences in responses to items Q1, Q8, Q20, and Q40. These differences are
represented in Figures 5a, 5b, 5c, and 5d. These items represented leader behaviors which were typically autocratic, or training and instruction-oriented. Accordingly, it was not surprising to note the behavior variables Q8, "Pay special attention to teammates' mistakes," and Q20 were much less likely to be performed by respondents of lower academic classes (i.e., freshman, sophomores). However, somewhat surprisingly, freshman respondents overwhelmingly reported to performing that behavior of variable Q1, "See to it that my teammates work to capacity," even more so than respondents of senior class standing. Freshman were also reportedly more likely than any other class to "Speak in a manner which discourages question" (Q40), which was also a curious discovery.

A MANOVA of responses according to class standing was also completed for items B1 to B40 with similarly significant differences concerning where the behaviors were learned. Differences were sighted in items B1, B8, B20, B27, and B29, and are depicted in Figures 6a, 6b, 6c, 6d, and 6e. These behaviors, again, are mainly autocratic, and training and instruction-oriented. Analysis of variable B1 showed that each class, with the exception of the sophomore class, reported that the behavior was more often learned through athletics. Junior class respondents were the only respondents who credited athletics with the behavior of item B8. Neither Freshman nor Sophomores performed the behavior of item B20, while Juniors were again more likely than Seniors to attribute this behavior to their athletic
experiences. Nearly all classes reported to not performing the behaviors of B27, "Refuse to compromise on a point," and B29, "Give specific instructions to each teammate on what should be done in every situation," however, Junior respondents who did perform these behaviors attributed them to experiences outside of sport.

A MANOVA by sport was performed for variables Q1 to Q40, with significant differences occurring in Q6, Q12, Q15, Q24 (Figs. 7a, 7b, 7c, 7d). All soccer-playing subjects reported to "Plan[ning] relatively independent of teammates" (Q6), while none of the subjects participating in football and baseball, and nearly none of the lacrosse-playing subjects reported to doing this. The behavior of item Q12, "Do not explain my actions," was performed by none of the lacrosse, field hockey, and track participants, while all swimmers reported to portraying this behavior. With the exception of individuals from the sports of soccer, football, and tennis, all other respondents admitted to performing the behavior of item Q15, "Promote sharing of decision making among teammates." Finally, nearly every respondent, with the exception of those who played soccer, reported to performing the behavior of item Q24, "Let teammates try their own way even if they make mistakes."

The last analysis that was performed was a MANOVA by sport for variables B1 to B40. Significant differences occurred in items B1, B14, and B29 (Figs. 8a, 8b, and 8c). This analysis revealed that soccer players and football players attributed the
behavior of item B1 exclusively to their participation in sport, while contrarily tennis players and swimmers attributed it exclusively to areas outside of athletics. The data offered that nearly none of the respondents performed the behavior of item B14, "Instruct every teammate individually in the skills of the sport," with the exception of football players, who attributed this behavior to experiences away from their sport. The learning of the behavior of B29 was attributed to experiences in their sport, according to football players. No tennis players or swimmers reported to performing this behavior, and other sports ascribed this behavior to outside-sport experience.

Analysis

In light of my research and the prior review of sport leadership literature I have concluded that sport and athletics is definitely a viable arena for the study and analysis of leadership. The variety of situations and conditions which occur in sport make it necessary for leaders, be they coaches or players, to not limit themselves to the practicing of certain leader behaviors. This need is magnified in sport because situations change rapidly and decisions need be made on short notice. A leader in sport must be adaptive, must be flexible, indeed must be willing to change his/her leader behavior in a split second.

Sport is an interesting setting for the study of different
leader styles because, historically, leaders of seemingly polar styles have been equally successful. Task-oriented leaders (ie. Bobby Knight, Bear Bryant, etc.) as well as relationship-oriented leaders (John Lucas, Mike Kzchyewzski, etc.) have each successfully implemented their styles and translated them into winning teams. It is often the successful blending of the task- and relationship-oriented leader behaviors, though, which is reason for goal attainment.

The survey results do indicate that leadership behavior is not totally indigenous to the coach or certain players in leadership roles (ie. captains). In sports, it seems, each player must, to some degree, practice certain leadership behaviors as a product of their participation. At the same time, the phenomena of "too many chiefs and not enough indians" has doomed many an athletic team to fall short of the goal of winning. Thus, it would seem that for a sport team to compete at its optimal level, a middle-ground must be reached between the positional leadership behavior of the coach and captain(s), and the individual leadership behavior of other team members.

Conclusion

It is the opinion of this researcher that the debate over sport as a builder of leadership has not been settled with this study. While this is somewhat disappointing, I hope that the research presented in this paper will serve to create an awareness as to
the study of leadership qualities and abilities of those physically participating in the sport, the athletes themselves. They are the largely-ignored majority in sport and leadership study, a condition which must be addressed in the literature if sport leadership investigation is to become indeed holistic.

While the purpose of this research was to determine the validity of sport as a builder of leadership, may it also further the cause of sport and athletics as a "leadership laboratory," and as a vital division in the study of leadership. As the study of leadership progresses into the twenty-first century, so too must the study of sport leadership. Sport has become such a predominate facet of American culture and society that to ignore it would reflect a less than true account of modern leadership, facilitating a deficiency in the study of leadership. The children of America, the leaders of tomorrow, no longer identify with political leaders, business leaders, and the like. Rather they look to sports heroes as role models and leaders, those persons with whom they can identify. If for no other reason, leadership scholars and practitioners cannot ignore athletics and sport, but must use it to further the body of knowledge of the phenomena that is leadership.
### Leadership Scale for Sports (Preference Version)

Each of the following statements describes a specific behavior that a coach may exhibit. For each statement there are five alternative choices.

1. **ALWAYS** (90% of the time), 2. **OFTEN** (75% of the time), 3. **OCCASIONALLY** (50% of the time), 4. **RARELY** (25% of the time), 5. **NEVER**

Please check your responses by placing an **X** in the appropriate space. Avoid all blanks even if you are unsure of any response. Place your responses in the order indicated by the statements. If your own personal experience or that of another coach is required, there are two right or wrong answers. Your spontaneous and honest responses are important to the success of the study.

<table>
<thead>
<tr>
<th>Statement</th>
<th>ALWAYS</th>
<th>OFTEN</th>
<th>OCCASIONALLY</th>
<th>RARELY</th>
<th>NEVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>I prefer my coach to:</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>1. See if it that athletes work to capacity.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Look for if the athletes work to capacity.</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Help athletes with their personal problems.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Compliment athletes for good performance in terms of others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Repel to each athlete the techniques and tactics of the sport.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Pay relatively independent of the athletes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Help members of the group to do their best.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Pay special attention to correcting athletes’ mistakes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Check athletes’ progress on important matters before going ahead.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Tell me if the athlete does a particularly good job.</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>11. Note that the coach’s behavior in the match is understood by all athletes.</td>
<td></td>
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<td></td>
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<tr>
<td>12. Pay explicit attention to the athletes.</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>13. Look for the implicit evaluation of the athlete’s performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Break every athlete individually to the spirit of the sport.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Let the athletes share in decision making.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. See that an athlete is rewarded for a good performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Figure ahead on what should be done.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Fig. 3 Preference Version of the Leadership Scale for Sport (Cehhadiali and Salem, 1980)
The following is a derivation of Chelladurai’s (1980) Leadership Scale for Sport (LSS). The purpose of the scale is to determine whether leadership behavior can be learned through participation in an intercollegiate varsity athletics. Please answer "Yes" or "No" to the following questions concerning your characteristic behavior. NEXT, answer "IS" if you feel the behavior was learned "inside of sport" or "OS" if you feel the behavior was learned "outside of sport." If you answered "No" to the characteristic behavior, then answer "DNA" (does not apply). Your prompt and honest response is very important for the success of the study. Thank you for your help!

A. Gender: Male. Female.

B. Class Standing: Freshman Sophomore Junior Senior

C. Sport: ________________

In practicing and competing in my sport, I:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>This behavior was learned:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Inside Sport</td>
</tr>
<tr>
<td>1. See to it that my teammates work to capacity. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>2. Ask for the opinion of my teammates on strategies for specific competitions. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>3. Help teammates with their personal problems. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>4. Compliment a teammate for good performance in front of others. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>5. Explain to each teammate the techniques and tactics of the sport. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>6. Plan relatively independent of my teammates. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>7. Help members of the group settle their conflicts. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>8. Pay special attention to correcting teammates’ mistakes. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>9. Get group consensus on important matters before going ahead. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>10. Tell a teammate when he/she does a particularly good job. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>11. Make sure that your function in the team is understood by all teammates. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
<tr>
<td>12. Do not explain my actions. Yes No</td>
<td>IS</td>
<td>OS</td>
</tr>
</tbody>
</table>
In practicing and competing in my sport, I:

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Yes</th>
<th>No</th>
<th>Inside Sport</th>
<th>Outside Sport</th>
<th>Does Not Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Look out for the personal welfare of my teammates.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>14. Instruct every teammate individually in the skills of the sport.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>15. Promote sharing of decision making among teammates.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>16. See that a teammate is rewarded for a good performance.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>17. Figure ahead on what should be done.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>18. Encourage teammates to make suggestions for ways to get more out of practices.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>19. Do personal favors for teammates.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>20. Explain to my teammates what should be done and what should not be done.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>21. Encourage coach to let team set goals.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>22. Express any affection felt for teammates.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>23. Expect every teammate to carry out one’s assignment to the last detail.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>24. Let teammates try their own way even if they make mistakes.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>25. Encourage teammates to confide in you.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>26. Point out each teammates’ strengths and weaknesses.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>27. Refuse to compromise on a point.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>28. Express appreciation when a teammate performs well.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
<tr>
<td>29. Give specific instructions to each teammate on what should be done in every situation.</td>
<td>Yes</td>
<td>No</td>
<td>IS</td>
<td>OS</td>
<td>DNA</td>
</tr>
</tbody>
</table>
In practicing and competing in my sport, I:

<table>
<thead>
<tr>
<th></th>
<th>This behavior was learned:</th>
<th>Inside Sport</th>
<th>Outside Sport</th>
<th>Does Not Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. Ask for the opinion of teammates on important playing matters.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Encourage close and informal relations among teammates.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. See to it that teammates’ efforts are coordinated.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Let teammates work at their own speed.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Keep aloof from teammates.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Explain how each teammate’s contribution fits into the total picture.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Invite my teammates home.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Give credit when it is due.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Specify in detail what is expected of teammates.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. Encourage coach to allow team to decide on strategy to be used in the game.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Speak in a manner which discourages question.</td>
<td>Yes No</td>
<td>IS OS DNA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fig. 5a - MANOVA by Class
Survey Item Q1

Class Standing of Respondents

Mean Score
Fig. 5b - MANOVA by Class
Survey Item Q8

Class Standing of Respondents
Fig. 5c - MANOVA by Class
Survey Item Q20

Class Standing of Respondents

Mean Score
Fig. 5d - MANOVA by Class
Survey Item Q40

Class Standing of Respondents

Mean Score

Freshman  Soph.  Junior  Senior
Fig. 6a - MANOVA by Class
Survey Item BI

Class Standing of Respondents

Mean Score

Freshman  Soph.  Junior  Senior
Fig. 6b - MANOVA by Class
Survey Item B8

Class Standing of Respondents

Mean Score

Freshman  Soph.  Junior  Senior
Fig. 6c - MANOVA by Class
Survey Item B20

Mean Score

Class Standing of Respondents
Fig. 6d - MANOVA by Class
Survey Item B27

Class Standing of Respondents

Mean Score

Freshman  Soph.  Junior  Senior
Fig. 6e - MANOVA by Class
Survey Item B29
Fig. 7a - MANOVA by Sport
Survey Item Q6
Fig. 7b - MANOVA by Sport
Survey Item Q12

Class Standing of Respondents

Mean Score

Lacrosse  Fld hockey  Soccer  Football  Tennis  Track  Swimming  Baseball
Fig. 7c - MANOVA by Sport
Survey Item Q15

Class Standing of Respondents
Fig. 7d - MANOVA by Sport
Survey Item Q24
Fig. 8a - MANOVA by Sport Survey Item B1

Class Standing of Respondents

Mean Score

Lacrosse  Fld hockey  Soccer  Football  Tennis  Track  Swimming  Baseball
Fig. 8b - MANOVA by Sport
Survey Item B14

Mean Score

Class Standing of Respondents
Fig. 8c - MANOVA by Sport
Survey Item B29

Class Standing of Respondents

Mean Score
Works Cited


Congressional Quarterly Researcher. 2(9), March 6, 1992


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