

Leadership Development through Sports Team Participation

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Abstract

The question of whether leadership is teachable has received considerable attention in the academic and practitioner arenas. Organized athletic team participation offers students a different experiential venue that many argue develops leadership. The purpose of this study is to investigate the relationship between organized sports team participation and leadership skills. We employ a valid means of measuring several leadership dimensions using a validated assessment center method. Nine distinct leadership skill levels were measured for 141 MBA program students. Using ANOVA and correlation analysis we found no systematic association between the number of seasons of sports team participation and the level of any particular leadership skill. The findings caution recruiters and other persons making personnel decisions against using this past behavior as an indicator of these or any other leadership skills. By showing a preference for athletes, recruiters may bypass persons who would be a good fit for a position.

Introduction

The question of whether leadership is learnable has received considerable attention in the academic and practitioner arenas. Doh (2003) presented the perspectives of several prominent management educators on this topic. He concluded that several aspects of leadership might be enhanced through various learning experiences. Additionally, it was suggested “leadership skills are best acquired as part of a practical, experiential educational program” (p. 64).

While most leadership educators are referring to traditional, faculty-led educational programs when discussing leadership skill development, persons from another part of the college campus argue that their programs are also instrumental in leadership development. Organized athletic teams offer the student a different experiential program that many argue develops leadership. Ewing, Gano-Overway, Branta, and Seefeldt (2002) argue that sport contributes to learning the skills and values necessary to succeed in education, in the workforce and throughout life. Similarly, Astin (1993) and Ryan (1989) contend that athletic participation among college students relates positively to growth in interpersonal skills, peer relationships, and leadership abilities. Danish (1986) defines some of these skills as the ability to perform under pressure, solve problems, meet deadlines and challenges, set goals, communicate, handle success and failure, work in a group and within a system, and receive feedback and benefit from it.

Dupuis, Bloom, and Loughead (2006) analyzed semi-structured interviews with former university team captains. They concluded that team captain experiences developed interpersonal characteristics, verbal interactions, and task behaviors – all elements of leadership. Based on a review of empirical data, Iso-Aloha and Hatfield (1986) concluded that early athletic participation might contribute to later success in leadership through reinforcement of critical behaviors. Snyder and Spreitzer's (1992) study of over 4,000 high school males led them to conclude that athletic participation appears to increase the potential ability to lead. Consistent results were found by Dobosz and Beaty (1999) who found that in a sample of 60 suburban high school students, athletes demonstrated significantly greater leadership ability than did non-athletes. DeMoulin (2002) found that high school seniors who were involved in organized sports were better able to get along with all kinds of people (social integration), a critical skill for leaders of diverse groups. Aries, McCarthy, Salovey, and Banaji (2004) compared athletes and non-athletes at highly selective colleges. They reported that high-commitment athletes had a higher perception of themselves as socially skilled, outgoing, confident, and good leaders.

Not all studies have demonstrated a relationship between athletic team participation and leadership skill development. In his early anthropological study of Little League baseball, Fine (1987) concluded that sports participation has no general effect on self-image; it does not reduce prejudice nor is it necessary for leadership development. Danish, Petitpas, and Hale (1990) argue that overall the empirical literature does not support a cause-effect relationship between sport participation and social competence. While high school coaches rank learning life skills second of 15 reasons they believe young people should participate in sports, they concede that by ranking it ninth as an outcome then in reality, it does not happen (Lesyk, 2000). DeMoulin's (2002) study of high school seniors found that those who participated in organized sports scored significantly lower on a

measure of personal maturity, a construct reflecting self-efficacy, coping skills, positive assertiveness, and locus of control. Blinde and Greendorfer (1992) report that student-athletes find it difficult to interact with peers outside athletic groups. In addition, Spreitzer (1994) contends that the transfer effects from the playing field to the larger game of life receive little support.

In addition to the mixed conclusions reached by previous studies of the relationship between sports team participation and leadership development, the measures used in many of these studies also may be questioned. Some of the leadership measurement instruments used in those studies focused on leadership within a sports team, and thus may not be generalized to leadership in a different context. Other measures included self, peer, or coaching staff perceptions of the individual athlete's leadership abilities and as such, the validity of the construct measured can be challenged. Sample size in many of the studies is very small. No previous study of sports and leadership has used a behaviorally based, validated measure of leadership.

The current study examines the relationship between organized sports team participation and leadership skills, employing a valid means of measuring several dimensions of leadership. The study addresses the following research questions.

Q1: Do organized sports team participants differ in their leadership skills from those who did not participate in similar teams?

Q2: Are increasing levels of participation in school-sponsored sports teams associated with increasing levels of leadership skills?

Q3: Does the nature of the sport have an effect on the level of leadership skills developed?

Methods

Participants

Participants consisted of 141 students who completed a one-day assessment center required by their academic program. The students were enrolled in an MBA program at a suburban North Central United States private university. Seventy-three (52%) of the participants were male. Their average age at time of assessment was 26.9 years (sd. = 5.8 years). Compared to other MBA students at other private school MBA programs within a 300-mile radius, this group is comparable in age and gender make-up. Compared to those attending programs sponsored by public universities in the region, these students are approximately two years younger and had more female representation. Based on information

available from *Business Week's* business school part-time MBA program data comparison, this convenience sample is representative of MBA students at North Central United States universities.

Measures

Leadership Skills. The assessment center was a pre-requisite exercise for enrollment in a required management skills course. The assessment center method, which offers a direct assessment of the behaviors, motivations, and knowledge needed for a target position, involves multiple evaluation techniques, including various types of job-related simulations and psychological tests. The American Assembly of Collegiate Schools of Business (AACSB) commissioned Development Dimensions International (DDI) in the late 1980s to develop an assessment center as a means of measuring learning outcomes measurement in business schools (AACSB, 1989).

The Assessment Center exercises used in this study are those developed by DDI. They included the following simulations:

- An in-basket exercise.
- Group discussions.
- Simulated performance interview with a “subordinate.”
- Oral presentation exercise.
- Written communication exercise.

The validity of using the assessment center method in both industrial and academic settings has been established. The standardized administration and scoring inherent in the assessment center method helps to insure the reliability and validity of the data that are produced (Gaugler, Rosenthal, Thornton, & Bentson (1987)). Riggio, Mayes, and Schleicher (2003) and Waldman and Kobar (2004) established the criterion-related validation for the use of assessment centers in academic settings. They were able to establish significant correlations between assessment center performance and post-graduate supervisory ratings (Riggio, et al., 2003) as well as subsequent job satisfaction, number of promotions, and salary (Waldman and Kobar, 2004).

One advantage of using assessment center methods is that it allows for the measurement of a multidimensional array of skills associated with the leadership construct. Nine independent factors (dimensions) were measured in the current study, including (a) planning, (b) analysis, (c) judgment, (d) delegation, (e) maximizing performance, (f) individual Leadership, (g) teamwork, (h) communication, and (h) written communication. Definitions of each of these skills are listed in Appendix A.

Participants' behaviors and outcomes of their participation in each of the simulations were recorded either on videotape or in written format. DDI evaluated the results. Each participant's exercises and simulations are rated by multiple (typically three) assessors. DDI assessors are given extensive training to differentiate participants' behaviors related to competencies being measured. DDI provides assessors with behavioral examples to guide their judgment of participants' performance on each dimension (DDI, 2001). After each assessor assigns a rating on each dimension for each participant, assessors share their observations and agree on a single score for each dimension. Specific written feedback was returned to the participants, including numeric scores (1 = low to 5 = high) on each of the dimensions. A university career counselor then debriefed each student, explaining the DDI feedback and suggesting courses and activities that might result in skill improvement.

Sports Team Participation. Each assessment center participant completed a survey requesting the number of seasons played in each of 24 sports on a formal school-sponsored team at either the high school or college level. We based the list of sports on those offered by a university identified by the NCAA as having the widest variety of varsity teams. In addition, we added that university's "club" sports to the list and an open-ended question was available for participants to amend the list.

Although participation in the assessment center exercises was not voluntary for students in this MBA program, participating in the survey of sports team participation was. No student refused to complete the survey.

Analysis

We carried out a single variable ANOVA where the dependent variables were the leadership dimension scores and the grouping variable was team participation. For significant ANOVA, follow-up univariate analyses were carried out. Finally, we examined the correlation between the number of seasons played and the level of leadership skill for each of the nine leadership dimensions measured.

Results

Table 1 lists the variables' means, standard deviations, and ranges. There is wide variance for all variables, giving us confidence that even though our sample consisted of persons motivated and talented enough to pursue a graduate business degree, their current skill level varied considerably.

Table 1: Means, Standard Deviations and Ranges for Team Participation and Assessment Center Skills Results ($N = 141$)

Variables	Mean	SD	Range
Age (years)	26.9	5.7	21 - 53
Number of Seasons Interactive Sport Team Participation Total (High School and College)	3.66	4.46	0 - 15
Number of Seasons Coactive Sport Team Participation Total (High School and College)	2.01	3.00	0 - 12
Number of Seasons All Sport Team Participation Total (High School and College)	5.67	5.27	0-20
Assessment Center Skill Dimensions (1=low 5=high)			
Planning	2.28	.79	1 – 5
Analysis	2.64	.76	1 – 4
Judgment	2.26	.66	1 – 5
Delegation	1.95	.80	1 – 4
Maximizing Performance	2.35	.89	1 – 5
Individual Leadership	2.84	.92	1 – 5
Teamwork	2.91	.77	1 – 5
Communication	3.48	.62	2 – 5
Written Communication	3.23	.43	2 - 5

Table 2 provides results that related to first research question – Q1: Do sports team participants differ in their leadership skills from non-participants. Sports team participation measured as a dichotomous, categorical variable is defined as those persons who reported one or more seasons of participation. Team participants differed from non-participants in only two skills: teamwork: [$F(1,139) = 9.936, p = .003$] and written communication [$F(1,139) = 3.094, p = .081$].

Univariate tests confirmed that the only statistically significant differences were again for teamwork and written communication. For teamwork, participants' mean score on this dimension was 3.02, while non-participants averaged only 2.60 ($t = 2.989, sig. = .003$). Non-participants scored significantly higher ($t = -1.76, sig. = .08$) on written communication ($m = 3.34$) than team participants ($m = 3.19$). While the differences for the other seven dimensions were not statistically significant, it is interesting to note that average scores for non-participants on planning, judgment, delegation, maximizing performance, and communication were higher than the average score for team participants. Subsequent analyses of this data defining participation by varying levels of team experience yielded similar results.

Table 2.
Mean Leadership Skill Levels for Team Participants and Non-Participants

Leadership Dimension	Team Participants		Non-Participants		t
	Mean	s.d.	Mean	s.d.	
Planning	2.24	.76	2.38	.87	-.959
Analysis	2.69	.75	2.51	.80	1.214
Judgment	2.22	.62	2.36	.78	-1.081
Delegation	1.92	.78	2.03	.87	-.709
Maximize Performance	2.33	.89	2.40	.92	-.350
Individual Leadership	2.86	.97	2.79	.78	.396
Teamwork	3.02	.69	2.60	.88	2.989**
Communication	3.46	.61	3.51	.63	-.443
Written Communication	3.19	.42	3.34	.55	-1.759*

* p < .1 ** p < .01

Table 3 lists the correlations between length of team participation and leadership skill levels. This analysis provides information relative to two of the research questions – Q2: Are increasing levels of participation associated with increasing levels of leadership and Q3: Does the nature of the sport affect the skills developed? The only sports individually analyzed were those in which some participation was reported by at least 15% (n = 25) of the study’s participants.

Table 3
Correlation Between Number of Seasons Sport Participation and Leadership Skill Level (n = 141)

Variables	M	SD	Plan	Anal	Judge	D'gate	Max Perform	Ind'l Leader	Team Work	Comm	Written Comm
Total Seasons	5.67	5.27	-.027	-.010	-.021	-.143	-.051	-.006	.129	-.019	-.126
Total Interactive Sports Seasons	3.66	4.46	.030	.000	-.008	-.117	-.007	-.049	.091	-.031	-.117
Total Coactive Sports Seasons	2.01	3.00	-.090	-.017	-.024	-.072	-.077	.082	.085	.014	-.042
Basketball	0.86	1.78	-.055	-.037	.066	-.094	-.003	.111	.009	.152	-.009
Baseball / Softball	0.85	1.83	.072	.040	.040	-.032	.117	-.088	.053	-.156*	-.076
Football	0.96	2.11	-.087	-.044	-.033	-.084	-.118	-.056	.079	-.018	-.193**
Soccer	0.54	1.45	-.033	.000	-.150*	.022	-.007	-.094	-.079	-.072	.053
Track / CC	0.71	1.66	-.028	-.040	-.050	-.033	-.015	.145	.168**	.093	-.128

* p < .01 ** p < .05 *** p < .001

In order not to ignore the potential effects of less popular sports, each of the 23 sports was classified into one of two categories: coactive or interactive. Interactive sports are those where task interactions are essential for group success (e.g., baseball, football, soccer, basketball). Coactive sports are those where task interaction among the individual team members is not an element of the sport (e.g., golf, tennis, swimming, track). This categorization is relatively common in the sports study discipline (Carron, Colman, Wheeler, & Stevens, 2002; Munroe, Estabrooks, Dennis, & Carron, 1999).

The resulting correlations reveal no systematic association between the number of seasons of sports participation and the level of any particular leadership skill. Only increased participation in track/cross country was associated with an increased level of teamwork ($r = .168, p < .05$). Increased participation in football was associated with significantly lower skills in the area of written communications ($r = -.193, p < .05$). Increased participation in baseball and softball was negatively correlated with communication skills ($r = -.156, p < .01$), while increased soccer participation was negatively associated with judgment skills ($r = -.15, p < .01$). Grouping sports into the interactive and coactive categories did not result in increased participation having any statistically significant association with any leadership skill level.

Summary

Few differences exist between sports participants and non-participants regarding the leadership skills measured in this study. Team participants differed significantly from non-participants in only two skills: teamwork and written communications. Sports team participants demonstrated higher teamwork skills. Those who did not participate in school sports demonstrated higher written communications skills. Increased levels of participation are not associated with differing levels of leadership skills. The nature of the sport is not generally associated with skill development.

Discussion

The current research demonstrates only limited support for the adage that sports builds leaders. We posit three distinct reasons for this weak link. First, the primary purpose of participating on a sports team is not leadership development. The activities are designed to develop physical skills and the strategy associated with a particular sport. Kaagan (1998) points out that effectively designed leadership development activities consist of correctly selected learning challenges, ordered in a specific sequence. Team coaches select activities and order them in a manner to develop athletic, not leadership skills.

Second, while it is possible that the sporting fields and arenas could serve as a venue for experience-based learning of leadership skills, several of the key elements necessary for learning are not present. Thomas and Cheese (2005) outline three key phases of experience-based learning: preparing, developing, and preserving. Proper preparation requires assessment of strengths and weaknesses, personal values, and learning style. Developing involves practice of the skill, while preserving involves feedback and revision of learning objectives. Consistent with the preservation factor, Connaughton, Lawrence, and Ruben (2003) point out that good leadership development programs encourage the students to reflect on their leadership processes both inside and outside of the classroom. We argue that while the typical sports team experience may develop leadership-related skills, systematic attention is paid not paid to preparation or preservation. Bredemeier and Shields (2006), in a literature review focusing on sports as a social experience and character development conclude that “sports can build character, but only if coaches deliberately seek to do so and are adequately informed regarding the educational processes required” (p.6). Anecdotal evidence from our study participants during debriefing revealed that feedback from coaches centered on sports-related skills. Even participants designated as a team captain rarely received feedback from a coach regarding their leadership role. If anything, team leaders reported that they tried to model their own leadership behaviors for those of the team coach.

Finally, leadership behaviors developed through sports may not be transferable to classroom, much less the boardroom. Just as the classroom teaching of abstract leadership constructs is criticized for its lack of transferability to in the workplace, so too the skills learned in a competitive athletic contest may not transfer to a corporate setting. McKenna (2004) argues that managerial skills “cannot be developed in isolation of context” (p. 674). Athletes may only see their field-developed skills as applicable to sports, and therefore do not use or practice them in the workplace.

Human resources managers, especially those involved with campus recruiting should consider the results of this study in their decision-making. The authors’ experience with campus recruiters is that many of them put a high premium on recruiting college athletes because they believe that experience increases their leadership skills, especially teamwork and motivation skills. An executive recruiter of CFOs stated that he looks for “people who have been in athletics at a high level” (*Today’s Finance Leaders*, 2002). The findings of this study caution recruiters and other persons making personnel decisions against using this past behavior as an indicator of these or any other leadership skills. By showing a preference for athletes, persons who would be a good fit in the job may be bypassed unnecessarily. Further research on this topic will focus on whether sports develop skills in certain types of persons and not others (e.g., males v females) and its effect on skills not measured in an assessment center.

Appendix A

Fundamentals of Leadership Dimension Definitions

Planning and Organizing/Work Management – Establishing a course of action for self and/or others to accomplish a specific goal; planning proper assignments of personnel; appropriate allocation of resources.

Analysis/Problem Assessment – Securing relevant information and identifying key issues and relationships from a base of information; relating and comparing data from different sources; identifying cause-effect relationships.

Judgment/Problem Solving – Committing to an action after developing alternative courses of action that are based on logical assumptions and factual information as well as take into consideration resources, constraints, and organizational values.

Maximizing Performance – Establishing performance goals; coaching performance; providing training; evaluating performance.

Individual Leadership/Influencing – Using appropriate interpersonal styles and methods to inspire and guide individuals (i.e., direct report, peers, and superiors) toward goal achievement; modifying behavior to accommodate tasks, situations, and individuals involved.

Teamwork/Collaboration – Working effectively with team/work group or those outside the formal line of authority (e.g., peers, senior managers) to accomplish organizational goals; taking actions that respect the needs and contributions of others; contributing to and accepting the consensus; subordinating own objectives to the objective of the organization or team.

Communication – Expressing ideas effectively in individual and group situations (includes nonverbal communication); adjusting language or terminology to the characteristics and needs of the audience.

Written Communication – Expressing ideas clearly in memoranda and letters that have appropriate organization and structure; correct grammar and language; terminology adjusted to the characteristics and needs of the audience.

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Biography

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