

VIEWS AND PRACTICES OF HIGH SCHOOL COACHES ON THE EDUCATION AND TRAINING OF TEAM CAPTAINS IN LEADERSHIP

Abstract

This cross-sectional study (1) described the views and practices of a national U.S. sample of high school coaches on the education and training of team captains in leadership; and (2) examined if their views and practices differed as a function of leadership behavior and coaching efficacy. Results of 255 online surveys showed nearly 90% of coaches thought formal captain leadership development programs were beneficial; only 12% used such a program. Coaches with higher character-building and motivation efficacy more strongly endorsed the intentional education and training of their captains and perceived fewer barriers to this process. These findings encourage coaches, others working directly with scholastic athletes, and leadership educators more broadly to leverage and examine sport, including captaincy, as a valuable leadership development opportunity for youth.

Introduction

Sport is viewed as an excellent context for leadership development; it is an activity that society values, and there are important consequences for the millions who participate each year. Four-time Olympic gold medal winner Michael Johnson, for example, launched a program designed to foster leadership and community engagement among youth involved in sport globally (BeyondSport, 2016). The National Federation of State High School Associations (NFHS), an organization responsible for managing nearly 8 million high school sport participants in the 2017-2018 academic year, specifically emphasizes “educational programs that develop leaders” in its mission statement (NFHS, 2018). In an effort to explicitly teach leadership skills, the NFHS has offered several programs, including a Captain’s Course – an online leadership training

program for sport captains. Nearly 17,000 youth have completed this course in just over 3 years since its inception in 2015 (see Gould & Voelker, 2010 for course development description). Sport, then, is seen as an opportunity ripe for developing leadership in young people (Gould, 2016).

The bulk of the leadership literature in sport has focused on how coaches may best lead their teams (e.g., Vella, Oades, & Crowe, 2010). However, peer leadership, or athletes leading other athletes, has received increasing attention given its influence on life skill development, team dynamics, and sport performance (e.g., Fransen et al., 2017). The most traditional form of peer leadership in scholastic sport is the team captain. Gould, Chung, Smith, and White (2006) found that poor team leadership was among the most frequently cited concerns in a survey of

scholastic sport coaches, and Jones and Lavallee (2009) identified leadership as a key interpersonal skill needed by British youth. Captaincy on sports teams is one opportunity by which youth can learn and practice real leadership skills. However, critical questions remain for coaches on how to best work with athletes who are or desire to become captains. Few studies have examined athletes' perceptions of their education, training, and overall preparedness for captaincy and the role of coaches in optimizing this leadership development opportunity.

To address these practical concerns, our research team initiated a systematic line of research on the leadership experiences of high school team captains. In our first study, we interviewed 13 former high school sport captains about their captaincy experience. Results indicated that although the experience was generally positive, former captains identified being held accountable and subjected to extra scrutiny as difficult aspects of leading their peers. The majority of captains reported receiving little to no education and training from coaches on leadership or preparation for their captaincy role. Managing teammates, coping with the pressures of being a captain, and staying neutral in the midst of team conflict were among the most difficult aspects identified with being a captain (Voelker, Gould, & Crawford, 2011).

As a follow-up to our first study, we interviewed 10 current high school coaches with a regional reputation for developing leadership in their captains on their individual approaches. Coaches reported clearly defined leadership views and were proactive in their leadership development initiatives. They helped their captains develop communication skills, regularly met with and provided feedback about their captain's leadership behaviors, conducted or encouraged formal leadership education and training sessions, and provided leadership readings. These coaches also noted that mistakes they made were giving captains too much or not enough responsibility and failing to communicate, reinforce,

and educate them enough on leadership (Gould, Voelker, & Griffes, 2013). Although insightful, these qualitative findings do not permit generalizations to a larger population of high school coaches nationwide. Hence, little is known about the scale and scope of these issues. Moving beyond qualitative studies to understand a large sample of coaches' views on the roles and responsibilities of captains, the challenges and mistakes coaches and captains make when working together, and how coaches educate and train captains in leadership will not only inform future research, but assist in better preparing coaches, and others working in scholastic sport, for developing athlete leaders.

Gould and Carson's (2008) heuristic life skills development model purports that life skills (i.e., skills fostered in sport that can be used in other life contexts, like leadership) are largely shaped by athletes' sport experience, including the characteristics of the coach (e.g., the coach's own leadership behaviors) and the direct (e.g., providing leadership instruction) and indirect (e.g., modeling effective leadership) teaching strategies implemented. Aligning with frameworks used to develop effective youth programs (e.g., theory of developmental intentionality; Walker, Marczak, Blyth, & Borden, 2005), Pierce, Gould, and Camiré (2017) emphasized that coaches' efforts to teach life skills must be explicit and intentional in order for athletes to best learn and transfer those skills to other domains, such as the classroom. Educating coaches on this active life skills development process is essential to helping team captains become effective leaders outside of the sport environment.

Designing resources that effectively prepare coaches for captains' leadership education and training will be informed by our understanding of the individual difference factors that may affect coaches' willingness and ability to learn these skills (Smoll & Smith, 1989). It is unlikely that all coaches hold the same opinions or are equally effective in supporting the education and training of their captains. Individual difference

factors may make some coaches more interested and successful in developing captains, such as the extent to which coaches already exhibit certain leadership behaviors. Based on previous literature (e.g., Cumming, Smith, & Smoll, 2006), coaches who are more democratic, less autocratic, and provide higher levels of social support and positive feedback may approach the education and training of their captains more proactively by involving them in meaningful decision-making, talking to them about navigating team issues, and offering constructive feedback on leadership behaviors.

Another factor that is likely to be associated with a coach's approach to developing captains is coaching efficacy, defined as the degree to which coaches believe they are capable of affecting athlete learning and performance (Myers, Feltz, Chase, Reckase, & Hancock, 2008). Coaching efficacy has been shown to influence use of encouragement and praise as well as instructional and organizational behaviors (Feltz, Short, & Sullivan, 2008). In this study, the motivation and character-building dimensions of coaching efficacy were of particular interest. It is plausible that coaches who believe in their ability to impact the motivation and character of their athletes would also feel optimistic about their ability to help athletes grow as leaders and may thus approach the process of educating and training captains with more positive intentions.

Expanding upon the research examining the nature and development of leadership among high school captains, the purpose of this study was two-fold. Our primary purpose was to extend the results of qualitative studies, conducted with small samples of coaches and athletes, by describing the views and practices of a national U.S. sample of high school sport coaches on captain leadership, including (a) the appropriate roles and responsibilities of team captains, (b) the challenges and mistakes that coaches and captains make when working with each other, and (c) how coaches educate and train their captains in leadership. A secondary purpose was to assess if the views and practices of high school coaches differed as a function of leadership behavior

and coaching efficacy. It was expected that coaches who reported higher levels of democratic behavior, social support, positive feedback, motivation efficacy, and character-building efficacy, compared to coaches with lower scores on these measures, would report fewer perceived mistakes when working with captains, more proactive leadership education and training practices, and stronger perceptions that captains can and actually do learn meaningful leadership skills through their captaincy experience.

Method

Participants. The NFHS sent e-mails from the investigators requesting participation in the study to 5,500 coaches proportionally selected from all 50 states who coached the top 10 most popular scholastic sports. From the 364 high school coaches who opened the survey, 274 fully completed it. As the primary purpose of this study was to investigate coaches' views and practices related to captaincy, any coaches who indicated they did not use captains were directed to the end of the survey. Nineteen coaches indicated they did not use captains, and thus, the final number of coaches included in the study was 255 (199 males, 56 females) ages 20 to 70 years ($M = 43.23$, $SD = 11.62$).

On average, coaches had 11.48 years of coaching experience ($SD = 9.94$) and coached boys' teams ($n = 96$), girls' teams ($n = 87$), or teams comprised of both male and female athletes ($n = 72$). All 10 of the most participated in high school sports for girls and nine of the 10 most participated in high school sports for boys (NFHS, 2017) were represented. No single sport represented more than 20% of the total sample. Coaches represented 44 states and coached in suburban ($n = 120$), rural ($n = 93$), and urban settings ($n = 42$). The schools where they coached varied in the number of students who received free or reduced lunch (10% or less, $n = 66$; 25%, $n = 43$; 50%, $n = 47$; 75%, $n = 27$; 90% or more, $n = 11$; do not know, $n = 61$), which served as a proxy measure of socioeconomic status. Coaches self-identified as Caucasian ($n = 215$), African-American ($n = 11$), Hispanic/Latino ($n =$

10), Asian ($n = 4$), and other ($n = 9$), with six coaches leaving the question blank.

Procedures. Following Institutional Review Board approval, initial emails were sent to coaches through the NFHS email database; a follow-up email was sent approximately 3 weeks later. Coaches who elected to participate followed the link to an online survey where they provided consent and were made aware that responses would remain confidential and anonymous. Data collection closed two months after the final email invitation. The survey took approximately 30 minutes to complete.

Measures.

Views and practices of coaches on captain leadership. Participants completed a series of descriptive items that were developed by the research team based on key findings from two qualitative studies with high school captains and coaches (Gould et al., 2013; Voelker et al., 2011). Additionally, the athlete leadership development literature, specifically focusing on team captains (e.g., Wright & Côté, 2003), was referenced to determine if any additional items were needed. These descriptive items were developed and used in this study to extend our understanding of the scale and scope of issues that have been identified by high school captains and coaches through qualitative research. Because our goal was not to develop a new instrument that would be used by future investigators, extensive psychometric evaluation of these items was beyond the parameters of this descriptive study. However, as some validity and reliability evidence for the newly created items were important, we took initial steps to ensure a minimum level existed. First, experts in the coaching field (i.e., scholars, coach-educators, and coaches) reviewed all questions to ensure face validity. Additionally, for question sets that focused on a specific theme (e.g., challenges that captains face in their

captaincy role), internal reliability in the form of Cronbach's alpha values were assessed.

Items examined coaches' general background and perspectives on leadership and captaincy, including personal leadership experiences (e.g., If you were a captain, did your coach intentionally train or prepare you for the leadership role?); perceptions of and experiences with formal leadership development programs (e.g., Have your captains ever participated in a formal leadership program?); the captaincy structure on their team (e.g., How are your captains selected?); and the attributes of the ideal captain in which coaches rank-ordered a list of 12 captain characteristics and behaviors. Coaches responded to two items on the viability of sport captaincy as a meaningful leadership development experience (i.e., To what degree could high school student-athletes learn leadership skills from the sport captaincy experience? To what degree do today's high school sport captains actually learn leadership skills from their sport captaincy experience?; 1, not at all, to 5, a great degree).

Additionally, coaches' specific perceptions of captains were assessed, including appropriate roles and responsibilities for team captains (8 items, e.g., To what degree is it appropriate for a captain to mediate conflict between teammates?; 1, not at all appropriate, to 5, very appropriate; $\alpha = .75$); challenges that captains face in their captaincy role (13 items; e.g., Coping with pressure from teammates; 1, not at all a challenge, to 5, a big challenge; $\alpha = .89$); mistakes captains make in their captaincy role (6 items; e.g., Captains make the mistake of not understanding what it means to be a leader; 1, strongly disagree, to 5, strongly agree; $\alpha = .85$); mistakes

coaches make when working with captains (7 items; e.g., When working with captains, coaches make the mistake of relying on captains too much; 1, strongly disagree, to 5, strongly agree; $\alpha = .77$); and how coaches train captains (20 items; e.g., I talked with my captain about leadership; 1, strongly disagree, to 5, strongly agree; $\alpha = .85$).

Leadership Behavior. To assess coaches' leadership behavior, four of the five subscales concerning coach's decision-making (democratic and autocratic behavior) and motivational tendencies (social support and positive feedback) of the Leadership Scale for Sports (LSS; Chelladurai & Saleh, 1980) were administered. In an effort to decrease the time required for survey completion and increase participation from coaches, these subscales were chosen because of their hypothesized relevance to captain education and training based on previous research (e.g., Cumming et al., 2006). Together, these four subscales contained 27 items examined on a 5-point Likert scale from 1, never, to 5, always. Nine items assessed democratic behavior (e.g., In coaching I ask for the opinion of the athletes on strategies for specific competitions); five items assessed autocratic behavior (e.g., In coaching I plan relatively independent of my athletes); eight items assessed social support (e.g., In coaching I help athletes with their personal problems); and five items assessed positive feedback (e.g., In coaching I complement an athlete for good performance in front of others). Totals for each subscale were calculated by computing means for all subscale items. Reliability and factorial and construct validity for the measure has been reported with a variety of coaches, including those coaching at the high school level (Chelladurai & Riemer, 1998).

For the current study, Cronbach's alpha values were above .70 for all subscales except the Autocratic subscale where an alpha value of .44 was obtained. Deletion of any number of items did not improve the alpha coefficient for this subscale and was thus excluded from all analyses.

Coaching efficacy. Given the hypothesized relevance to captain education and training based on previous research (e.g., Feltz et al., 2008), the motivation and character-building subscales from the Coaching Efficacy Scale (CES; Feltz, Chase, Moritz, & Sullivan, 1999) assessed coaches' belief in their ability to influence athletes' motivation and character on an 11-point Likert scale (0, not at all confident, to 10, extremely confident). Seven items assessed motivation efficacy (e.g., How confident are you in your ability to motivate your athletes?), and four items assessed character-building efficacy (e.g., How confident are you in your ability to instill an attitude of fair play among your athletes?). Scores for each subscale were calculated by computing means for all items. Feltz et al. provided evidence for the factorial, convergent, and discriminant validity of the subscales. For the current study, Cronbach's alpha values for the motivation and character-building subscales were .93 and .88, respectively.

Data Analysis. To assess the primary purpose (i.e., describe the views and practices of a national U.S. sample of high school coaches on captain leadership), descriptive statistics for all relevant study variables were reported. To assess the secondary purpose (i.e., examine if the views and practices of high school coaches differed as a function of coaching leadership and efficacy profile), a person-centered approach was used. The person-centered approach first groups participants based on patterns of study variables with a cluster analysis and then assesses differences between groups. Using this approach preserves

individual differences and improves the ecological validity of findings due to the groups representing naturally occurring orientations (Bergman & Magnusson, 1997; Fredricks & Eccles, 2005).

After we created cluster analysis profiles, three MANCOVAs were conducted. Each MANCOVA included cluster membership as the independent variable, and three sets of questions assessing views and practices on captain leadership served as the dependent variables (i.e., mistakes coaches make when working with captains, the viability of sport captaincy as a meaningful leadership development experience, and how coaches prepare captains), while controlling for age and coaching experience. When the overall MANCOVA was significant, we conducted univariate post hoc tests. Due to the large number of post hoc tests that were completed, we used a criterion of $p < .01$ as statistical significance.

Results

Views and Practices of Coaches on Captain Leadership. Coaches varied in the types of leadership experiences they had in their own careers and the experiences they reported providing for their own captains. Approximately 65% ($n = 165$) of coaches indicated that they were a high school sport captain themselves, but only 19.4% ($n = 32$) of those coaches reported that they were educated and trained to be a captain in an intentional way by their coach. Additionally, less than 35% ($n = 89$) of the coaches reported participating in a formal leadership development program to inform their own coaching behaviors, and even fewer coaches (12.2%; $n = 31$) had their captains participate in such a program. Regardless of prior leadership training experience either for themselves or their captains, nearly 90% of the sample ($n = 229$) indicated that formal leadership education and training programs were a good idea. As a whole, coaches strongly agreed that athletes could learn leadership through the sport captaincy experience ($M = 4.42$; $SD = .71$), but coaches felt less strongly that athletes actually learned these skills ($M = 3.48$; $SD = .85$).

Coaches most frequently reported having two captains on their team (one captain, $n = 32$; two captains, $n = 128$; three captains, $n = 54$; four captains, $n = 32$; five or more captains, $n = 9$). These captains were most often selected jointly by the team and the coaches ($n = 122$) or by the coaches alone ($n = 91$). The top three characteristics coaches wanted for their captains accounted for over two-thirds of all coach responses, including “works hard in practices and games” (87.1%), “expects high levels of performance from self and teammates” (67.5%), and “shows respect for others on the team” (52.5%).

Coaches felt the most appropriate responsibilities for captains were mediating conflict between teammates, confronting teammates when they misbehave/violate rules, and taking risks such as making unpopular decisions and confronting tough issues (Table 1).

Coaches perceived that their captains face a wide number of challenges, but most strongly endorsed the difficulties of coping with pressure from teammates, balancing multiple roles, and staying neutral in team conflict situations (see Table 2 for all responses). In terms of captain’s mistakes, coaches most strongly agreed that captains do not understand what it means to be a leader and think captainship is more about recognition than hard work (Table 2).

With regard to the personal mistakes coaches made when working with captains, coaches most strongly agreed with issues that involved leadership education and training, such as failing to educate their captains on leadership, making assumptions about what their captains knew and understood about leadership, and not giving captains enough responsibility (Table 3). Finally, coaches endorsed a variety of ways to educate and train their captains with the most popular approaches including setting a good example, providing captains with support, communicating specific expectations, and talking with captains about leadership (see Table 4 for all responses).

Table 1

Descriptive statistics for coaches' ratings on the most appropriate roles and responsibilities for captains

<i>Item</i>	<i>M</i>	<i>SD</i>
Mediate conflict between teammates	3.90	.70
Confront teammates when they misbehave/violate rules	3.72	.93
Take risks (e.g., make unpopular decisions, not be afraid to take charge)	3.69	.94
Take care of things in the coaches absence	3.53	.99
Give coaches constructive criticism (e.g., tell their coaches things they may not want to hear about their coaching)	3.48	1.01
Mediate conflict between teammates and coaches	3.20	1.03
Set rules for teammates	2.84	1.05
Enforce consequences when teammates misbehave/violate rules	2.58	1.15

Note. Scale is 1, *not at all appropriate*, to 5, *very appropriate*.

Table 2

Descriptive statistics for coaches' perceptions of captain challenges and captain mistakes

<i>Item</i>	<i>M</i>	<i>SD</i>
Captain Challenges		
Coping with pressure from my teammates	3.13	.86
Balancing multiple roles (e.g., student, athlete, captain)	3.09	1.00
Staying neutral in conflict situations between teammates	3.07	.90
Defending the coach's decisions to teammates	2.98	1.06
Being held accountable	2.89	1.02
Coping with pressure from coaches	2.85	.89
Maintaining composure	2.78	.93
Maintaining a positive image	2.72	.98
Being publicly scrutinized and meeting expectations	2.71	1.12
Coping with pressure from parents	2.64	1.22
Overstepping boundaries	2.57	1.03
Feeling isolated	2.36	1.13
Communicating with coaches	2.27	1.02
Captain Mistakes		
Not understanding what it means to be a leader	3.64	.89
Thinking captainship is about recognition rather than hard work	3.53	.92
Being power hungry/selfish	2.97	1.08
Being too negative	2.86	1.05
Poorly interacting with others	2.82	1.00
Being poor role models	2.73	1.10

Note. Captain challenges scale is 1, *not at all a challenge*, to 5, *a big challenge*. Captain mistakes scale is 1, *strongly disagree*, to 5, *strongly agree*.

Table 3

Descriptive statistics for coaches' perceptions of mistakes coaches make when working with captains

Item	Total Sample		Cluster Membership	
	Mean	SD	EDS	MEDS
Failing to educate their captains on leadership	3.64	.95	3.59	3.81
Making assumptions about what captains know and understand	3.62	.87	3.57	3.78
Not giving captains enough responsibility	3.47	.80	3.50	3.41
Not communicating with their captains	3.27	.95	3.20	3.46
Selecting the wrong captains	3.18	1.03	3.11	3.40
Relying on captains too much	2.85	.87	3.83	2.90
Having poor relationships with their captains	2.55	.99	2.42	2.81

Note. Scale is 1, *strongly disagree*, to 5, *strongly agree*. EDS refers to efficacious, democratic, and supportive coaches; MEDS refers to more efficacious, democratic, and supportive coaches.

Table 4

Descriptive statistics for how coaches educate and train captains in relation to total sample and cluster membership

Item	Total Sample		Cluster Membership	
	Mean	SD	EDS	MEDS
I set a good example of what a leader should be for my captain(s).	4.16	.57	4.00*	4.23*
I provided my captain(s) with support.	4.04	.71	3.91	4.10
I communicated specific expectations for my captain(s).	3.89	.80	3.53*	4.02*
I talked with my captain(s) about leadership.	3.88	.83	3.49*	4.02*
I could have better prepared my captain(s) for their leadership role.	3.69	.87	4.00*	3.64*
I informally train my captain(s) for their leadership role (e.g., allow them to make mistakes, learn from observing previous captains).	3.69	.79	3.72	3.65
I provided my captain(s) with feedback on their leadership skills.	3.61	.89	3.39	3.69
I engaged my captain(s) in important decision-making.	3.56	.85	3.48	3.60
I engage my captain(s) in adult/mature conversations.	3.47	1.11	3.33	3.53
I held captain meetings.	3.38	1.09	3.19	3.47
I provided my captain(s) with resources on leadership.	2.87	1.03	2.57*	2.99*
I engaged my captain(s) in the practice planning process.	2.82	.96	2.59	2.92
I would like to train my captain(s), but I don't have the materials to do so.	2.73	1.08	3.07*	2.62*
I formally train my captain(s) for their leadership role (e.g., hold workshops, scheduled meetings).	2.66	1.07	2.45	2.76
I limited my captain(s) opportunities to lead.	2.53	.86	2.74	2.42
I would like to train my captain(s), but I don't have the time.	2.44	1.05	2.81*	2.32*
I would like to train my captain(s), but I don't know how.	2.23	.98	2.63*	2.10*
I too often ignored the suggestions of my captain(s).	2.23	.72	2.30	2.21
I would like to train my captain(s), but I don't believe the payoff will be worth the effort.	1.76	.76	2.06*	1.62*
I used intimidation to lead my captain(s).	1.62	.76	1.78	1.58

Note. Scale is 1, *not at all*, to 5, *a great degree*. EDS refers to efficacious, democratic, and supportive coaches; MEDS refers to more efficacious, democratic, and supportive coaches.

* $p < .01$

Coach Leadership Behavior and Efficacy Differences. Cluster analysis was used to classify participants into groups with similar patterns across the LSS subscales (democratic behavior, social support, and positive feedback) and CES subscales (motivation and character-building). Both hierarchical and non-hierarchical cluster techniques were used to determine the best cluster solution (Hair & Black, 2000). First, a hierarchical cluster analysis, using Ward's linkage method and squared Euclidean distance as the similarity measure, was conducted to determine the number of clusters represented in the data. Examination of the agglomeration coefficients showed that the percentage change in coefficient was smallest following the two-cluster analysis, suggesting the two-cluster solution was ideal. Then, k-means cluster analysis was used to finalize the cluster solution.

Table 5 shows means, standard deviations, and standardized scores for each cluster profile. A z score criterion of ± 5 was used as a criterion for determining whether participants in different groups scored relatively higher or lower in comparison to their peers (Hodge & Petlichkoff, 2000; Smith, Balaguer, & Duda, 2006). Although one group had higher scores on all subscales, both groups scored well above the mean point. Therefore, rather than labeling one group high and one group low, the research team

chose to label the two groups as either "Efficacious, Democratic, and Supportive Coaches" (EDS; $n = 79$) or "More Efficacious, Democratic and Supportive Coaches" (MEDS; $n = 173$). Inspection of the z-scores for each of the subscales indicated that the difference between the groups was largely due to variations in coaching efficacy in which EDS coaches scored lower than MEDS coaches. EDS coaches also scored lower than MEDS coaches on each of the LSS subscales, but this difference failed to reach the criterion of .50 that indicated significance. The groups had similar compositions of male and female coaches (EDS $n = 59$ males, $n = 20$ females; MEDS $n = 135$ males, $n = 38$ females). Coaches in the EDS group were on average younger (EDS Mage = 41.1; MEDS Mage = 44.5) and had less coaching experience (EDS Mexperience = 9.5; MEDS Mexperience = 12.4). Thus, age and years of coaching experience were controlled in the following MANCOVA analyses.

There was no significant difference between EDS and MEDS coaches in their view of the mistakes they make when working with captains, $F(7, 212) = 1.75$, $p > .10$, $\eta^2 = .05$. However, EDS and MEDS coaches significantly differed in their views that captains could and actually learn leadership through the captaincy experience, $F(2, 222) = 8.46$, $p < .001$, $\eta^2 = .07$. Univariate results indicated that group membership had a significant effect on perceptions that athletes

Table 5

Descriptive statistics for EDS ($n = 79$) and MEDS coaches ($n = 173$) by CES and LSS scores

<i>Subscale</i>	EDS Coaches (Cluster 1)			MEDS Coaches (Cluster 2)		
	<i>Mean</i>	<i>SD</i>	<i>Z-Score</i>	<i>Mean</i>	<i>SD</i>	<i>Z-Score</i>
CES Motivation	7.09	1.00	-1.13*	8.96	.66	.49
CES Character-Building	7.91	1.15	-1.03*	9.47	.53	.46
LSS Democratic Behavior	3.07	.51	.12	3.17	.50	.07
LSS Social Support	3.10	.56	.20	3.24	.54	.06
LSS Positive Feedback	4.31	.44	-.45	4.60	.42	.20

Note. CES refers to Coaching Efficacy Scale (0, *not at all confident*, to 10, *extremely confident*); LSS refers to Leadership Scale for Sports (1, *never*, to 5, *always*). EDS refers to efficacious, democratic, and supportive coaches; MEDS refers to more efficacious, democratic, and supportive coaches.

* $p < .01$

could learn leadership, $F(1, 223) = 13.49$; $p < .001$; $\eta^2 = .06$, and did learn leadership, $F(1, 223) = 9.20$; $p < .01$; $\eta^2 = .04$. Examination of means revealed that MEDS coaches (could learn $M = 4.54$; actually learn $M = 3.57$) more strongly endorsed these views in comparison to EDS coaches (could learn $M = 4.21$; actually learn $M = 3.17$).

EDS and MEDS coaches also significantly differed in how they educated and trained their captains, $F(20, 197) = 2.75$, $p < .001$, $\eta^2 = .22$ (see Table 5 for all means). In comparison to EDS coaches, MEDS coaches more strongly endorsed that they set a good example for captains to follow, $F(1, 216) = 10.56$; $p < .01$; $\eta^2 = .05$, communicated specific expectations to captains, $F(1, 216) = 18.78$; $p < .001$; $\eta^2 = .08$, talked about leadership with their captains, $F(1, 216) = 19.67$; $p < .001$; $\eta^2 = .08$, and provided resources to captains on leadership, $F(1, 216) = 7.25$; $p < .01$; $\eta^2 = .03$. Additionally, in comparison to MEDS coaches, EDS coaches more strongly endorsed negative aspects of captain education and training. Specifically, EDS coaches felt more strongly that they could have prepared captains better, $F(1, 216) = 7.63$; $p < .01$; $\eta^2 = .03$, and that they would like to educate and train their captains but did not have the knowledge to do so, $F(1, 216) = 13.39$; $p < .001$; $\eta^2 = .06$, materials to do so, $F(1, 216) = 9.28$; $p < .01$; $\eta^2 = .04$, time to do so, $F(1, 216) = 10.52$; $p < .001$; $\eta^2 = .05$, or did not believe the payoff was worth the effort required, $F(1, 216) = 19.80$; $p < .001$; $\eta^2 = .08$. There were no other significant differences for captain education and training strategies between EDS coaches and MEDS coaches.

Discussion

Views and Practices of Coaches on Captain Leadership. The primary purpose of this study was to describe the views and practices of a national U.S. sample of high school coaches on captain leadership. When coaches were asked how they educate and train their captains in leadership, the most strongly indicated responses focused on passive or routine coaching actions, like setting a strong example of what a good leader should be, providing support for their

captains when needed, and setting clear expectations. More intentional efforts, such as providing captains with leadership resources or holding workshops, were less often used. These findings are consistent with qualitative reports from 12 of 13 former high school captains who indicated that coaches did little to deliberately educate or train them in leadership; some captains did not feel prepared for their leadership role and thought their coaches inhibited their leadership development (Voelker et al., 2011). The lack of training and preparation of captains is concerning considering recent research and conceptual models which recognize that leadership and other life skills are more consistently developed when they are intentionally taught and fostered by coaches (Gould, 2016; Gould & Carson, 2008; Pierce et al., 2017). However, some scholars suggest that limited leadership education and training may not be unique to sport contexts. In reflection of school-based leadership development programs in general, Karagianni and Montgomery (2018) noted that although most schools provide ample leadership opportunities, “they run the risk of inserting young people in roles without the appropriate support or structure on a ‘learn-by-doing’ approach” (p. 95). Efforts must be made to better understand why coaches, and perhaps other important adults, are not preparing youth in leadership positions and identify realistic ways to help them implement more intentional leadership education and training.

Further, although nearly all the coaches liked the idea of preparing their captains through formal leadership development programs, only 12% reported that they had their captains participate in this type of education. Failing to educate captains on leadership and assuming they already knew how to lead were indeed the most frequently identified mistakes coaches thought they made when working with captains. The disconnect between what coaches think would be good for their captains and their reported behavior could be explained in several ways. It is possible that although coaches have good youth leadership development intentions, they may not believe they have the time or energy to act on them. Other responsibilities and time demands may

not easily allow for intentional leadership education and training, which is likely viewed as extra to their normal duties. Or, coaches may think that attributes like leadership are incidentally acquired by athletes simply by playing on sports teams, viewing other peer leaders, or trial and error (Coakley, 2016). Coaches may also be unaware of available resources to formally educate and train their youth leaders. Importantly, on-the-job learning, observation of other coaches, and mentorship have been cited as primary sources of coaching knowledge (Erickson, Bruner, MacDonald, & Côté, 2008). However, coaches in the current study reported minimal exposure to formal leadership education or training as a coach and were not intentionally prepared for their own captaincy role as a former athlete. Thus, these coaches may not have an adequate template by which to follow in initiating this type of intentional process with their captains, despite viewing such efforts favorably.

For formal leadership education and training to be effectively implemented, captains and other young people in leadership roles must also be receptive to becoming leaders. van Linden and Fertman (1998) theorized that helping young people to realize that they have leadership potential is the first step to the leadership development process. Interestingly, in Voelker et al.'s study (2011), beliefs that leaders are born and not made were among the reasons that some captains thought formal leadership education and training programs would be ineffective. Further, the coaches in the current sample agreed that not understanding what it means to be a leader and thinking that captaincy is more about recognition than hard work were the biggest mistakes captains make in this role. Together, these findings indicate a need to help athletes who aspire to become captains, or youth in other settings who desire leadership positions, to better understand what leadership involves and to envision themselves as leaders.

A part of helping youth to examine their leadership potential is providing the opportunity to lead (van Linden & Fertman, 1998; Camiré, Trudel, & Forneris, 2012). However, coaches in the current sample reported that they did not give captains enough responsibility. van Linden and Fertman acknowledged

that giving youth real responsibilities, while essential to youth leader development, is often a large obstacle. Walker and Larson (2006) discussed the dilemma that adult leaders of youth programs face in providing both appropriate structure and support while allowing youth enough individual agency. In the present study, the most appropriate captain roles and responsibilities endorsed by coaches pertained to leading peers, such as mediating teammate conflict, confronting teammate misbehavior and rule violation, and making the right but unpopular decisions. However, former high school captains indicated that having these types of responsibilities, such as staying neutral in teammate conflict, were among the most difficult aspects of leadership (Voelker et al., 2011). Clearly, education, training, and support is essential if coaches assign these duties to captains as part of their leadership opportunity.

Coach Leadership Behaviors and Efficacy Differences. A secondary purpose of this study was to examine if the views and practices of coaches differed as a function of their own leadership behavior and coaching efficacy. All coaches in the sample were efficacious in their ability to motivate and build character in their athletes and reported high levels of democratic leadership behavior, social support, and positive feedback, but there was a clear distinction between good (EDS group) and better coaches (MEDS group). Importantly, this distinction was primarily due to differences in the coaching efficacy measure. As predicted, the MEDS group believed more strongly in captaincy as an opportunity for youth to learn leadership and felt that this potential was actualized in their experience. This finding is consistent with Brumbaugh and Cater (2016) who found that in a sample of 4-H youth development educators, perceived importance of youth leadership training was predictive of their confidence in effectively delivering leadership development programming. Believing in the importance of youth leadership and in one's ability to positively impact young people may be key components to improving the quality and extent of youth leadership education and training.

Additionally, coaches in the MEDS group, as compared to the EDS group, reported using more proactive

leadership education and training strategies that closely paralleled the intentional approaches reported by coaches known for developing youth leadership (Gould et al., 2013). In contrast, coaches in the EDS group, as compared to the MEDS group, reported being less equipped to educate and train their captains appropriately in terms of time, materials, and knowledge. Aligning with sentiments by Karagianni and Montgomery (2018), it is plausible that the under-preparedness of coaches to educate and train their captains perpetuates the selection of athletes who are thought to require the least education and training in the first place. These athletes are likely those who already conform to normative ideologies of what it means to be a captain (e.g., someone who calls the coin toss). In these instances, leadership development and diversity would be severely compromised in the captaincy experience. Indeed, our findings suggest a need to examine ways to help coaches become more efficacious in their leadership education and training approaches.

Strengths and Limitations. Pierce and colleagues (2017) cite an overreliance on qualitative work when investigating coaches' life skills development strategies. This study attempted to address this limitation by building upon previous qualitative studies and expanding inquiry to a broader array of coaches in how they use captains and think about the relationship between captaincy and leadership. A major strength of this study was that coaches were not merely selected from one school, a particular sport, or a specific region. The survey was distributed to a national U.S. sample of coaches from a variety of sports. Conducting this survey also allowed us to verify and extend many of the findings that were derived from qualitative studies conducted with high school captains (Voelker et al., 2011) and coaches known for developing captain leadership (Gould et al., 2013). Hence, we have a much better understanding of the scale and scope of the issues involved in scholastic captaincy, how coaches are involved in that process, and how education and training efforts should be focused to better prepare captains for a valuable leadership experience.

The findings from this study form an important basis for future leadership education research efforts in sport and other scholastic contexts. First, intervention studies are needed to determine if efforts to educate coaches, or other adult leaders, about effective youth leadership development strategies actually change their approaches to leadership education and training, and if those actions translate into youth leadership gains. Second, it is often assumed that youth leadership skills learned in one context (e.g., sport) will transfer to other contexts (e.g., the classrooms or out of school jobs). However, little data exist to show that this transfer actually occurs. Therefore, researchers should investigate how significant adults, like coaches and teachers, can facilitate the transfer of leadership skills learned in sport or other contexts to different domains. Recent research has hypothesized the critical role of coaches in this transfer in the sport realm (Bean, Kramers, Forneris, & Camiré, 2018; Pierce et al., 2017), but empirical work is needed to better understand the specific behaviors that facilitate it.

The interpretations of our findings are bound by limitations, including the self-report nature of the surveys and the willingness of participants to respond honestly to survey items. As is often the case with online surveys requests, it was not possible to determine how many coaches actually opened the e-mail (e.g., perhaps the email was sent to a spam folder, sent to an inactive email address, or was not opened if coaches were not checking messages in their off season). Other recent studies with coaches have reported similar ratios between the number of emails sent and the number of respondents completing an online survey (e.g., Machida-Kosuga, Shaubroeck, Gould, Ewing, & Feltz, 2017) and have yielded low response rates from coaches contacted using national databases (e.g., 6.5%; Kroshus, Baugh, & Daneshvar, 2016). However, it was encouraging that our study yielded data from 255 coaches representing the most popular scholastic sports for boys and girls in 44 different states who offered novel insights into leadership development views not previously examined.

Our sample did not vary in efficacy and leadership behaviors in that most of our respondents were at least moderately efficacious in their coaching, were more democratic in their decision-making, and perceived themselves to be engaged in providing social support. Future research could identify a more varied sample of leadership behaviors with regard to how coaches view and interact with captains, although we hypothesize that coaches who are more autocratic may be less likely to engage in autonomy-sharing practices, such as having a team captain in the first place. In examining if and how coaches use sport as an opportunity for athlete leadership education more broadly, scholars could consider different operational definitions of peer leaders, such as those identified by Fransen and colleagues (2014; e.g., task leader, motivational leader, social leader, and external leader). Coaches may be more inclined to comment on this variety of peer leaders on their team, as opposed to just team captains (see also Cotterill & Fransen 2016). Finally, our sample was not as racially and ethnically diverse as we hoped, which must be addressed in future studies by engaging directly with racially and ethnically diverse communities.

Practical Implications. The results of this study inform efforts to educate coaches, and others working directly with scholastic athletes, on developing leadership skills through the sport captaincy experience. The coaches' responses suggest it is critical that athletes are engaged in a development process that helps them to examine their leadership potential, their responsibilities as a captain, and the work involved in being a good leader through education, mentorship, questioning, and opportunities to lead. Additionally, the teaching and learning of strategies for balancing multiple roles must be strengthened. Being a leader, friend, and teammate simultaneously can make responsibilities like mediating team conflict, confronting rule violations, and making unpopular decisions quite difficult. Leading one's peers can be challenging for leaders of any age to negotiate, but especially for young people just learning how to lead. Coaches

should be prepared to offer strategies to help captains navigate this process.

Researchers and practitioners interested in youth leadership play an important role in the design and dissemination of leadership education and training resources for coaches and captains alike. The free online Captains Course offered through the NFHS makes formal education and training possible in a time-efficient and cost-effective manner (Pierce, Blanton, & Gould, 2018). Findings from the present study suggest that this type of opportunity may be advanced through the integration of an efficacy-building framework that considers how coaches view their ability to act on any recommendations and strategies offered. Educators could consider expanding offerings, like the Captains Course for high school student-athletes, to include a series of modules for coaches to become more familiar with the varied types of peer athlete leaders, learn how to best leverage the team captain position, and more explicitly promote leadership lessons and transferable life skills.

Finally, sport has the potential to be a powerful context for youth leadership education. With over 8 million students taking part in school-sponsored sports each year (NFHS, 2017), the sport context is one where young people are highly involved in activities that have great meaning in their own lives and are also viewed as significant in their communities (Gould & Voelker, 2010). It is a context that those interested in youth leadership in general should consider both leveraging and studying. Can the sport captaincy experience serve as a vehicle for developing leadership that transfers beyond sport? How might the sport experience fit within the portfolio of youth leadership education efforts? What are the benefits and limitations of current sport leadership education efforts for young people? Can coaches and other school personnel be effectively trained to enhance athlete leadership development and, if so, what are the best strategies for doing so? These are questions not only relevant to those working in sport but in youth leadership education in general.

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