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NATIONAL COACH SURVEY: FINAL REPORT

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susan crown exchange

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National Coach Survey Final Report

In 2022, LiFE*sports* at The Ohio State University (OSU), the Aspen Institute's Project Play Initiative, the Susan Crown Exchange, and Nike partnered to conduct the first-ever youth sport coach survey of its kind in the United States (U.S.). The goal of the 2022 National Coach Survey was to examine youth sport coaches' backgrounds, experiences, philosophies, behaviors, and training histories and interests, while also exploring whether coach training makes a difference in relation to improved coaching practices and, ultimately, perceived impact on athletes. Findings provide useful information about youth sport coaching in the U.S. and can be used to drive improvements in youth sport policy, practice, coach preparation, and training.

Here, we first review the literature by synthesizing past research and gaps, laying the groundwork for the present analysis. Next, we outline the study methods, describing the procedures, survey items, and statistical analyses. Results then summarize data on background and training histories and interests, confidence in certain coaching behaviors, priority coaching philosophies, preparation to work with specific populations, and other variables of interest. We then present findings that demonstrate how trained coaches report higher levels of perceived coaching effectiveness, perceived impact, and career winning percentages as compared to those not trained in specific competencies. Finally, we discuss the overall findings and illuminate ways to support youth sport coaches through training, continuing education, and professional development.

Background and Rationale

Sport engages youth in physical activities that promote health and well-being, encourage social interactions that transcend cultures and boundaries, and empower and motivate participants (Anderson-Butcher & Bates, 2021). Indeed, research demonstrates the role of youth sport in promoting health and mental health outcomes, as well as in reducing youth problem behaviors (Eime et al., 2013; Eccles, Barber, Stone & Hunt, 2003; Jones et al., 2017; Pate et al., 2000; Spruit et al., 2016; Super et al., 2017). The inherent design of youth sport also requires the implicit and explicit use of valuable skills on and off the field. Given mass participation rates and universal appeal, the potential for youth sport to impact positive youth development (PYD) is vast. However, positive experiences in youth sport often are dependent on non-sport components, including interactions with coaches and other social agents (Amorose & Anderson-Butcher, 2015; Anderson-Butcher, 2019; Newman et al., 2021; Riley et al., 2017).

Coaches can make or break the youth sport experience. In fact, research demonstrates how coaching philosophies that prioritize social and emotional development above performance and talent development are critical for PYD (Anderson-Butcher et al., 2018; Côté & Gilbert, 2009; Gould et al., 2006, 2007; Holt & Neely, 2011). Requisite knowledge, previous training, past histories in coaching, confidence in coaching skills, and having played sport produce high-quality coaches (Camiré, 2014; Côté & Gilbert, 2009; Feltz et al., 1999; McDonald et al., 2020). Structured coaching strategies that intentionally teach life skills and foster social and emotional learning (SEL) produce more favorable outcomes (Anderson-Butcher, 2019; Bean & Forneris, 2016, 2017; Beni et al., 2017; Camiré et al., 2009; Gould & Carson, 2008; Pierce et al., 2018; Turnnidge et al., 2014). Further, coaches who set boundaries, offer consistent and structured programming and feedback, set expectations for learning and mastery, and encourage hard work and fun are most effective (Anderson-Butcher et al., 2021; Amorose & Weiss, 1998; Beni et al.,

2017; Gould et al., 2012; Haudenhuyse et al., 2014; Holt et al., 2016; Newton et al., 2007; Whitley et al., 2019). Also important is the modeling and reinforcing positive behaviors and good sportspersonship (Bolter & Weiss, 2008; Feltz et al., 1999; Riley et al., 2017). Yet still, some have found success as measured by win/loss records is an indicator of effectiveness (Boardley, 2018).

Although research has begun to distill specific coach characteristics and coaching strategies effective for PYD, there are still many gaps in the research. Many studies on youth sport lack sufficient descriptions of the methodologies used or are limited in methodological rigor (Coalter, 2010, 2013; Holt et al., 2016; Whitley et al., 2019). Most coaching studies to date have relatively small sample sizes and only explore coaches from one to two sports (often team sports that are more high profile; Camiré, 2014). Likewise, research too often focuses on individual-level practices (Coakley, 2011; Haudenhuyse et al., 2014; Jones et al., 2017) and psychological processes (Coakley, 2011; Jones et al., 2017) and fails to account for social and political contexts, competition level, organizational capacities, demographics of participants and varying program features (Anderson-Butcher 2019; Coakley, 2011; Coalter, 2010).

Some measurement issues also exist. Most studies treat sport participation as a single variable rather than categorizing participation and coaching by types of involvement (Jones et al., 2017). Similarly, youth sport research often fails to delineate the types of sports programs offered (Clark et al., 2015). Certain coaching strategies also may be more effective for certain groups of youth, pointing to the need for individualized strategies for girls, those with disabilities, youth from culturally diverse groups, and those living in poverty (Anderson-Butcher et al., 2018; Fernandez-Gavira et al., 2017; Schulenkorf et al., 2016). Last, coaching practices, philosophies, and strategies may be limited due to barriers such as financial costs, lack of access to facilities and safe spaces, transportation, the timing of programs, and funding (Fernandez-Gavira et al., 2017; Edwards & Rowe, 2019; Rosso et al., 2016, Skinner et al., 2008; Schulenkorf et al., 2016; Spaaij et al., 2016). Indeed, there is a need to explore varying sport contexts and specific pedagogical practices to determine the best way to structure sport through intentional coaching practices (Spaaij et al., 2016).

Further, the value of coach training, especially focused on PYD and SEL, is increasingly important (Anderson-Butcher et al., 2019; Barnett et al., 1992; Côté & Gilbert, 2009). Twenty percent of youth in the United States lack age-appropriate social and/or life skills (Blumberg et al., 2008). Recent data from the Centers for Disease Control and Prevention (2021) suggest a 40% increase in anxiety, depression, and thoughts of self-harm among youth over the past decade. Importantly, some research suggests that coach training in PYD and SEL strategies can improve youths' motivation, satisfaction, and continued participation (Falcão et al., 2012; Camiré et al., 2020). However, we know that coach participation in training beyond health/safety protocols is limited (Anderson-Butcher et al., 2020; Bates & Anderson-Butcher, in review). Ensuring coaches are better prepared to address the diverse and multi-faceted needs of youth remains a growing priority.

Given this context, the current study addresses some of these gaps in the literature. We explore coaching practices and philosophies among coaches in multiple sports, at different competitive levels, from varying backgrounds (i.e., paid vs. unpaid, history in coaching, etc.), of players from different genders and ages, and varying perspectives. A few research questions guided this work, including: What types of background, history in sport and coaching, coaching philosophies, and

practices do youth sport coaches in the United States bring with them to this important social setting? To what extent do they incorporate best practices in coaching effectiveness into their coaching practices? Do coaches from different backgrounds and/or sports use similar or different coaching strategies when working with youth? Does training and preparation produce more confident, effective coaches and, in turn, promote broader impact on youth? Findings will address gaps in the youth sport coaching literature and inform efforts to improve the quality of youth sport experiences provided by coaches across the United States.

Method

The study builds from prior research exploring coaching practices in the State of Ohio. Specifically, an initial coach study was completed in 2019 as part of the Aspen Institute's State of Play Central Ohio report. Considerable time was spent here reviewing the literature on coaching effectiveness, creating a survey item pool, and exploring the psychometric properties of a Coach Survey. Following survey development, 461 coaches from the Central Ohio area completed the survey online and findings were used as part of a local youth sport needs assessment (Anderson-Butcher et al., 2019).

This initial work, in turn, was used to drive the development of an Ohio-based coach training agenda funded by the Susan Crown Exchange called Coach Beyond. As part of the first year of Coach Beyond (2021), over 4,000 Ohio coaches completed the next iteration of the Coach Survey, also allowing for the survey to be again tested for reliability and validity and further refined in relation to its overall measurement properties. Please note the results of this study (Bates & Anderson-Butcher, 2022; Bates et al., in review) are currently driving Ohio-based coach training done by LiFE*sports* in partnership with the Ohio High School Athletic Association. This National Coach Survey builds from this initial research in Ohio and strives to assess the youth sport coach landscape across the country.

Procedures

All study procedures were approved by the OSU Institutional Review Board. Participants were recruited via posts on social media and emails sent out to contacts on a comprehensive list of coaches, school leaders, and sport administrators from for-profit and non-profit sectors (i.e., club teams, public and private schools, clubs, associations, and other sport entities such as parks and recreation departments, etc.). Additionally, leaders from sport organizations and athletic associations forwarded recruitment scripts along with the survey link through their networks, membership databases and distribution lists. Further, the Aspen Institute, Nike, and the Susan Crown Exchange, partners in this research, were critical in spreading the word and recruiting coaches and organizations. Online data collection using Qualtrics occurred between March and October of 2022. All participants provided informed consent for participation.

No identifiable information was collected on the survey, and therefore data could not be traced back to individual respondents during analyses. For every 500 people who completed the survey and provided an email address, a random participant was awarded a $50 electronic gift card. Organizations with more than 500 coaches completing the survey will eventually receive a summary report synthesizing their own data. This served as another incentive for participation.

Measurement

Items on the survey explored variables such as coach background, history in sport and coaching, philosophy, confidence in relation to current practices, and perspectives on sport. Specific constructs and respective items of interest included measures of:

Demographic Characteristics and Background. Several items explored the demographics of coaches, including age, gender, race/ethnicity, employment outside of sport, age, level of education, occupation, licensure/certification status, and roles as coaches. Also, several questions explored varying characteristics of the youth coached, such as their age, gender, and the percent of youth on the team living in poverty. Other items explored characteristics of the sport context, such as the type of sport (i.e., soccer, basketball, etc.), level of competitiveness, whether they coached at a school or in the community, and their level of pay (if any).

Coach Training and Preparation. Building from past research by Cote & Gilbert (2014) and Camiré et al. (2014), participation in and desired interest in several different types of training were examined and surveyed. Specifically, participants reported on past coach trainings they had attended and noted their desire for more training in specific areas. Example training areas assessed included those focused on health and safety (i.e., CPR, basic first aid, etc.), traditional coaching practices (i.e., developing sport skills and tactics), PYD (i.e., relationship building, developing life skills), fostering a positive environment (i.e., team cohesion, etc.) and mental wellness (i.e., suicide protocols, linkage to resources). In addition, coaches were asked to report on their perceived preparation to work with specific populations of athletes, such as those with ADD/ADHD, physical disabilities, chronic illness, behavioral problems, etc.

Coaching Philosophies. Several items explored coaches' philosophy of coaching, building from and extending original values and priorities researched previously by Camiré (2014) and Lemyre et al. (2007). Here participants were given a list of 17 items and asked to order them from most to least important. Example values reflecting their philosophies included ones such as winning games/competitions, teaching life skills, creating a sense of belonging, making sure everyone plays, etc.

Confidence in Coaching Practices. The Coach Beyond Index (Bates & Anderson-Butcher, 2021) was used to assess coaches' confidence in various coaching practices, both ones focused on traditional coaching practices and those related to PYD and broader mental wellness. Respondents reported on their different coaching practices during the last season coached. There are five subscales on the Index which assess the following practices: health and safety (i.e., handling injuries, concussions), coaching the X's and O's (i.e., traditional coaching practices related to tactics and techniques), teaching life and leadership skills through sport, fostering a positive team environment, and supporting athletes' mental wellness. Items were measured on a scale of strongly disagree to strongly agree. Coaches were asked to rank from "strongly disagree" to "strongly agree" how confident they were in their abilities in these areas.

Motivations for Coaching. Several items on the survey explored participants' motivations for coaching. Specifically, coaches were asked to rate how influential certain factors were in influencing their decisions to coach. Example items include, "I love

teaching sport," "I played sports as a child," "I love working with young people," and "I am a parent/caregiver of an athlete."

Satisfaction, Stress, Likelihood to Continue, and Winning. Coaches also reflected on their overall coaching experience by indicating how satisfying their coaching experience was, how likely they were to continue coaching in the future, and how stressful the coaching experience was for them. Items were rated on a scale from "not at all" to "extremely." They also reported on their estimated winning percentage over the course of their careers, last season, and in their primary sport.

Perceived Impact. Coaches were asked to share their perceptions related to the impact they have had on their athletes in the setting where they coached their primary sport. Coaches ranked their impact on a scale from 1 to 100 with 1 indicating low impact, 50 indicating moderate impact, and 100 indicating high impact. Sport-Related Performance Impact included items reflecting traditional sport outcomes such as developing sport skills and winning championships/games. Youth Development Impact included items such as developing life and leadership skills among their athletes and helping youth persist in educational settings. Also, all eight items were added together to also create an Overall Impact Scale.

Other Factors. A few other factors were explored that were of particular interest to our research team. For example, we wanted to better understand coaches' perceptions of parent/caregiver behaviors in sport. As such, coaches were asked how often did parents/caregivers of athletes on their team praise or criticize their own child, other athletes on the team, and opponents. We also were interested in better understanding how coaches were supported and evaluated. As such, several questions asked whether participants had been evaluated during their last season, and whether the evaluation was helpful in improving their coaching practices. Other items ascertained the degree to which the person they report to provides constructive feedback, supports them in their role as a coach, or uses wins/losses to determine their success as a coach. Last, we also asked coaches to reflect on the degree to which they perceived a need for more sport for targeted groups of youth (i.e., girls, middle school, those with disabilities, etc.), as well as a need for more coaches, in general.

Analyses

Data from Qualtrics were exported to Microsoft Excel and SPSS, checked for errors, and managed for missing data. Please note valid percentages were used throughout the descriptive analyses to reflect the percent when missing data are excluded from the calculation. Descriptive statistics explored variables of interest across the sample, as well as among different subgroups of coaches (i.e., competitiveness level, school, or community, etc.). Follow-up analyses exploring significant differences among groups involved basic t-tests, ANOVAs, and MANOVAs. Ultimately, analyses were largely descriptive and examined trends across subgroups to better understand the overall coaching landscape. Our analyses exploring group differences should be interpreted with caution given increased risks for Type I error (i.e., false positive).

The main part of this report summarizes key findings of particular relevance to the national agenda. The Appendix includes tables summarizing data points across groups and further analyses in more detail. In the future, additional analyses will use structural equation modeling and other more advanced statistical techniques (i.e., cluster analyses, etc.) to examine further relationships among variables concerning coaching practices and perceived outcomes. To reference this report, please utilize the following citation:

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Coach Demographics

In total, 10,661 coaches participated in the National Coach Survey. To specifically examine the context of youth sport, we removed the 176 coaches who were currently working in collegiate settings. Therefore, this report summarizes findings from the 10,485 youth sport coaches who participated in the survey. Demographics describing these coaches provide an indication of who took the survey, but also provide a snapshot into the backgrounds and characteristics of coaches across the U.S. A breakdown of the demographic characteristics of coaches in the sample can be found in **Appendix A**. The following provides an overview of the unique demographic characteristics of this sample of coaches.

Gender, Race, and Age

The sample was largely male (74%) and White Caucasian (79%). The average age of coaches in the sample was 45.62 years with 36% of the sample identifying as over 50 years of age.

Years of Coaching Experience

Study participants coached for an average of 12.95 years. There was a lot of variability in the years coached, however, as 31% of coaches reported they coached less than one year; 25% reported coaching for 5-10 years; 24% coached for 11-20 years; and 21% coached for 21 or more years.

Geographic Location

Coaches from every state completed the survey, with the largest representation from the three states where the high school athletic associations/departments were active in distribution: California (17%), Ohio (15%) and Washington (12%). In total, 62% of coaches reported they primarily coached youth who lived in their own zip code.

Educational and Occupational Background

Overall, 77% of coaches reported having a Bachelor's degree or more advanced degree. Most majored in degree pathways such as business, education, engineering, law, liberal arts/humanities, social sciences, and leisure/fitness studies. In total, 36% of coaches with an undergraduate or graduate degree majored in education, parks/recreation, leisure, and fitness studies, or psychology (16% of the full sample).

Employment and Hours of Coaching

Notably, 83% of coaches reported they were employed outside of coaching. The most common occupations outside of coaching reported were those in the business arena, with 21% of the

sample reporting employment in occupations such as Sales, Business/Financial Operations, and Management-related occupations. Further, 83% of coaches reported working 35 hours or more a week outside of their coaching role in their full-time jobs.

Organizations, Apps, & Affiliations

Several organizations distributed the survey through their networks and social media, with greatest representation from soccer organizations, including US Youth Soccer (n=1256), the U.S. Soccer Federation (n=759), and the U.S. Soccer Foundation (n=248). Two high school athletic associations (Washington and Ohio) and AAU had nearly 500 coaches each report affiliation, and Little League had nearly 1000 coaches complete the survey (n=948). Three sport apps also helped share out the survey link, including Team Snap (n=2149) and Arbiter (n=1059).

Sports Coached Throughout Career

Participants in the sample reported coaching 38 specific sports, with the greatest representation from the sports of baseball (33%), basketball (35%), soccer (40%), softball (17%), tackle football (16%), track & field (14%), and volleyball (10%). In total, 36% of coaches reported coaching only one sport throughout their coaching career, whereas 64% reported coaching two or more sports throughout their career. The mean number of sports coached during their career was approximately 3 sports ($M = 2.73$, $SD = 2.28$).

Roles Held Throughout Coaching Career

Coaches reported the different roles they had held during their careers. These data demonstrate how coaches have histories in different coaching roles, with 65% reporting they had been volunteer coaches, 74% reporting they had been assistant coaches, and 79% reporting they had been head coaches at one time in their careers. Some also had served in other roles in youth sport, such as serving as a Board Member (23%) or acting as a Sport Administrator (14%). Notably, 52% of the sample reported that during their coaching career they had a child who was an athlete. Overall, percentages are greater than 100% as coaches could select all of the various roles they have held during their careers. More information on the multiple roles coaches held during their careers can be found in Appendix A.

Settings Coached During Coaching Career

Coaches also reported on the different settings where they had coached throughout their careers. These data demonstrate how coaches often engage in multiple settings and sports systems throughout their careers. For example, 62% reported coaching in a school-based setting at one point in their career; 56% developmental; 68% recreational; 59% competitive; 13% collegiate; 6% adapted; and 4% other. To demonstrate the overlap in number of settings coached, we found 35% of school-based coaches also reported having coached in developmental settings during their careers. Further, 41% of coaches who had coached in developmental settings also reported coaching in competitive settings during their careers.

Pay and Hours Worked Last Season in Primary Sport

In relation to pay, 41% of the coaches in the sample were unpaid in their last season coaching their primary sport. Further, 33% of coaches were paid under $5,000 and 26% were paid over $5,000 in their last season of coaching their primary sport. In relation to hours coached last season, 9% worked less than 5 hours/week, 23% coached between 6-10 hours, 17% coached

between 11-15 hours/week, 17% worked between 16-20 hours; and 34% worked more than 20 hours/week.

Coaches Primary Sport, Role, and Setting

To understand participants' level of engagement in youth sport (i.e., sport, role, and setting), we asked participants to select their primary sport, coaching role last season, and setting coached most often. When exploring primary sport participants coached, these data demonstrate the most representation from soccer coaches (24%), baseball (15%), basketball (12%), tackle football (6%), and softball (6%). We also asked coaches to rank their sport on a continuum of 1 to 100, with 1 representing free play and 100 representing organized sport. Most coaches in this sample perceived the last season sport coached as highly organized (Mean = 89.71, SD = 15.57). These data suggest that the coaches in this sample primarily coached in highly competitive sporting contexts (which is similar to the 59% who report coaching in a competitive setting). Table 1 overviews participants' primary sport coached.

Table 1. Primary Sport Coached

Sport	Total	%	Sport	Total	%
Badminton	304	3%	Golf	249	2%
Baseball	1559	15%	Gymnastics	94	1%
Basketball	1256	12%	Ice Hockey	129	1%
Biking	620	6%	Lacrosse	180	2%
Bowling	114	1%	Martial Arts	35	<1%
Boxing	107	1%	Parkour	24	<1%
Cheerleading	163	2%	Rowing	26	<1%
Cross Country	290	3%	Rugby	52	<1%
Curling	45	<1%	Sailing	24	<1%
Dance and Step	69	<1%	Soccer	2500	24%
Diving	41	<1%	Softball	681	6%
Esports	34	<1%	Street Hockey	30	<1%
Fencing	261	3%	Swimming and Diving	168	2%
Field Hockey	51	<1%	Squash	18	<1%
Figure Skating	282	3%	Track & Field	425	4%
Flag Football	175	2%	Tennis	237	2%
Tackle Football	631	6%	Volleyball	427	4%
Free play	38	<1%	Wrestling	246	2%
Frisbee	30	<1%	Other	214	2%
General Fitness	60	<1%	--	--	--

In their last season coached, 42% of the coaches in the sample coached in schools. Of those who coached in a school, 86% coached at the high school level, 83% coached in public school settings, and 50% of coaches reported being educators at the school. Others coached primarily in competitive (29%), recreational (20%), and developmental settings (6%). Notably, 51% of the coaches' teams were selected using tryouts, which again aligns with the level of competition often seen in school and competitive club settings. Furthermore, 2/3 of the sample were Head Coaches during their last season coached, and most had formal roles (as only 9% identified themselves as volunteer coaches). See Table 2.

Table 2. Setting and Role During Last Season

Setting Last Season	N	%	Role During Last Season	N	%
School	3899	42%	Head Coach	5925	66%
Developmental (8 or younger)	590	6%	Assistant Coach	2066	23%
Recreational	1855	20%	Volunteer Coach	824	9%
Competitive	2729	29%	Other	223	2%
Adapted	17	<1%			
Other	187	2%			

Team Characteristics (Gender, Age, Race, and Socioeconomic Status)

In total, 40% of the participants coached male athletes, 27% coached female athletes, 19% coached male and female athletes, and 14% coached co-ed teams during their last season. Additionally, a majority of the teams were comprised of youth aged 14 to 17 (54%) which aligns with the sample composition of competitive and school-based coaches.

Table 3. Gender and Age of Athletes

Gender Coached Last Season	N	%	Ages of Athletes on Team	%
Male	3721	40%	Under age 7	7%
Female	2494	27%	8-13	35%
Equally male and female	1747	19%	14 -17	54%
Co-ed	1351	14%	18 and older	3%

Coaches were asked to estimate the racial and socioeconomic backgrounds of athletes on their teams by reporting a percentage indicator ranging from 1 to 100 of those who identify as these various identities on their teams. Based on these estimates, mean percentages were generated that demonstrate a majority of teams were comprised of White athletes (average composition reported was 42%) as compared to teams comprised of Black, Indigenous youth of color (BIPOC; average composition ranged from 1% to 8% among subgroups). Further, coaches reported approximately 20% of athletes or 1 out of 5 identified as youth living in poverty. Living in poverty was defined based on perception and all indicators reported above should be interpreted with caution. These are estimates based on coach perceptions and not primary data collected from athletes or their parents/caregivers.

Table 4. Racial and Socioeconomic Make-Up of the Team (Average %'s reported)

Racial Background	Average % of Athletes on Team Reported	Mean (SD)	Reported 50% or More of Team is
Black/African American	6%	5.88 (13.44)	2%
Hispanic/Latino	8%	7.71 (15.65)	3%
Asian/Pacific Islander	3%	3.22 (9.25)	1%
White	42%	41.60 (36.61)	39%
Native American or American Indian	<1%	0.84 (5.25)	<1%

Multiple Races	3%	3.41 (11.01)	1%
Other	1%	1.05 (12.68)	<1%

Socioeconomic Background	Average % of Athletes on Team Reported	Mean (SD)	Reported 50% or More of Team is
Living in Poverty (Receive free and reduced lunch, experience food or housing insecurity, have unmet basic needs)	20%	19.80 (26.40)	12%

Motivations to Coach

The coaches in this sample reported multiple motivations influencing their decision to become a coach, with two primary ones involving their love of teaching sport (83%) and desire to stay involved in the game (79%). Others related to their desires to teach young people, including how they wanted to develop young people in the community (82%) and they love working with young people (81%). Many were motivated by their past sport participation, with about 3 out of 4 reporting they played sports in their childhood. Further, 66% were motivated to coach because they were the parent/caregiver of an athlete. Interestingly, 48% were approached by someone and asked to serve as a coach, and only 14% reported they coached to make extra money. When further exploring motivations related to coaching by levels of pay, coaches paid over $5,000 tended to be most motivated and influenced by all of the factors. Most salient was the difference in being motivated because they "love teaching sport" (64% versus 41%) compared to unpaid coaches.

Table 5. Motivations to Coach

To what degree did the following influence your decision to become a coach:	% Very or Extremely Influential
I love teaching sport.	83%
I wanted to develop young people in my community.	82%
I love working with young people.	81%
I wanted to stay involved in sport.	79%
I played sports as a child.	78%
I played sports in high school.	74%
I wanted to give back to my community.	70%
I am the parent/caregiver of an athlete.	66%
I had great coaches in my life.	58%
I was approached by someone to serve as a coach.	48%
I played sports in college.	46%
Coaching is locked upon favorably by my job.	22%
I wanted to make extra money.	14%
Coaching is required for my job.	12%

Table 6. Motivations to Coach by Pay Last Season

To what degree did the following influence your decision to become a coach:	Pay Last Season		
	Unpaid	Paid under $4999	Paid over $5000
Motivations	% Extremely influential		
I love teaching sport.	41%	61%	64%
I wanted to develop young people in my community.	41%	54%	49%
I love working with young people.	36%	55%	54%
I wanted to stay involved in sport.	36%	53%	57%
I played sports as a child.	45%	59%	58%
I played sports in high school.	38%	60%	55%
I wanted to give back to my community.	35%	41%	36%
I am the parent/caregiver of an athlete.	64%	37%	34%
I had great coaches in my life.	19%	36%	38%
I was approached by someone to serve as a coach.	15%	22%	24%
I played sports in college.	19%	37%	43%
Coaching is looked upon favorably by my job.	4%	11%	18%
I wanted to make extra money.	1%	6%	11%
Coaching is required for my job.	2%	5%	16%

There also were differences in motivations to coach based on the level of competition within the sporting context. Overall, those coaches at more competitive levels (i.e., defined as those working in school and competitive club settings) reported greater motivations to coach across all factors (except for in relation to being the parent/caregiver of an athlete; 43% compared to 60%). The ones most influential to coaches at competitive levels of sport related to their love of teaching sport (58% reported this was extremely influential compared to 40% of rec/developmental coaches) and having past histories of sport involvement (55% reported playing sports in high school was extremely influential to their decisions to coach compared to 37% of rec/developmental coaches). Coaches at the developmental/recreational level were more highly motivated by being a parent/caregiver of an athlete (60%), because they love teaching sport (40%), and because they played sports as a child (46%).

Coaching Behaviors

All coaches were asked about their ability to engage in various coaching behaviors that support the whole athlete in and out of sport. Items were measured on a scale of strongly disagree to strongly agree. Items that generated the highest and lowest percentages of coaches reporting they felt highly confident (i.e., strongly agree) are reported below. Coaches were asked, "How confident are you in your ability to…" Specific breakdowns of confidence items can be found in **Appendix B.**

Table 7. Confidence in Coaching Behaviors

5 Most Confident Coaching Behaviors	5 Least Confident Coaching Behaviors
1. Promote good sportspersonship	**1.** Help athletes navigate the pressures of social media
2. Make athletes feel welcome on a team	**2.** Link athletes to mental health resources
3. Teach basic techniques/skills	**3.** Refer athletes to supports for unmet basic needs
4. Report child abuse and neglect	**4.** Identify off the field stressors among athletes
5. Create an inclusive environment	**5.** Reduce performance anxiety among athletes

Coaches reported feeling confident in their ability to promote good sportspersonship

Overall, coaches were most confident in coaching behaviors related to team culture/climate-related competencies, ones such as promoting good sportspersonship (66% reporting highly confident), creating an inclusive environment (55%), and making athletes feel welcome on the team (65%). They also felt confident in teaching the basic techniques/skills of the sport (63%), as well as reporting child abuse and neglect (57%). They were asked to identify the areas of coaching where they were least confident. Coaches in this sample were least confident in coaching behaviors pertaining to student-athlete mental health, ones such as helping athletes navigate the pressures of social media (only 17% feel highly confident), linking athletes to mental health (18%), identifying off the field stressors among athletes, (19%), and reducing performance anxiety (20%). They also were less confident in their ability to refer athletes to supports for basic needs (18%).

Only 18% of coaches reported feeling highly confident in their ability to link athletes to mental health resources

Interestingly, data demonstrate how coaches were confident in their traditional coaching behaviors, ones more central to sport coaching. Yet, a majority also demonstrate room for growth in their perceptions of these skills. For instance: only 39% reported feeling highly confident (i.e., strongly agree) in regard to their ability to handle concussions, 39% in their

ability to detect subtle technical errors, 37% in their ability to prepare for competitions against strong competitions, 42% in their ability to provide constructive feedback, and only 35% were highly confident in their ability to communicate with athletes when they are underperforming.

Differences by Subgroups

Differences in coaching behaviors were examined in a myriad of ways, primarily to determine differences based on level of competition and among educators vs. non-educators. Table 8 overviews these findings.

Level of Competition High vs. Low

Coaches reported differences in their confidence levels based on setting and role. Across all subscales assessing confidence in various coaching behaviors, competitive sport coaches (those in schools, clubs, etc.) rated their confidence levels significantly more favorably than those coaching at the recreational/developmental levels (except in the area of fostering a positive environment where the two groups were fairly similar).

Educator vs. Non-Educator

Similarly, differences in coaching confidence were found among coaches working in school settings (i.e., educators vs. non-educators). Specifically, statistically significant differences were identified in mean scores on subscales measuring coach practices (X's and O's), PYD (i.e., teaching life and leadership through sport), and Supporting Mental Wellness behaviors (i.e., ones assessing mental health-related practices). Scores were more favorable for coaches employed by the school as compared to those not employed by the school.

Table 8. Coaching Behaviors by Level of Competition and Role as School-Based Coach

Category	Level of Competition		School-Based Coaches		Overall
	High Level of Competition (School/Competitive)	Low Level of Competition (Rec/Developmental)	Educator	Non-educator	
How confident are you in your ability to…	**% Strongly agree**				
Health and Safety Overall Mean (SD)	**4.23 (0.70)***	4.01 (0.84)	4.23 (0.69)	4.28 (0.68)	4.17 (0.75)
handle concussions.	36%	31%	36%	38%	39%
handle injuries.	42%	33%	41%	45%	35%
Coaching the X's and O's Overall Mean (SD)	**4.35 (0.48)***	4.13 (0.50)	**4.39 (0.48)***	4.29 (0.46)	4.29 (0.49)
prepare for competitions against strong opponents.	36%	23%	45%	36%	37%
make strategic decisions in pressure situations.	52%	40%	53%	48%	49%
maximize team strengths during competitions.	45%	28%	48%	41%	41%
detect subtle technical errors.	42%	27%	43%	36%	39%
support the diverse needs of athletes.	43%	36%	46%	40%	41%
communicate with my athletes when they are performing well.	49%	45%	52%	44%	48%
teach basic techniques/skills.	65%	56%	65%	63%	63%
communicate with my athletes when they are underperforming.	38%	26%	41%	33%	35%
accurately assess the physical conditioning of athletes.	37%	24%	41%	35%	34%
set clear expectations for how I choose a team.	44%	25%	50%	38%	39%
give constructive feedback to athletes.	43%	36%	44%	39%	42%

Category	Level of Competition		School-Based Coaches		Overall
	High Level of Competition (School/Competitive)	Low Level of Competition (Rec/Developmental)	Educator	Non-educator	
How confident are you in your ability to…	**% Strongly agree**				
debrief with athletes after a competition.	44%	31%	47%	39%	41%
Teaching Life and Leadership Skills Overall Mean (SD)	**4.30 (0.50)***	4.09 (0.54)	**4.37 (0.48)***	4.26 (0.49)	4.28 (0.52)
promote good sportspersonship.	65%	66%	64%	67%	66%
effectively motivate athletes.	41%	34%	44%	36%	39%
teach life skills through sport.	51%	33%	55%	49%	47%
use goal-setting techniques with athletes.	36%	26%	50%	54%	34%
develop my athletes into leaders.	32%	21%	36%	29%	29%
serve as a mentor to athletes.	51%	41%	55%	47%	49%
build confidence among athletes.	44%	41%	44%	41%	44%
resolve interpersonal conflicts on a team.	32%	26%	35%	28%	31%
ensure athletes on my team are successful academically.	36%	16%	47%	33%	31%
Fostering a Positive Environment Overall Mean (SD)	4.48 (0.51)	4.48 (0.51)	4.48 (0.51)	4.47 (0.51)	4.49 (0.51)
create an inclusive environment.	54%	54%	41%	44%	55%
make athletes feel welcome on a team.	64%	67%	62%	62%	65%
foster positive team dynamics and cohesion.	46%	43%	47%	44%	46%

Category	Level of Competition		School-Based Coaches		Overall
	High Level of Competition (School/Competitive)	Low Level of Competition (Rec/Developmental)	Educator	Non-educator	
How confident are you in your ability to…	**% Strongly agree**				
Supporting Mental Wellness Overall Mean (SD)	**3.95 (0.57)***	3.75 (0.60)	**4.03 (0.55)***	3.91 (0.56)	3.90 (0.59)
report child abuse and neglect.	59%	50%	60%	56%	57%
develop mental toughness among athletes.	35%	24%	39%	33%	33%
identify mental health concerns among athletes.	26%	19%	29%	23%	25%
help athletes regulate their emotions.	26%	20%	28%	22%	25%
refer athletes to supports for unmet basic needs.	20%	13%	25%	17%	18%
link athletes to mental health resources.	19%	13%	23%	16%	18%
communicate with parents/caregivers.	40%	41%	39%	38%	40%
help athletes navigate the pressures of social media.	19%	11%	23%	17%	17%
deal with the pressures of coaching.	41%	33%	40%	39%	39%
set expectations for our team related to social media.	26%	13%	32%	23%	23%
prevent burnout among athletes.	26%	23%	27%	24%	25%
identify off the field stressors among athletes.	21%	14%	25%	16%	19%
incorporate mental imagery into training/workouts.	26%	18%	27%	25%	24%
utilize mindfulness exercises with athletes.	23%	18%	25%	22%	22%

Category	Level of Competition		School-Based Coaches		Overall
	High Level of Competition (School/Competitive)	Low Level of Competition (Rec/Developmental)	Educator	Non-educator	
How confident are you in your ability to…	**% Strongly agree**				
reduce performance anxiety among athletes.	20%	18%	20%	19%	20%

Note. This overall measure called the Coach Beyond Readiness Index consists of 5 subscales: The health and safety subscale consists of 2 items; the Coaching the X's and O's subscale consists of 12 items; the Teaching Life and Leadership Through Sport subscale consists of 9 items; the Fostering a Positive Team Environment subscale consists of 3 items; and the Supporting Mental Wellness subscale consists of 15 items. Each item is measured on a scale of 1 = Strongly disagree and 5 = Strongly agree. Higher scores indicate greater levels of confidence in one's ability. Response options ranged from 1 (“strongly disagree”) to 5 ("strongly agree"). *Bold indicates a significant mean difference at $p < 0.05$.

Other analyses demonstrate the following differences in coaching behaviors based on various sport and coach characteristics:

Team vs. Individual Sport Coaches: Overall, coaches of team sports reported significantly higher means scores on three of the five Coach Beyond Index subscales including coaching the X's and O's, teaching life and leadership, and fostering a positive team environment compared to coaches of individual sports. Individual sports included those with individual or dual participants (i.e., Badminton, Biking, Bowling, Boxing, Cross Country, Diving, Fencing, Figure Skating, Golf, Gymnastics, Martial Arts, Parkour, Swimming, Tennis, and Wrestling). Team sports included all other sports in the dataset but excluded free play and general fitness. Notably, differences in mean scores on health and safety and supporting mental wellness were non-significant among these two subgroups.

Coaches Evaluated Last Season vs. Not Evaluated Last Season: Coaches who reported they were evaluated last season reported significantly higher mean scores on four of the five Coach Beyond Index subscales, including health and safety, coaching the X's and O's, teaching life and leadership skills, and supporting mental wellness behaviors. Means scores were similar and non-significant on the fostering a positive team environment subscale.

Licensed/Certified vs. Not Licensed/Certified: Statistically significant differences were noted in scores on four of the five Coach Beyond Index subscales when comparing coaches who were certified/licensed or not: health and safety, coaching the X's and O's, teaching life and leadership skills, and Supporting Mental Wellness behaviors were all higher among coaches that were licensed/certified compared to those who were not.

Male vs. Female Coaches: Overall, female coaches reported significantly higher means scores on three of the five Coach Beyond Index subscales (including teaching life and leadership skills, fostering a positive team environment, and supporting mental wellness behaviors) as compared to male coaches. In contrast, male coaches reported significantly higher mean scores on the coaching the X's and O's subscale as compared to female coaches. There were no significant differences in terms of perceptions of confidence on health and safety-related items.

Coaches Identifying as White vs. Coaches Identifying as Black, Indigenous People of Color: Coaches who identified as BIPOC reported significantly higher mean scores on just one of the five Coach Beyond Index subscales: supporting mental wellness behaviors. Mean scores were similar and non-significant on the remaining four subscales including health and safety, coaching the X's and O's, teaching life and leadership skills, and fostering a positive team environment.

Coaching Philosophies

Coaches were given a list of 13 different coaching philosophies and asked to rank their top 3 and bottom 3 philosophies. The top coaching philosophies reported by coaches were helping athletes learn new life skills (35% rated in top 3) and making sure all athletes have fun (35%). Only 6% reported that winning games or competitions was a top priority driving their coaching philosophy.

The top coaching philosophies reported by coaches were helping athletes learn new life skills and making sure athletes have fun

Table 9. Coaching Philosophies

Coaching Philosophies	% Ranked Philosophy in Top 3	% Ranked Philosophy in Bottom 3
Making sure all athletes play	29%	30%
Supporting athletes in being healthy and fit	29%	9%
Helping athletes learn new sport-specific skills	28%	13%
Helping athletes learn new life skills	35%	10%
Creating a sense of belonging through sport	29%	9%
Winning games or competitions	6%	62%
Teaching athletes to set their own goals and work toward them	23%	13%
Creating opportunities for athletes to learn from their mistakes	12%	16%
Making sure athletes have fun	35%	13%
Teaching the love of sport	29%	19%
Teaching athletes how to play fair	6%	35%
Ensuring athletes develop good sportspersonship	16%	24%
Creating a safe environment to prevent injuries	23%	33%

There were differences in how coaches ranked some of their top and bottom priorities. For example, 29% of coaches reported making sure all athletes play as a top priority and another 30% of the sample put this as a bottom 3. Similarly, 21% ranked creating a safe environment to prevent injuries as a top value, whereas 33% put that in the bottom 3. Variability also existed in relation to values pertaining to sportspersonship and playing fair. For instance, teaching athletes how to play fair was in the bottom 3 for 35% of the coaches, and only mentioned as a top 3 for 6%. Also, 16% ranked ensuring athletes develop good sportspersonship as a top priority, whereas 24% reported it as a bottom 3 priority.

Differences by Subgroups

By Coach Characteristics (see Table 10): In relation to coaching philosophies, some differences were noted in relation to the prioritization of different values specific to one's coaching practices. A few findings are interesting: Coaches with backgrounds in education and related fields included winning, promoting a sense of belonging, and teaching life skills in their top 5 coaching philosophies at higher levels than those without backgrounds in this area. Coaches employed in schools more often included winning games, teaching life skills, and promoting a sense of belonging in their top 5 coaching philosophies as compared with coaches not employed in schools. Coaches receiving some sort of compensation included winning as higher in prioritization than those not receiving pay. Participants coaching at more competitive levels included life skill development and promoting a sense of belonging in their top 5 more often than those coaching at the recreational/ developmental levels. Coaches who reported they had been evaluated last season more often included developing life skills in their top 5 coaching philosophies as compared to coaches reporting they were not evaluated last season. Female coaches seemed to be more likely to include fostering a sense of belonging in their top 5 as compared to male coaches. No evident differences existed among philosophies across coaches who were certified/licensed and those not certified/licensed, across team and individual sport coaches, and across coaches of different racial/ethnic backgrounds.

By Sport Characteristics (see Table 11): Differences in coaching philosophies also varied based on level of competition, type of sport, location, whether coaches had been parents/caregivers, and the demographics of their teams. Notably, a majority of coaches reported teaching the love of sport, helping athletes learn new life skills, and making sure athletes had fun as a value guiding their coaching. In recreational/developmental settings, coaches reported valuing making sure athletes play more so. This also was important to coaches who identified as parents/caregivers and those coaching teams with more than 50% of their athletes living in poverty. School-based coaches reported creating a sense of belonging through sport was a value guiding their coaching practices whereas non-school-based coaches reported valuing making sure all athletes play.

Table 10. Coaching Philosophies by Coach Characteristics

Comparison Groups		% Ranked Winning Games and Competitions in Top 5 Philosophies	% Ranked Teaching Life Skills in Top 5 Philosophies	% Ranked Creating a Sense of Belonging Through Sport in Top 5 Philosophies
Educational Background	Degree in Education, Fitness, or Psych	15%	62%	58%
	No Degree or Training in Education	10%	54%	50%
School-Based Coaches	Educator	17%	66%	60%
	Non-Educator	11%	60%	57%
Pay Last Season	Unpaid	7%	46%	48%
	Paid under $4999	12%	63%	57%
	Paid over $5000	18%	62%	52%
Certified/Licensed	Yes	11%	55%	51%
	No	12%	55%	53%
Level of Competition	High: School/ Competitive	13%	60%	54%
	Low: Rec/Dev	7%	43%	46%
Type of Sport	Team	12%	57%	52%
	Individual	9%	54%	50%
Evaluated Last Season	No	9%	51%	50%
	Yes	14%	60%	54%
Coach Gender	Female	8%	57%	57%
	Male	13%	55%	50%
Coach Race/Ethnicity	Identify as BIPOC	13%	58%	51%
	Identify as White	11%	55%	52%

Table 11. Coaching Philosophies by Sport Characteristics

Demographic	Making Sure All Athletes Play	Supporting Athletes in Being Healthy and Fit	Helping Athletes Learn New Sport-Specific Skills	Helping Athletes Learn New Life Skills	Creating a Sense of Belonging Through Sport	Winning Games or Competitions	Teaching Athletes to Set their Own Goals and Work Toward Them	Creating Opportunities to Learn from Mistakes	Making Sure Athletes Have Fun	Teaching the Love of Sport	Teaching Athletes How to Play Fair	Ensuring Athletes Develop Good Sportspersonship	Creating a Safe Environment to Prevent Injuries
Competition Level													
Low: Rec/Dev	1								2	3			
High: School/Competitive				1					3	2			
Type of Sport													
Team Sport				1					2	3			
Individual Sport	2									3			1
Location													
School-Based				1	3					2			
Non-School Settings	2								1	3			
Coach and Parent of Athlete During Coaching Career													

Yes, Parent/Caregiver	3			2				1		
No, Never Parent/Caregiver	2			1					3	
Coaches of Teams with 50% or More Athletes in Poverty										
Less than 50%				2				1	3	
50% or More	2			1					3	

Note. Coaches were asked to rank these items 1-13. The coded numbers represent the top 3 philosophies reported by coaches as evidenced by the highest % of rankings on for that item. Also, non-school settings represent rec/developmental, competitive, and adapted/other settings combined to compare those who are coaching in school-based settings versus those not coaching in school-based settings.

Coaching Philosophies and Winning

Of significance, coaches who emphasized winning games/competitions reported significantly higher career winning percentages than those not as focused on this priority. In addition, coaches emphasizing teaching life skills reported significantly higher career winning percentages than those less focused on this priority. No significant differences in career winning percentage were identified on where coaches ranked creating a sense of belonging through sport. See Table 12.

Table 12. Mean Comparisons of Win Percentage Over Career by Coaching Philosophies

Comparison Groups		Overall Career Winning Percentage Mean (SD)
Winning Games and Competitions in Top 5 Philosophies	Yes	**69.31 (14.88)***
	No	64.57 (17.56)
Teaching Life Skills in Top 5 Philosophies	Yes	**66.16 (16.58)***
	No	63.81 (18.15)
Creating a Sense of Belonging Through Sport in Top 5 Philosophies	Yes	64.98 (17.26)
	No	65.27 (17.41)

Note. *Indicates a significant difference at $p < 0.05$. Overall career win percentage was measured on a scale of 1 to 100 (coaches could drag the bar to indicate the % of games, matches, competitions, etc. won over the course of their coaching careers).

Impact on Athletes

Coaches were asked to share their perceptions of the impact they have had on their athletes in the setting where they coach their primary sport. Coaches ranked their impact on each domain on a scale from 1 to 100 with 1 indicating low impact, 50 indicating moderate impact, and 100 indicating high impact.

Table 13. Coaches Perceived Impact on Athletes

Impact on Athletes	Mean (SD)	% Reported Moderate to High Impact (50 or above)
Developing life skills	73.92 (20.81)	84%
Acquiring leadership skills	71.49 (21.42)	81%
Securing college scholarships	38.01 (29.72)	32%
Developing sport skills	82.44 (17.05)	93%
Persisting in educational settings	67.74 (27.05)	73%
Developing a continued desire to play sports	78.31 (18.47)	90%
Winning championships and games	58.87 (26.83)	60%
Becoming role models in their communities	72.92 (24.51)	80%

Coaches overall believed they had made a strong impact on the athletes they coached, with over 80% believing they had made a difference in the areas of being a role model (80%), developing a continued desire to play sports (90%), acquiring leadership skills (81%), developing sport skills (93%), and developing life skills (84%). Additionally, 73% reported they helped their athletes persist in educational settings. As Table 13 reflects, the coaches in this sample believed they had made a difference for the most part in multiple ways.

Differences by Subgroups (see Table 14)

In relation to impact, coaches with backgrounds in education and related fields reported significantly higher levels of impact overall and in relation to youth development outcomes than those without backgrounds in education and related fields. Furthermore, educators coaching in schools reported significantly higher levels of overall impact in relation to youth development and sport performance-related outcomes than non-educators coaching school-based sport. Coaches receiving some sort of compensation reported significantly higher levels of overall impact in relation to youth development and sport-related performance outcomes than coaches receiving pay. Interestingly, overall impact on all measures were highest among the highest paid coaches. Coaches who were certified/licensed reported significantly higher levels of overall impact, in relation to PYD outcomes, and in relation to sport-related performance outcomes as compared with coaches not certified/licensed.

Participants coaching at more competitive levels reported significantly higher levels of overall impact, impact in relation to youth development outcomes, and related to sport-related performance outcomes as compared to those coaching at the recreational/ developmental levels. Coaches of team sports reported significantly higher levels of overall impact, impact related to youth development outcomes, and in relation to sport-related performance outcomes (as compared to those coaching individual sports). Coaches reporting having been evaluated last season reporting greater impact on all three indicators (overall, youth development, and sport-related performance) than those coaches reporting they were not evaluated last season. Female coaches reported significantly higher levels of impact on youth development outcomes than male coaches. There were no other differences noted based on gender of the coach. Coaches identifying as BIPOC reported significantly higher levels of overall impact and impact related to youth development outcomes than those identifying as White Caucasian. There was no difference in relation to sport-related performance impacts (see Table 14).

Table 14. Mean Comparisons of Impact by Subgroups

Comparison Groups		Overall Impact Mean (SD)	Impact on Youth Development Mean (SD)	Impact on Sport-Related Performance Mean (SD)
Educational Background	Degree in Education, Fitness, or Psych	**71.71 (13.93)***	**76.65 (16.94)***	74.43 (15.13)
	No Degree or Training in Education	68.04 (16.34)	71.10 (20.20)	73.51 (016.53)
School-Based Coaches	Educators	**73. 13 (13.77)***	**78.82 (15.88)***	**74.88 (15.22)***
	No-educators	68.63 (14.95)	73.43 (18.10)	73.05 (15.98)
Pay Last Season	Unpaid	64.16 (16.98)	65.66 (21.53)	71.58 (17.30)
	Paid under $4999	**71.41 (14.29)***	**76.62 (17.02)***	**74.43 (15.53)***
	Paid over $5000	**72.97 (14.09)****	**77.27 (16.46)****	**76.13 (14.90)****
Certified/Licensed	Yes	**69.69 (15.38)***	**73.47 (18.76)***	**74.43 (15.63)***
	No	68.16 (16.21)	71.39 (20.15)	72.82 (16.57)
Level of Competition	High: School/ Competitive	**71.21 (14.57)***	**75.63 (17.53)***	**75.08 (15.20)***
	Low: Rec/Dev	62.19 (17.38)	62.97 (22.07)	69.74 (18.18)
Type of Sport	Team	**69.42 (15.60)***	**73.05 (19.61)***	**74.32 (15.95)***
	Individual	67.87 (16.39)	70.94 (19.46)	72.45 (16.58)
Evaluated Last Season	No	65.83 (16.38)	68.21 (20.75)	72.10 (16.61)
	Yes	**71.95 (14.52)***	**76.52 (17.11)***	**75.27 (15.27)***
Coach Gender	Female	69.71 (15.27)	**74.31 (18.67)***	73.46 (16.41)
	Male	68.91 (15.88)	72.07 (19.51)	73.96 (15.80)
Coach Race/Ethnicity	Identify as BIPOC	**70.30 (16.76)***	**73.83 (20.53)***	74.51 (16.98)
	Identify as White	68.17 (15.40)	71.64 (19.15)	73.32 (15.82)

Note. *Bold indicates a significant difference at $p < 0.05$. The overall impact scale consists of 9 items (all from the survey on coaches' perceptions of their impact on student-athletes sport skill development, positive youth development, and academic success). The youth development impact subscale consists of 3 items (impact on the student-athlete developing life skills, acquiring leadership skills, and becoming a role model in their community). The sport-related performance impact subscale consists of 3 items (developing sport skills, developing a continued desire to play sport, and winning championships/games). Each item was measured on a scale of 1 to 100 (coaches could drag the bar to indicate their impact with 1 = low impact, 50 = moderate impact, and 100 = high impact). For pay last season variables, *indicates a significant difference among unpaid and the under $4999 group and **indicates a significant difference among unpaid and the paid over $5000 group.

Coaching Philosophies and Impact on Athletes

Descriptive analyses also examined differences in how coaches with varying philosophies and values perceived their impact on athletes. Specifically, coaches reporting an emphasis in winning games/competitions reported significantly higher levels of overall impact and sport-related performance outcomes as compared to those not as focused on this priority. Coaches emphasizing teaching life skills reported significantly higher levels of overall impact, as well as impact on youth development and sport performance-related outcomes as compared to coaches less focused on this priority.

Coaches emphasizing creating a sense of belonging reported significantly higher levels of PYD impact than those less focused on this priority. Coaches who did not include creating a sense of belonging in their top 5 reported significantly higher levels of sport performance-related outcomes. These data demonstrate in some ways the concept of "sport as a double edge sword." In other words, can coaches focus on a caring climate and still win and excel on the field? These data suggest coaches not ranking creating a sense of belonging in their top 5 coaching philosophies are those more focused on sport skill development (see Table 15).

Table 15. Mean Comparisons of Impact on Athletes by Coaching Philosophies

Comparison Groups		Overall Impact Mean (SD)	Impact on Youth Development Mean (SD)	Impact on Sport-Related Performance Mean (SD)
Winning Games and Competitions in Top 5 Philosophies	Yes	**72.08 (14.36)***	73.88 (17.71)	**78.86 (14.54)***
	No	68.45 (15.98)	72.14 (19.82)	73.09 (16.27)
Teaching Life Skills in Top 5 Philosophies	Yes	**71.04 (14.77)***	**76.53 (17.11)***	73.83 (16.02)
	No	66.15 (16.68)	67.09 (21.20)	73.64 (16.39)
Creating a Sense of Belonging Through Sport in Top 5 Philosophies	Yes	68.99 (15.55)	**73.48 (19.22)***	72.95 (16.32)
	No	68.73 (16.14)	71.12 (19.92)	**74.59 (16.01)***

Note. *Indicates a significant difference at p <0.05. The overall impact scale consists of 9 items (all from the survey on coaches' perceptions of their impact on student-athletes sport skill development, positive youth development, and academic success). The youth development impact subscale consists of 3 items (impact on the student-athlete developing life skills, acquiring leadership skills, and becoming a role model in their community). The sport-related performance impact subscale consists of 3 items (developing sport skills, developing a continued desire to play sport, and winning championships/games). Each item was measured on a scale of 1 to 100 (coaches could drag the bar to indicate their impact with 1 = low impact, 50 = moderate impact, and 100 = high impact).

Impact on Athletes and Winning

Coaches were categorized into 3 groups based on their perceptions of overall impact, as well as their impact in relation to their youth development and sport-performance-related impact. In all three groups, the coaches in the group who perceived they were most impactful overall, the group most impactful in relation to youth development outcomes, and the one rating high levels of impact on sport-performance-related outcomes, all reported higher levels of career winning percentages than those coaches in the groups reporting less impact in the three areas. See Table 16.

Table 16. Mean Comparisons of Winning Percentage Over Career by Impact

Comparison Groups		Overall Career Winning Percentage Mean (SD)	
Overall Impact Mean Score	Low	54.27 (19.27)	**All differences among groups are statistically significant.**
	Moderate	65.13 (16.03)	
	High	75.05 (14.26)*	
Youth Development Impact Mean Score	Low	56.61 (19.04)	**All differences among groups are statistically significant.**
	Moderate	65.31 (16.18)	
	High	73.27 (16.51)*	
Sport-Related Performance Impact Mean Score	Low	55.57 (19.95)	**All differences among groups are statistically significant.**
	Moderate	65.22 (16.00)	
	High	73. 47 (15.59)*	

Note. *Indicates a significant difference at $p < 0.05$. Impact levels were created by identifying coaches one standard deviation below (low) and one standard deviation above (high) the mean on each subscale. Moderate indicates coaches were within the range of one standard deviation below and above the mean. Overall career winning percentage was measured on a scale of 1 to 100 (coaches could drag the bar to indicate the % of games, matches, competitions, etc. won over the course of their coaching careers).

Impact on Athletes and Coaching Behaviors

Significant differences were found when comparing scores in relation to coaches' perceptions of impact in three areas: overall impact, youth development impact, and sport-related performance impact. Coaches across the board who were the most confident in all coaching practices (i.e., those with moderate and high efficacy), perceived themselves as making more of an impact on their athletes overall, in relation to their youth development, and in relation to their sport-related performance.

Please note significant differences were identified across all comparisons in regard to coaches of moderate efficacy perceiving greater impact on their athletes compared to coaches with low efficacy, coaches with high efficacy perceiving greater impact on their athletes compared to coaches with moderate efficacy, and coaches with high efficacy perceiving greater impact on their athletes compared to coaches with low efficacy (i.e., all comparisons were statistically significant). Please use caution when interpreting these findings as multiple comparisons increase risks for Type I error.

Table 17. Mean Comparisons of Impact by Coaching Behaviors

Comparison Groups		Overall Impact Mean (SD)	Impact On Youth Development Mean (SD)	Sport-Related Performance Impact Mean (SD)	Note
Health and Safety	Low Efficacy	60.27 (18.42)	61.25 (22.44)	66.30 (19.28)	**All differences among groups are statistically significant.**
	Moderate Efficacy	67.61 (15.12)	70.99 (18.83)	72.59 (15.59)	
	High Efficacy	74.68 (14.31)*	79.26 (15.53)*	78.36 (16.16)*	
Coaching the X's and O's	Low Efficacy	54.74 (17.52)	55.89 (21.60)	60.03 (18.47)	
	Moderate Efficacy	68.19 (14.02)	71.65 (17.94)	73.25 (14.67)	
	High Efficacy	80.76 (11.97)*	85.83 (13.98)*	83.77 (12.51)*	
Life and Leadership Through Sport	Low Efficacy	53.12 (16.66)	50.99 (20.78)	62.52 (17.99)	
	Moderate Efficacy	68.07 (13.75)	71.62 (17.00)	73.01 (15.05)	
	High Efficacy	80.82 (11.82)*	87.35 (12.47)*	82.04 (13.77)*	
Fostering a Positive Team Environment	Low Efficacy	59.71 (16.82)	60.95 (20.37)	65.22 (17.76)	
	Moderate Efficacy	66.56 (15.23)	69.52 (19.08)	71.76 (15.14)	
	High Efficacy	74.82 (14.73)*	79.71 (17.75)*	78.51 (15.14)*	
Supporting Mental Wellness	Low Efficacy	55.90 (15.85)	55.71 (20.36)	64.17 (17.50)	
	Moderate Efficacy	68.81 (14.43)	72.54 (17.97)	73.51 (15.26)	
	High Efficacy	80.54 (12.75)*	86.22 (13.70)*	82.16 (14.24)*	

Note. *Indicates a significant difference at $p < 0.05$.Coaching efficacy levels were created by identifying coaches one standard deviation below (low) and one standard deviation above (high) the mean on each subscale. Moderate indicates coaches were within the range of one standard deviation below and above the mean.

Stress, Satisfaction, Retention, and Winning

Several items on the survey assessed items reflecting coach satisfaction. In general, 96% of participants reported they were satisfied with their coaching experiences and 95% reported they were pretty likely to continue coaching. When asked about how stressful their coaching experience was, 69% reported feeling stressed.

Table 18. Perceived Satisfaction, Stress, and Likelihood to Continue

Question	% Moderately	% Very	% Extremely
How satisfying is the coaching experience?	19%	49%	28%
How stressful is the coaching experience?	50%	15%	4%

	% Neutral	% Somewhat	% Extremely
How likely are you to continue coaching?	6%	24%	65%

In addition, 2/3 of the coaches in the sample reported having fairly good winning percentages over the course of their career, in their primary sport, and during the last season of coaching their primary sport.

Table 19. Estimated Win Percentages

Estimated Win Percentage Over	Mean % (SD)
Career	65%
Primary Sport	67%
Last Season in Primary Sport	65%

Differences by Subgroups (see Table 20)

Differences among subgroups existed among coaches in relation to their reported satisfaction, stress, likelihood to continue coaching, and winning percentage over the course of their careers. For example, as evidenced in Table 20, male and female coaches reported comparable levels of satisfaction, stress, and win percentages but differed by 11% in their likelihood of continuing coaching. Female coaches reported they were less likely to return as compared to male coaches.

Trends did not vary much regarding the gender of the team coached, yet co-ed coaches reported lower levels of satisfaction and reported less likelihood of continuing their coaching as compared to coaches of male and female athletes. Based on level of competition, coaches working in competitive settings reported higher satisfaction levels and a greater likelihood of continuing to coach, but also had higher stress levels as compared to recreational/developmental coaches (13% difference on very or extremely stressful).

Differences were mixed across coaches of team sports and individual sports. Coaches of team sports reported higher levels of satisfaction and stress (4-6% difference) compared to coaches of individual sports. Other items did not vary by more than 1-2%. Similar to competition level, school-based coaches reported greater satisfaction, yet higher stress levels compared to coaches working in non-school-based settings. Lastly, coaches working with teams where over 50% of their athletes lived in poverty reported higher stress levels (% difference on very or extremely stressful) and a lower likelihood of returning to coach (4% difference) as compared to coaches with fewer than 50% of the athletes on their teams living in poverty. Levels of satisfaction and winning percentages only varied by 1-3% among this demographic of coaches.

Table 20. Satisfaction, Stress, and Career Winning Percentage by Coach and Sport Characteristics

	Satisfaction	Stress		Retention	Success
Characteristics	**% Very or Extremely Satisfied**	**% Coaching is Moderately, Very, or Extremely Stressful**	**% Coaching is Very or Extremely Stressful**	**% Somewhat or Extremely Likely to Continue**	**Win Percentage as a Coach**
Gender of Coach					
Male	79%	69%	19%	88%	65%
Female	75%	73%	22%	77%	65%
Gender of Athletes					
Male	77%	70%	19%	87%	66%
Female	79%	76%	22%	88%	66%
Co-ed	78%	69%	19%	69%	63%
Competition Level					
Low: Rec/Dev	72%	56%	10%	89%	62%
High: School/ Competitive	79%	75%	23%	88%	66%
Type of Sport					
Team Sport	78%	72%	21%	87%	66%
Individual Sport	73%	67%	17%	88%	64%
Location					
School-Based	81%	77%	25%	88%	66%
Non-School Setting	75%	64%	15%	89%	64%
Athletes Living in Poverty					
Less than 50% of Team	78%	69%	18%	90%	65%
50% or More of Team	75%	77%	27%	86%	66%
Pay Last Season					
Unpaid	77%	50%	10%	89%	63%
Paid Less than $5K	80%	75%	23%	88%	66%
Paid More than $5K	75%	80%	29%	88%	67%
Overall	**78%**	**69%**	**21%**	**89%**	**65%**

Note. Non-school settings represent rec/developmental, competitive, and adapted/other settings combined to compare those who are coaching in school-based settings versus those not coaching in school-based settings.

Training History and Interests

Overall, 76% of coaches reported having completed a training offered by a sport-specific national governing body**.** When asked about the effectiveness of this training in preparing them to be a coach: 12% said this training was not effective or slightly effective**;** 26% said this training was somewhat effective**;** 61% said this training was moderately or extremely effective. Appendix B also includes indicators of training participation by organization.

In addition, all coaches were asked about past coaching training topics they have never participated in and their interest in future training topics. Below are the top topics that generated the highest and lowest percentages in regard to coaches' training histories (see Table 21). We also examined top trainings coaches reported having an interest in participating in (see Table 22). Coaches were most interested in trainings focused on coaching tactics and strategy (75%) and sport skills and techniques (74%). A large percentage also were interested in those related to positive youth development, ones such as relationship building (70%), performance anxiety (70%), motivational techniques (70%), and leadership development (69%). These data are presented in Table 22.

The entire synthesis of training topics that coaches reported their participation levels and interests are overviewed in Table 23. For the most part, coaches in this same had participated previously in health & safety-related courses (most likely related to licensing. For instance, 91% had participated in CPR and 82% reported participating in trainings focused on child abuse and neglect. In general, coaches in this sample also reported interests in attending trainings in multiple areas, with more than 50% reporting interest in ones focused on health & safety, traditional coaching practices, ones focused on creating a positive environment, and coaching to support mental health and broader youth development. Scores were lowest in relation to basic health and safety areas, ones where coaches are most likely are required to receive training. Not surprisingly, the areas most desired for coach training were focused on traditional coaching practices. Yet still, there was still great interest in trainings related to areas such as mental health, stress management, performance anxiety, and trauma informed practice. Another area which 63% reported interest in was time management.

Table 21. Top Trainings Participated In and Have Never Participated In

Top 5 Trainings Coaches Have Participated In	% Have Participated	Top 5 Trainings Coaches Have Never Participated In	% Have Never Participated
1. CPR	91%	**1.** Linkage to Community Resources	57%
2. Basic First Aid	91%	**2.** Trauma-Informed Practice	57%
3. Concussion Management	90%	**3.** Performance Anxiety	55%
4. General Safety and Injury Prevention	89%	**4.** Stress and Coaching	54%
5. Physical Health and Safety	86%	**5.** Emotional Regulation/Working with Parents & Caregivers	48%

Table 22. Top 10 Trainings Coaches Are Interested In

Top 10 Trainings Coaches are Interested In	% Interested in More
1. Coaching Tactics and Strategy	75%
2. Sport Skills and Techniques	74%
3. Relationship Building	70%
4. Performance Anxiety	70%
5. Motivational Techniques	70%
6. Leadership Development	69%
7. Team Dynamics	67%
8. Mental Health	67%
9. Effective Communication	66%
10. Life Skill Development Through Sport	66%

Table 23. Coaches Training Backgrounds and Interests

Training Topic	% Never Participated	% Interested in More
Health & Safety		
CPR	9%	57%
Basic First Aid	9%	56%
Concussion Management	10%	55%
General Safety and Injury Prevention	11%	55%
Physical Health and Safety	14%	54%
Child Abuse and Neglect	18%	54%
COVID-19 Protocols	27%	59%
Coaching the X's and O's		
Sport Skills and Techniques	15%	74%
Coaching Tactics and Strategy	19%	75%
Effective Communication	22%	66%
Goal-Setting	24%	64%
Life and Leadership through Sport		

Training Topic	% Never Participated	% Interested in More
Health & Safety		
Leadership Development	20%	69%
Life Skill Development Through Sport	41%	66%
Motivational Techniques	41%	70%
Conflict Resolution	38%	61%
Relationship Building	37%	70%
Fostering a Positive Environment		
Team Dynamics	38%	67%
Diversity and Inclusion	33%	57%
Coach Beyond…		
Mental Health	38%	67%
Stress Management	35%	63%
Performance Anxiety	55%	70%
Mental Toughness (i.e., grit, discipline, focus)	44%	59%
Safety on Social Media	48%	32%
Emotional Regulation	48%	54%
Time Management	39%	63%
Suicide Protocols	45%	54%
Social-Emotional Learning	42%	54%
Linkage to Community Resources	57%	57%
Trauma-Informed Practice	57%	60%
Stress and Coaching	54%	57%
Working with Parents and Caregivers	48%	57%
Child Development	40%	57%

Differences by Subgroups

Licensed/Certified vs. Not Licensed/Certified: In general, data demonstrate how coaches with certifications/licenses reported more attendance in different types of training across the board. In general, there was about a 10-15% difference in the percentage differences in all areas. For instance, 66% of coaches with certifications/licenses reported having attended trainings on mental health as compared to 55% of those without. This pattern was fairly consistent across all training topics.

Educators vs. Non-Educators: When exploring training histories relative to whether a school-based coach was an educator, data overall indicated educators reported having attended more trainings in most all areas than non-educators in school-based sport settings. For the most part, there was about a 5-15% difference between the two groups (with educators reporting a higher frequency of involvement in trainings across the board). There were a few topic areas with greater disparities, especially in relation to trainings focused on mental health-related topics. For instance, 71% of educators reported they had been involved in trainings in mental health as compared to only 54% of non-educators (17% difference). Similarly, 68% of educators had received training on suicide protocols as opposed to only 44% of non-educators (24% difference). Additionally, 69% of the educators had been trained in social-emotional learning as compared to only 49% of non-educators (20% difference).

Level of Competition High vs. Low: Training histories also were examined by level of competition. Participants coaching at more competitive levels reported greater involvement in prior trainings than those at the recreational/developmental levels. Greater differences in training involvement across the two groups were noted when exploring history of trainings related to mental health and leadership, fostering positive environments, and life skill development. There was about a 20% difference between the groups. For instance, 67% of competitive-level coaches reported involvement in past trainings on mental health compared to only 47% of those at the recreational/ developmental levels (20% difference). Similarly, 63% of competitive-level coaches had received training in suicide protocols as compared to only 38% of those at the recreational/developmental level. Competitive and recreational/developmental coaches tended to report similar levels of interest in future trainings overall. There were a few areas where there was more than a 10% difference in interest level, with developmental/recreational reporting higher levels of interest: CPR (12% difference), basic first aid (7% difference); diversity and inclusion (6% difference); stress and coaching (7% difference), and child development (6% difference).

Training Participation and Coaching Behaviors

Overwhelmingly, these data demonstrate how coaches who reported having participated in past trainings focused on key elements of coaching youth sport had significantly higher perceptions of their confidence in all areas measured by the Coach Beyond Index (i.e., coaching behaviors reported earlier in the report), including in relation to health & safety practices, coaching the X's and O's, teaching life and leadership through sport, fostering a positive team environment, and supporting mental wellness than those coaching at the recreational/developmental levels. Caution should be noted when interpreting Table 24 as data are cross-sectional and may indicate, however, that coaches who seek out training simply may be more confident in their coaching practices.

Coach Training and Impact on Athletes

Furthermore, we were interested in exploring whether past experience in trainings (especially ones focused on positive youth development) made a difference in coaches' perceptions of their impact in several key areas. Specifically, we explored differences in perceptions of impact by whether coaches had received trainings in three areas or not, including ones focused on coaching tactics/strategy, life skill development, and social-emotional learning (see Table 25).

Data demonstrate that coaches with past training experience in each of these three areas reported higher levels of impact in most all of the areas than those without training experiences. A few noteworthy examples included: Coaches with a past history of involvement in training in these three areas reported significantly higher levels of impact in relation to developing life and leadership skills among their athletes, supporting persistence in educational settings, and having their youth become role models in their communities. When exploring impact on sport-related outcomes, coaches with past histories of involvement in trainings in these three areas reported higher levels of impact in relation to outcomes related to securing scholarships, developing sports kills, developing a continued desire to play sports among their athletes, and in winning championships and games. Also note that there were no real differences in perceived impact when exploring if one training topic mattered more than another. There seemed to be a little higher level of impact reported by coaches who received training in relation to life skill development and SEL than those in coaching tactics and strategy. In other words, training in tactics/strategy scores on impact were a little lower than those for life skill development and SEL.

Table 24. Mean Comparisons of Confidence Items by Participation in Key Trainings

Training Participation		Health and Safety Overall Mean (SD)	Coaching the X's and O's Overall Mean (SD)	Teaching Life and Leadership through Sport Overall Mean (SD)	Fostering a Positive Team Environment Overall Mean (SD)	Supporting Mental Wellness Overall Mean (SD)
Sport Skills and Techniques	Never Participated	3.90 (0.87)	4.09 (0.52)	4.09 (0.52)	4.42 (0.53)	3.69 (0.59)
	Have Participated	**4.24 (0.69)***	**4.34 (0.45)***	**4.29 (0.48)***	**4.52 (0.48)***	**3.93 (0.57)***
Leadership Development	Never Participated	3.95 (0.80)	4.10 (0.47)	4.05 (0.49)	4.40 (0.51)	3.61 (0.55)
	Have Participated	**4.25 (0.70)***	**4.36 (0.46)***	**4.32 (0.48)***	**4.53 (0.48)***	**3.97 (0.57)***
Life Skill Development Through Sport	Never Participated	4.03 (0.75)	4.17 (0.46)	4.10 (0.47)	4.45 (0.49)	3.66 (0.55)
	Have Participated	**4.30 (0.70)***	**4.40 (0.46)***	**4.38 (0.47)***	**4.55 (0.48)***	**4.06 (0.55)***
Mental Health	Never Participated	4.00 (0.76)	4.18 (0.46)	4.10 (0.48)	4.44 (0.50)	3.62 (0.55)
	Have Participated	**4.31 (0.69)***	**4.39 (0.47)***	**4.37 (0.47)***	**4.54 (0.48)***	**4.07 (0.53)***
Social-emotional Learning	Never Participated	4.04 (0.75)	4.19 (0.46)	4.12 (0.47)	4.45 (0.49)	3.66 (0.54)
	Have Participated	**4.30 (0.70)***	**4.39 (0.47)***	**4.37 (0.48)***	**4.55 (0.48)***	**4.07 (0.55)***

Note. *Bold indicates a significant difference at $p < 0.05$. The health and safety subscale consists of 2 items; the Coaching the X's and O's subscale consists of 12 items; the Teaching Life and Leadership Through Sport subscale consists of 9 items; the Fostering a Positive Team Environment subscale consists of 3 items; and the Coach Beyond subscale consists of 15 items. Each item is measured on a scale of 1 = Strongly disagree and 5 = Strongly agree. Higher scores indicate greater levels of confidence in one's ability.

Table 25. Impact by Training Participation in Key Areas of Coaching and Positive Youth Development

Impact Question	Past Training Participation						
	Coaching Tactics and Strategy		Life Skill Development		Social-Emotional Learning		Overall Impact
	% Never Participated	% Have Participated	% Never Participated	% Have Participated	% Never Participated	% Have Participated	
	% Reported having Moderate to High Impact						
Developing life skills	82%	91%	84%	93%	85%	92%	89%
Acquiring leadership skills	78%	89%	81%	91%	82%	91%	87%
Securing college scholarships	29%	39%	27%	43%	28%	44%	38%
Developing sport skills	92%	97%	94%	97%	95%	96%	96%
Persisting in educational settings	66%	82%	68%	86%	69%	85%	79%
Developing a continued desire to play sports	90%	94%	92%	95%	92%	95%	93%
Winning championships and games	59%	71%	64%	73%	64%	73%	69%
Becoming role models in their communities	75%	87%	77%	91%	78%	90%	85%

Note. Three items from the training history questions were examined in conjunction with coaches perceived impact on their student athletes. This table summarizes coaches prior training participation in these three trainings and their perceived impact on coaching tactics and strategy, life skill development, and social-emotional learning.

Coach Preparation to Work with Specific Populations

We also were interested in understanding whether coaches felt prepared to work with targeted groups of youth, especially ones with disabilities, mental health concerns, and other challenging behaviors. Specifically, coaches were asked, "When coaching your primary sport, how prepared do you feel to work with athletes from the following populations…" Overall, when asked about how prepared they were to work with athletes from diverse groups, about half of the coaches in this sample reported being prepared to work with athletes with ADD/ADHD, intellectual or developmental disabilities (45%), physical disabilities (45%), mental health concerns (48%), behavioral challenges (57%), those identifying as LGBTQIA+ (51%).

Coaches reported less preparation in working with athletes identifying as refugees/immigrants (38%), eating disorders (35%), food insecurity (36%), and those speaking a different language (35%). They reported being most prepared to work with athletes who were elite performers (84%) and those academically gifted/talented (86%). The following table synthesizes their responses (see Table 26).

Table 26. Coach Preparation to Work with Specific Populations of Athletes

Preparation	% Moderately Prepared	% Extremely Prepared
ADD/ADHD Diagnoses	36%	21%
Chronic Illnesses	31%	11%
Intellectual or developmental disabilities	30%	15%
Physical disabilities	29%	16%
Mental health concerns	32%	16%
Visual or hearing impairments	29%	13%
Eating disorders	24%	11%
Behavioral challenges (i.e., fighting, conduct issues, lying, etc.)	36%	21%
Effects of food insecurity	24%	12%
Trauma in their home environment	28%	14%
Athletes that speak a different language than a majority of the team	23%	12%
Athletes that identify as refugees/immigrants	23%	15%
Athletes that identify as LGBTQIA+	29%	22%
Athletes that are a different race/ethnicity than your own	34%	53%
Athletes that are elite performers	37%	47%
Athletes that are academically gifted/talented	34%	52%

Coaches Perceptions

Some questions on the survey also inquired about the coaches' perceptions of parent/caregiver behaviors. Coaches were asked, "How often do parents and caregivers on your team…" Responses demonstrate coaches were relatively positive when reporting their perspectives of parent/caregiver behaviors. For example, 97% of coaches reported parents praise the

performance of their own child (as evidenced by sometimes, often, or always responses combined) and 96% report they demonstrate support for other athletes. About 9/10 reported the parents/caregivers consistently model sportspersonship and express appreciation of their coaching. On the other hand, coaches also often reported perceptions of negative parent/caregiver behaviors such as criticizing referees and officials (67%), criticizing the performance of other athletes (50%), criticizing the performance of their own child (66%), and criticizing their coaching performance (33%).

Table 27. Coaches Perceptions of Parents/Caregivers

Item	% Sometimes	% Often	% Always
Praise the performance of their own child.	22%	57%	18%
Demonstrate support for other athletes (i.e., teammates and opponents)	24%	53%	19%
Model sportspersonship with other parents/caregivers on opposing teams.	30%	47%	16%
Express appreciation for your coaching performance.	29%	43%	18%
Criticize the performance of their own child.	48%	15%	3%
Criticize the performance of other athletes (i.e., teammates or opponents)	33%	14%	3%
Criticize your coaching performance.	20%	10%	3%
Criticize the performance of referees and officials.	34%	25%	8%

Licensure and Certifications

In total, 56% of coaches reported they have a coaching certification or license. When asked to what degree this certification or licensure process was effective in preparing them to be a coach:

- 12% said their certification/licensure process was not effective or slightly effective
- 21% said their certification/licensure process was somewhat effective
- 67% said their certification/licensure process was moderately or extremely effective

Adminstrative and Supervisory Support

When prompted to report on perceived administrative and supervisory support as a coach, participants reported limited feedback and reinforcement provided by their administrators/supervisors. Specifically, only 35% of coaches reported the person they report to provides frequent feedback about their performance and 38% report their administrators or supervisors helped them evaluate opportunities for growth. Yet still, 72% of coaches in the sample report the person they report to supports them in their role as a coach.

Table 28. Perceived Support from Administrators/Supervisors

The person I report to…	% Neither agree nor disagree	% Agree	% Strongly agree
Offers constructive feedback after observing my coaching.	30%	32%	16%
Provides frequent feedback about my coaching.	33%	23%	12%
Helps me evaluate my opportunities for growth.	33%	26%	12%
Supports me in my role as a coach.	18%	37%	35%
Uses wins and losses to determine my success as a coach.	26%	11%	7%

Community Needs and Resources

Coaches also had the opportunity to reflect on the degree to which they perceived there was a need for additional sport opportunities in general and for specific groups of youth. We explored these data overall, as well as by geographical region. Please note several coaches felt comfortable reporting their zip codes while others did not. Of those who shared their zip codes, the following needs were reported as they reflected on their communities. Overall, coaches in urban settings reported a greater need for more adapted, collegiate, recreational, and school-based sport opportunities in their communities compared to coaches living in rural and suburban settings.

In addition, coaches reported they often did not have all the resources they needed to be successful coaching sport. When asked about whether they had 100% of the resources needed to coach last season, coaches in urban settings reported the greatest need for supports for uniforms, facility space, transportation, funding, administrative support, peer support, safe places to practice, and payment/income to coach compared to coaches living in rural and suburban settings. Interestingly, coaches in town and rural settings reported the highest level of needs for equipment compared to coaches living in urban and suburban settings. Table 31 documents needs another way whereby those coaching youth living in poverty reported greater needs on every resource, especially regarding uniforms (11% difference), funding (8% difference), and equipment (8% difference). Please note, urbanicity domains were defined by the Aspen Institute for Project Play Initiative using the National Center for Education Statistics (NCES) Zip Code Tabulation Areas (ZCTAs) identified by their data analytics team.

Table 29. Community Needs Overall and by Urbanicity

	Urbanicity				
In my community there is a need for sport opportunities for...	City/Urban (n = 1200)	Rural (n = 2970)	Suburban (n=1814)	Town (n = 21)	Overall
	% Agree or Strongly agree				
Boys	58%	53%	48%	48%	53%
Girls	68%	65%	62%	76%	65%
LGBTQIA+ youth	60%	46%	49%	47%	50%

Children experiencing disabilities	69%	65%	64%	62%	66%
Children experiencing food insecurity	60%	50%	49%	48%	52%
Preschool youth	50%	48%	48%	71%	48%
Elementary school youth	63%	59%	57%	76%	59%
Middle school youth	67%	61%	60%	76%	62%
High school youth	63%	58%	56%	66%	58%
Young adults	69%	67%	62%	86%	66%
In my community there is a need for…					
Adapted sport opportunities	64%	59%	60%	67%	59%
Collegiate sport opportunities	49%	45%	42%	62%	45%
Competitive sport opportunities	54%	55%	49%	76%	53%
Recreational sport opportunities	64%	62%	59%	76%	62%
School-based sport opportunities	61%	54%	54%	62%	56%
More coaches in general	79%	82%	83%	87%	81%

Table 30. Resource Needs by Urbanicity

	Urbanicity				Overall
Resource	**City/Urban (n = 1200)**	**Rural (n = 2970)**	**Suburban (n=1814)**	**Town (n = 21)**	
% Reported did not have all (<100% resources)					
Equipment	77%	78%	74%	80%	77%
Uniforms	64%	62%	60%	62%	62%
Facility space	82%	77%	81%	76%	80%
Transportation to games	72%	63%	62%	70%	65%
Funding for other team needs	85%	82%	79%	94%	82%
Administrative support	78%	73%	72%	79%	74%
Peer support	79%	76%	76%	85%	77%
Safe places to practice	63%	52%	53%	43%	55%
Payment/income to coach	84%	82%	80%	69%	82%

Table 31. Resource Needs by Team Composition Living in Poverty

	Athletes Living in Poverty		Overall
Resource	**Less than 50% of Team Living in Poverty**	**More than 50% of Team Living in Poverty**	
% Reported did not have all (<100% resources)			
Equipment	76%	82%	77%
Uniforms	60%	71%	62%
Facility space	79%	81%	80%
Transportation to games	64%	68%	65%
Funding for other team needs	81%	89%	82%
Administrative support	74%	75%	74%
Peer support	76%	80%	77%
Safe places to practice	54%	59%	55%
Payment/income to coach	82%	85%	82%

Note. Coaches selected how much of each resource they needed more of last season on a scale of 1 to 100.

Overall Summary

This study, the first of its kind in the United States, explored coaches' backgrounds, experiences, philosophies, behaviors, and training histories and interests, thereby creating a better understanding of the national coaching landscape. Before making final conclusions, study limitations are important to describe. Although over 10,000 coaches completed the survey (a number much larger than any other coaching study to date), there were selection effects. There was little diversity among the coaches who participated in the study, with the majority of participants being male, identifying as White, and reporting coaching at more competitive levels. There also were unequal cell sizes throughout the analyses, so differences in groups within this cross-sectional study should be interpreted with caution. Furthermore, we largely examined descriptive statistics and group differences using t-tests, ANOVAs, and MANOVAs. Although multiple comparisons helped to explore trends in these data, findings should be interpreted with caution given increased risks for Type I error. Nonetheless, the large sample size does allow for differences among coaches across these multiple factors and settings to be explored, providing key insights in relation to the status of coaching today. A few are noteworthy and further discussed here.

Opportunities to Increase Coaches Competencies Beyond the X's and O's

Coaches reported varying levels of confidence in relation to their coaching practices and behaviors. About 2/3 of the sample felt confident in their ability to engage in traditional coaching practices (such as when teaching basic techniques and tactics). Coaches were less confident in dealing with the mental aspects of sport (i.e., identifying off-field stressors among athletes, referring athletes to supports). For instance, only 29% were confident in their abilities to develop athletes into leaders and only 18% reported feeling confident in their ability to address mental health concerns. There are ample opportunities for to grow in the effective coaching practices.

- **Non-educators and those with no background in education or child development.** There was variability among coaches in relation to their perceptions of confidence. Specifically, findings demonstrate how educators are better coaches in relation to supporting positive youth development. For instance, 52% of educators reported feeling confident in their ability to teach life skills through sport as compared to 45% of non-educators. However, educators are no longer choosing to coach, with only 50% of school-based coaches reporting they were teacher-educators. What has resulted is a coaching field primarily filled by people without backgrounds in education and child development. These coaches need additional competencies to be successful in today's landscape of youth sport (i.e., 40% increase in mental health symptomology) and for the most part the coaches in this study reported a desire to be better prepared in these areas.
- **To work with specific populations/increase access to adapted sport.** Furthermore, data indicated that coaches do not feel prepared to work with specific populations of youth, especially those experiencing disabilities or challenging circumstances. For instance, 43% of coaches felt unprepared to work with athletes with behavioral challenges or ADD/ADHD; whereas 55% felt unprepared to work with those with intellectual, developmental, or physical disabilities. Gaps in training coaches to work with athletes with special needs will only continue to marginalize different populations of youth and hinder their ability to access quality sport experiences.

National priorities around training coaches to adapt sport to best serve these populations emerged as an imminent priority to address in the U.S.

- **In areas of youth development, mental wellness, and leadership.** Coaches in this study were highly interested in receiving additional training in multiple areas. In addition to wanting training on the X's and O's, coaches also identified interest in receiving coach training in areas focused on mental wellness, life skill development, and youth development practices. Coach training in these areas have the potential to leverage sport as a context to promote mental and physical health. At a time when young people are reporting heightened challenges in these areas, providing additional resources, trainings, and supports to coaches can serve as one national intervention strategy that can help reach millions of youth in the U.S. participating in sport.

Need to Decrease Barriers to Coach Education and Training

As evidenced by data highlighted in the Aspen Institute's State of Play 2022 report, unpaid coaches consistently report less confidence in their coaching behaviors as compared to paid coaches, both in relation to traditional coach practices and in areas focused on mental health and positive youth development. Similarly, as did community coaches when comparing their confidence levels to those working in schools. Community-based and unpaid coaches also were far less likely to be evaluated and participate in coach training than their counterparts coaching and working in schools. Supporting unpaid coaches that might also be described as those volunteering their time and/or ones that receive little to no pay through training and additional supports is an increasing priority when considering ways in which to improve youth sport contexts. Our report points toward the need to strengthen coach training for volunteers and community-based coaches is a growing priority, and strategies are needed to mitigate barriers in access (i.e., costs, etc.). These efforts may in turn also improve developmental/recreational sport experiences for youth, and perhaps help retain youth participation at more elevated rates.

Coach Training Matters and Demonstrates Impact

The good news is coach training matters. Results highlighted in this report demonstrate that coaches who participated in coach training were significantly more confident in their coaching behaviors than those who had not. Findings were particularly strong for coaches trained in youth development strategies such as building life skills and supporting mental health. For instance, coaches that reported participating in training in areas of youth development reported making a significantly greater impact on helping their athletes become role models in their communities (91%) as compared to those with no training (77%). Interestingly, coaches who ranked teaching life skills as one of their top coaching philosophies also reported higher win percentages over the course of their careers compared to coaches that did not share this value. Increasing opportunities for coaches at all levels and backgrounds to improve their coaching competencies are needed. Our findings suggest training in both traditional sport practices and strategies beyond the X's and O's may lead to better coaching practices and impacts on youth served through sport.

Insight on Potential Ways to Recruit More Quality Coaches

Coaches reported a shortage of coaches in their communities, a finding others have noted across the country. Participants in this study, however, provided insights in relation to what motivates adults to coach. Many coached because their children were athletes, but they also were motivated because of their love of teaching sport and desire to develop young people. Nearly 3 out of every

4 coaches played sport as a child. Pipelines that develop youth sport participants into coaches may be increasingly successful in recruiting new coaches into the field. Further, identifying adults that are looking for ways to give back to their communities and tailoring messages to those with time, resources, and a love of sport may help target coach recruitment efforts. Only 19% of coaches reported someone approached them to coach and this served as a motivator that influenced their participation. Perhaps individualizing asks to former athletes and community members to coach sport or reframing sport as a way to give back to ones community may be effective in recruiting great coaches. Additionally, parents/caregivers are motivated to coach their children. Finding ways to make coaching roles more conducive to family lifestyles may help engage more of them in their child's sport experience through coaching.

Coaches Do Not Have Enough Resources or Support

Overwhelmingly findings in this report suggest coaches do not have all the resources they need to be successful. The majority of coaches said they did not have tangible resources (including equipment, safe practice facilities, and enough pay to coach last season). With this lens in mind, it is admirable the incredible impact coaches in this sample are having on athletes given the disparities they reported experiencing. Oversight of and support to youth sport coaches also were limited, with nearly half of all coaches surveyed reporting they had never been evaluated and room for growth in the feedback and support they receive from administrators and supervisors. Even in the case when coaches were evaluated, about half reported the evaluation helped them be a better coach. Less than half reported their supervisor gave them constructive and frequent feedback and helped evaluate opportunities for growth. One wonders if coaches feel isolated in their roles. Perhaps further investments in the administrative functions in sport organizations would allow for further support, hands-on teaching, and consultation. The support role within sport organizations, many which are non-profits, may be a missing piece to the youth sport ecosystem.

Diversify Coaching

Sport is still dominated by men, and our study sample is reflective of this disproportionality. Men still own the coaching space. In our study, men were twice as likely as women to coach the opposite gender, as well as report more coaching experiences over the course of their lifetime. Men were more likely to report a desire to continue coaching than female coaches. Both men and women reported equal rates (12%) among those paid $10,000 or more to coach in their last season, and more women (44%) served as paid coaches making $5,000 or less compared to men (32%). However, given our sample was comprised predominantly of men, it is difficult to draw conclusions about pay inequities and disparities in youth sport based on coach gender. As noted elsewhere in research, substantive efforts are needed to equitability support and recruit females into coaching and to make coaching more inclusive to retain female coaches.

Intervene to Address Stressors in Youth Sport Environment

Nearly all coaches in this sample were satisfied with their coaching experiences and reported a high likelihood they will continue to coach. However, the majority of coaches (69%) reported their coaching experiences were stressful, with 6 out of 10 expressing interest in receiving training on stress management in coaching. Parents/caregivers were sources of stress. In fact, 1 out of every 3 coaches reported parents often criticized their coaching and two thirds said parents/caregivers criticize their child's teammates or opposing players. Nearly half reported

parents/caregivers do not model good sportspersonship when interacting with opposing team's parents. Of note, more negative parenting behaviors were noted by participants coaching in club and school settings, ones characterized by more structure and competitiveness. Addressing stressors such as inappropriate parent spectator behaviors and building the capacity of coaches to set up clear expectations related to culture and climate might help mitigate stressors in the youth sport environment.

Limitations. In the end, findings should be interpreted with caution, especially given the sample characteristics, risks for Type I error, and cross-sectional nature of the design. The study also was descriptive in nature, and only looked at basic trends when exploring differences among groups of coaches. Due to the small sample size, there also were limitations due to unequal cell sizes across groups. These and other factors should be taken into consideration when exploring lessons learned and making recommendations. Nonetheless, this study can be helpful in guiding next steps in improving youth sport experiences and coaching preparation. Findings related to coaches' backgrounds, experiences, philosophies, practices, and perspectives can be used to guide future efforts across the country to improve youth sport. Important priorities are identified such as the need for more sports (especially in urban areas), as well as for those for certain groups (i.e., children with disabilities). Findings overall point to several implications for future coaching training. Training for coaches at developmental/recreational levels may be important, as well as further training designed to promote positive youth development and mental wellness. In the end, these findings can help inform future directions in the United States to improve youth sport experiences.

Conclusion

The Aspen Institute, the Susan Crown Exchange, Nike, and The Ohio State University LiFE*sports* Initiative look forward to our continued work to elevate the findings synthesized in this report to put forth recommendations that inform the national coaching landscape. The results gleaned from these data will benefit youth participating in sport, coaching education and training, and guide future policy, funding, and practice recommendations. We would like to thank and acknowledge all of the coaches who participated in this survey, as well as organizations and entities that helped to share the survey with these participants. Without you and your dedication to youth sports, this project would not have been as successful and gathered insights from over 10,000 coaches. For more information about the content of this report, please contact Dr. Dawn Anderson-Butcher (anderson-butcher.1@osu.edu) or Dr. Samantha Bates (bates.485@osu.edu). You may also find other relevant information on The Ohio State University LiFE*sports* Initiative on our website: www.lifesports.osu.edu.

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Appendix A

Coach Demographics

Characteristics	%	M (SD)	% Female	% Male
Years Coached		12.95 (13.12)		
Less than 5 years	31%		11%	20%
6 - 10 years	25%		6%	19%
11 - 20 years	24%		6%	18%
21+ years	21%		4%	18%
Age		45.62 (11.30)		
Under 30	10%		5%	5%
30 – 39	20%		6%	14%
40 – 49	34%		7%	27%
50 – 59	25%		5%	20%
60 or older	11%		2%	9%
Race				
White	79%		21%	58%
Black	4%		1%	3%
Hispanic/Latino	7%		2%	5%
Multiple Races	3%		1%	2%
AAPI /Native American	3%		1%	2%
Prefer not to answer	2%		1%	1%
Other	1%		<1%	1%
Ethnicity				
Not of Hispanic, Latino, or Spanish origin	76%		20%	56%
Mexican, Mexican American, or Chicano	6%		1%	5%
Puerto Rican	1%		<1%	<1%
Cuban	<1%		<1%	<1%
Prefer not to answer	7%		2%	5%
Other	6%		1%	5%
Gender				
Male	74%		--	--
Female	25%		--	--
Transgender female	<1%		--	--
Transgender male	<1%		--	--
Non-binary	<1%		--	--
Self-described	<1%		--	--

Note. 5% of the sample reported they were 1st year coaches.

State Breakdowns

State	Total	%	State	Total	%
Alabama	46	1%	Montana	21	<1%
Alaska	30	<1%	Nebraska	37	<1%
Arizona	75	1%	Nevada	57	1%
Arkansas	38	<1%	New Hampshire	14	<1%
California	1038	17%	New Jersey	140	2%
Colorado	105	2%	New Mexico	19	<1%
Connecticut	63	<1%	New York	198	3%
Delaware	32	<1%	North Carolina	95	2%
Florida	161	2%	North Dakota	10	<1%
Georgia	231	4%	Ohio	899	15%
Hawaii	20	<1%	Oklahoma	17	<1%
Idaho	111	2%	Oregon	96	2%
Illinois	117	2%	Pennsylvania	211	3%
Indiana	63	1%	Rhode Island	14	<1%
Iowa	38	<1%	South Carolina	70	1%
Kansas	22	<1%	South Dakota	7	<1%
Kentucky	50	1%	Tennessee	48	1%
Louisiana	25	<1%	Texas	195	3%
Maine	18	<1%	Utah	186	3%
Maryland/DoC	121	2%	Vermont	10	<1%
Massachusetts	99	2%	Virginia	145	2%
Michigan	111	2%	Washington	719	12%
Minnesota	63	1%	West Virginia	30	<1%
Mississippi	5	<1%	Wisconsin	159	3%
Missouri	62	1%	Wyoming	4	<1%

Note. All %'s are rounded up to nearest whole number.

Educational Background

Degree	%	Degree	%
Less than a high school diploma	<1%	Undergraduate degree	36%
High school graduate	9%	Master's degree	33%
Trade or vocational certificate	4%	Professional or doctoral degree	8%
Associates degree	8%	Other	2%

Undergraduate and Graduate Degrees

Degree	% Undergraduate Degree (n = 2224)	% Graduate Degree (n = 2485)
Agriculture and natural resources	1%	<1%
Architecture and related services	1%	<1%
Area, ethnic, cultural, gender, and group studies	<1%	<1%
Biological and biomedical sciences	3%	2%
Business	20%	12%
Communication, journalism, and related programs	5%	1%
Communications technologies	<1%	<1%
Computer and information sciences	4%	2%
Education	15%	43%
Engineering	5%	4%
Engineering technologies	<1%	<1%
English language and literature/letters	2%	1%
Family and consumer sciences/human sciences	<1%	<1%
Foreign languages, literatures, and linguistics	1%	<1%
Health professions and related programs	4%	7%
Homeland security, law enforcement, and firefighting	1%	<1%
Legal professions and studies	1%	4%
Liberal arts and sciences, general studies, and humanities	4%	1%
Mathematics and statistics	2%	1%
Military technologies and applied sciences	<1%	<1%
Multi/interdisciplinary studies	<1%	<1%
Parks, recreation, leisure, and fitness studies	4%	2%
Philosophy and religious studies	<1%	<1%
Physical sciences and science technologies	2%	1%
Psychology	4%	3%
Public administration and social services	1%	1%
Social sciences and history	4%	3%
Theology and religious vocations	<1%	1%
Transportation and materials moving	<1%	<1%
Visual and performing arts	2%	<1%
Other	11%	8%

Occupation

Occupation	N	%	Occupation	N	%
Architecture and Engineering Occupations	181	4%	Installation, Maintenance, and Repair Occupations	80	2%
Arts, Design, Entertainment, Sports, and Media Occupations	205	4%	Legal Occupations	119	2%
Building and Grounds Cleaning and Maintenance Occupations	28	<1%	Life, Physical, and Social Science Occupations	60	1%
Business/Financial Operations	340	7%	Management	363	7%
Community and Social Service Occupations	96	2%	Office and Administrative Support Occupations	102	2%
Computer and Mathematical Occupations	227	4%	Personal Care and Service Occupations	20	<1%
Construction and Extraction Occupations	123	2%	Production Occupations	37	1%
Educational Instruction and Library Occupations	1584	31%	Protective Service Occupations	45	1%
Farming, Fishing, and Forestry Occupations	32	<1%	Sales and Related Occupations	353	7%
Food Preparation and Serving Related Occupations	48	1%	Transportation and Material Moving Occupations	66	1%
Healthcare Practitioners and Technical Occupations	222	4%	Other	693	14%
Healthcare Support Occupations	99	2%			

Note. Almost half of the sample chose not to disclose their occupation whether on this question or when asked to write in their current job.

Organizations & Apps

Organization	N	Organization	N
AAU	429	Pop Warner	105
America Scores	91	Special Olympics	170
Boys and Girls Club	172	Up2Us	21
Coaching Corps	171	US Soccer Federation	759
Girls on the Run	70	US Soccer Foundation	248
I9 Sports	89	US Youth Soccer	1256
Jr NBA	83	USA Olympic and Paralympic Committee	96
KOA Sports	48	US Sports Camps	71
Laureus Sport for Good	36	USTA	144
LiFE*sports*	39	WIAA	498
Little League	948	YMCA	266
OHSAA	627	Other	1715

App	N
Team Snap	2194
Arbiter	1059
Other	1323

Sports Coached During Entire Coaching Career

Sport	Total	%	Sport	Total	%
Badminton	512	5%	Golf	676	6%
Baseball	3501	33%	Gymnastics	214	2%
Basketball	3634	35%	Ice Hockey	326	3%
Biking	762	7%	Lacrosse	365	4%
Bowling	255	2%	Martial Arts	150	1%
Boxing	153	2%	Parkour	35	<1%
Cheerleading	330	3%	Rowing	49	<1%
Cross Country	712	7%	Rugby	115	1%
Curling	61	<1%	Sailing	46	<1%
Dance and Step	187	2%	Soccer	4158	40%
Diving	95	1%	Softball	1779	17%
Esports	97	1%	Street Hockey	91	1%
Fencing	313	3%	Swimming and Diving	451	4%
Field Hockey	123	1%	Squash	30	<1%
Figure Skating	324	3%	Track & Field	1417	14%
Flag Football	1269	12%	Tennis	555	5%
Tackle Football	1681	16%	Volleyball	1042	10%
Free play	348	3%	Wrestling	585	6%
Frisbee	171	2%	Other	476	5%
General Fitness	787	8%	--	--	--

Note. %'s exceed 100% given coaches could select all of the sports they have coached during their entire coaching careers.

Roles Held During Entire Coaching Career

Career Roles	N	%	Asst.	Volunteer	AD	Parent/ Caregiver	Sport Admin.	Board Member	Other
			% of Sample Working in Both Roles During Career						
Head Coach	8301	79%	63%	53%	8%	44%	13%	21%	5%
Assistant Coach	7804	74%		54%	7%	43%	12%	20%	5%
Volunteer Coach	6792	65%			5%	43%	11%	19%	4%
Athletic Director (AD)	914	9%				5%	4%	3%	1%
Parent/Caregiver of an Athlete	5430	52%					9%	18%	3%
Sport Admin.	1483	14%						7%	2%

Board Member	2393	23%		2%
Other	652	6%		--

Note. %'s exceed 100% given coaches could select all of the roles they have held during their coaching careers.

Settings Coached During Entire Coaching Career

Career Settings	N	%	Dev.	Rec.	Comp.	Collegiate	Adapted	Other
			% of Sample Working in Both Roles During Career					
School	6544	62%	35%	41%	39%	11%	5%	3%
Developmental (8 or younger)	5868	56%		47%	41%	8%	5%	2%
Recreational	7173	68%			47%	9%	5%	3%
Competitive	6176	59%				10%	5%	3%
Collegiate	1313	13%					2%	1%
Adapted Settings	614	6%						<1%
Other	411	4%						--

Note. %'s exceed 100 given coaches could select all of the settings they have coached in during their entire coaching careers.

Pay and Hours Worked Last Season

Pay Last Season	%	Hours Worked Last Season Per Week	%
Unpaid position	41%	Less than 5 hours	9%
Less than $999	4%	6 to 10 hours	23%
$1,000-$4,999	30%	11 to 15 hours	17%
$5,000-$9,999	14%	16 to 20 hours	17%
$10,000-$19,999	4%	21 to 25 hours	11%
$20,000-$29,999	2%	26 to 30 hours	9%
$30,000-$39,999	2%	31 to 35 hours	4%
$40,000-$49,999	1%	36 to 40 hours	4%
More than $50,000	3%	More than 40 hours	6%

School Follow-Up Questions

School Type	%
Public	83%
Private	14%
Charter	2%
Other	<1%
School Age	**%**
Preschool	<1%
Elementary school	2%

Middle school	10%
High school	86%
Other	2%

Relationship with School	% of Full Sample	% of School-based Coaches
Administrator	1%	<1%
Athletic Director	4%	9%
Counselor	1%	3%
Educator/Teacher	18%	50%
Extended Family Member of Student	1%	3%
Interventionist or Student Support Specialist	<1%	1%
Parent/caregiver of student at the school	6%	15%
Paraprofessional	1%	3%
Social Worker	<1%	<1%
Volunteer	5%	12%
Other	7%	18%
Employed by School	**% of Full Sample**	**% of School-Based Coaches**
Employed in one or more roles in the school	4%	12%

Note. % exceed 100% given coaches could select more than one role at the school (i.e., athletic director and administrator).

How Team is Selected

How Youth Are Selected for the Team	%
Random assignment by league	14%
Tryouts for team	51%
Coach draft of athletes	11%
Other	24%

Ages of Youth on Team

Ages of Youth on Team	%
Under age 7	7%
8-13	35%
14 -17	54%
18 and older	3%

Appendix B

Coaching Behaviors

Category	% Agree	% Strongly agreed		% Agree	% Strongly agreed
Health and Safety					
handle concussions.	47%	39%	handle injuries.	52%	35%
Coaching the X's and O's					
prepare for competitions against strong opponents.	50%	37%	teach basic techniques/skills.	34%	63%
make strategic decisions in pressure situations.	44%	49%	communicate with my athletes when they are underperforming.	55%	35%
maximize team strengths during competitions.	48%	41%	accurately assess the physical conditioning of athletes.	55%	34%
detect subtle technical errors.	48%	39%	set clear expectations for how I choose a team.	39%	39%
support the diverse needs of athletes.	49%	41%	give constructive feedback to athletes.	54%	42%
communicate with my athletes when they are performing well.	48%	48%	debrief with athletes after a competition.	51%	41%
Teaching Life and Leadership Skills					
promote good sportspersonship.	32%	66%	serve as a mentor to athletes.	45%	49%
effectively motivate athletes.	51%	39%	build confidence among athletes.	52%	44%
teach life skills through sport.	43%	47%	resolve interpersonal conflicts on a team.	54%	31%
use goal-setting techniques with athletes.	50%	34%	ensure athletes on my team are successful academically.	38%	31%
develop my athletes into leaders.	54%	29%			
Fostering a Positive Environment					
create an inclusive environment.	41%	55%	foster positive team dynamics and cohesion.	48%	46%
make athletes feel welcome on a team.	32%	65%			

Category	% Agree	% Strongly agreed		% Agree	% Strongly agreed
Coach Beyond…					
report child abuse and neglect.	31%	57%	deal with the pressures of coaching.	49%	39%
develop mental toughness among athletes.	53%	33%	set expectations for our team related to social media.	35%	23%
identify mental health concerns among athletes.	44%	25%	prevent burnout among athletes.	53%	25%
help athletes regulate their emotions.	57%	25%	identify off the field stressors among athletes.	47%	19%
refer athletes to supports for unmet basic needs.	39%	18%	incorporate mental imagery into training/workouts.	44%	24%
link athletes to mental health resources.	36%	18%	utilize mindfulness exercises with athletes.	40%	22%
communicate with parents/caregivers.	49%	40%	reduce performance anxiety among athletes.	55%	20%
help athletes navigate the pressures of social media.	35%	17%			

Training Participation by Organization

Organization	N	%	Organization	N	%
Center for Healing and Justice through Sports	118	1%	National Alliance for Youth in Sport (NAYS)	388	4%
Crash Course	132	1%	Positive Coaching Alliance	1268	12%
Doc Wayne	61	<1%	U.S. Center for SafeSport	2366	23%
How to Coach Kids	231	2%	Up2Us	52	<1%
MOJO Sports	241	2%	United States Center for Coaching Excellence (USCCE)	437	4%
National Federation of State High School Assoications (NFHS)	2348	22%	Other	1082	10%