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Christina Ann Villalon
West Virginia University, cav0016@mix.wvu.edu

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Roles and Responsibilities of a Coach Developer in a Youth Soccer Setting in the United States

Christina Villalon

Dissertation submitted to the College of Applied Human Sciences at West Virginia University

in partial fulfillment of the requirements for the degree of

Doctorate of Philosophy in Coaching and Teaching Studies

Kristen Dieffenbach, Ph.D., Chair

Sean Bulger, Ed.D.

Melissa Thompson, Ph.D.

Emi Tsuda, Ph.D.

Department of Athletic Coaching Education

Morgantown, West Virginia

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Abstract

Roles and Responsibilities of a Coach Developer in a Youth Soccer Setting in the United States

Christina Villalon

Although coaching has a long history guided in the apprenticeship or mentorship model (Taylor & Garratt, 2013), research has primarily focused on the athlete, rarely on the coach, and almost never on whom the coach is serving as an apprentice to, or being mentored or supported by. Internationally, this role has been termed a 'coach developer,' but the formalized title and role of the coach developer is still a rather new concept (ICCE, 2014), with most research focused on the coach developer working at elite levels. Therefore, the purpose of this study was to explore the roles and responsibilities of a coach developer in the United States youth soccer sport context, specifically within a single organization. Using a two-round modified Delphi approach, six panelists agreed 108 of the 184 tasks were the responsibility of the regional coach developer, 131 tasks were important to the role of the coach developer, and 51 tasks were completed at least weekly by the coach developer. Of the 184 tasks, 48 were agreed to be the current responsibility of, and important to, the weekly coach developer role. This is an increase from the 22 tasks that were identified in the organization's onboarding materials. Furthermore, one task reached a consensus for responsibility but not importance, while 20 tasks reached a consensus for importance but not responsibility. The discrepancies demonstrate an opportunity for growth within the coach developer role at the organization. This study echoes Cale and Abraham (2016) and Harvey and colleagues (2021) recommendation's regarding the need for the identification of more specific knowledge, skills, and attitudes for coach developer positions in order to better inform professional development opportunities, especially for those functioning in the youth sport context.

Table of Contents

Abstract ii
List of Tables v
List of Figures vii
Roles and Responsibilities of a Coach Developer in a Youth Soccer Setting in the US 1
    Job Analysis 4
    Coaching Psychology Framework 5
    Defining The Coach Developer 6
    Coach Developer Training 9
    Roles of the Coach Developer 12
        Planning and Initiating Coach Learning and Development 14
        Supporting and Sustaining Coach Learning and Development 15
        Evaluating and Reviewing Coach Learning and Development 16
        Being an Effective Practitioner 18
    Present-Day Coach Developer Context 19
Method 22
    Organization 22
    Research Design 24
    Participants 25
    Instrumentation 26
        Initial Screening Questionnaire 27
        Round 1 Questionnaire 28
        Round 2 Questionnaire 29
    Procedure 30
        Round 1 Procedures 30
        Round 2 Procedures 31
    Data Analysis 32
        Round 1 Data Analysis 32
        Round 2 Data Analysis 32
        Positionality 33
Results 33
Discussion 40
References 52
Appendix A - Modified Delphi Structure Overview 102
Appendix B - Screening Process Invitation Email 103
Appendix C - Screening Process Invitation IRB Consent Form 104
Appendix D - Modified Delphi Timeline 105
Appendix E - Initial Screening Questionnaire 106
Appendix F – Organization's CD Role & Responsibilities Onboarding Slides 109
Appendix G - Task Inventory List 110
Appendix H - Round 1 Questionnaire 117
Appendix I - Round 2 Questionnaire 118
Appendix J - Screening Email 1st Reminder 119
Appendix K - Screening Email 2nd Reminder 120
Appendix L - Round 1 Instructions 121

Appendix M 122
Round 1 Reminder Emails 122
Round 1 - 1st Reminder 122
Round 1 - 2nd Reminder 123
Round 1 - 3rd Reminder 124
Appendix N 125
Round 2 Instructions 125
Round 2 - Initial Email: Round 1 Panelist 125
Round 2 - Initial Email: Informed Consent 126
Round 2 - 1st Reminder 127
Round 2 - 2nd Reminder 128
Appendix O - Extended Literature Review 129

List of Tables

Page

70 Table 1. Participant's Demographics

71 Table 2. Responsibility of Task to Regional Coach Developer by Duty Groupings for Rounds 1 & 2

72 Table 3. Responsibility of Task to Regional Coach Developer for Building Relationship Tasks

73 Table 4. Responsibility of Task to Regional Coach Developer for Observe and Assess Tasks

75 Table 5. Responsibility of Task to Regional Coach Developer for Design, Deliver, and Evaluate Programs for Coaches Tasks

76 Table 6. Responsibility of Task to Regional Coach Developer for Design, Deliver, and Evaluate Programs for Coach Developer Tasks

77 Table 7. Responsibility of Task to Regional Coach Developer for Facilitating Learning Opportunities Tasks

79 Table 8. Responsibility of Task to Regional Coach Developer for Support and Mentor Coaches Tasks

80 Table 9. Responsibility of Task to Regional Coach Developer for Provide Leadership as a Coach Developer Tasks

81 Table 10. Responsibility of Task to Regional Coach Developer for Engaging in Continuing Professional Development Tasks

82 Table 11. Importance of Task to Regional Coach Developer by Duty Groupings for Rounds 1 and 2

83 Table 12. Importance of Task to Regional Coach Developer for Building Relationships Tasks

84 Table 13. Importance of Task to Regional Coach Developer for Observe and Assess Coaches Tasks

86 Table 14. Importance of Task to Regional Coach Developer for Design, Deliver, and Evaluate Programs for Coaches Tasks

87 Table 15. Importance of Task to Regional Coach Developer for Design, Deliver, and Evaluate Programs for Coach Developers Tasks

88 Table 16. Importance of Task to Regional Coach Developer for Facilitating Learning Opportunities Tasks

90 Table 17. Importance of Task to Regional Coach Developer for Supporting and Mentoring Coaches Tasks

91 Table 18. Importance of Task to Regional Coach Developer for Providing Leadership as a Coach Developer Tasks

92 Table 19. Importance of Task to Regional Coach Developer for Engage in Continuing Professional Development as a Coach Developer Tasks

93 Table 20. Frequency of Task to Regional Coach Developer by Duty Groupings for Round 2

94 Table 21. Consensus on Responsibility, Importance, and Performed Weekly

95 Table 22. List of Tasks that Reached Consensus Organized by Performance Frequency

99 Table 23. List of Interesting Tasks That Did Not Reach Both Responsibility and Importance Consensus

List of Figures

Page

100 Figure 1. Responsibility Mean Compared to Importance Mean for Round 1

101 Figure 2. Responsibility Mean Compared to Importance Mean for Round 2

Roles and Responsibilities of a Coach Developer in a Youth Soccer Setting in the United States

Although sport in society has evolved over the years, the current role of sports to impact health and human development physically, socially, and psychologically is valued (see DHHS, 2019, p. 8; Vealey & Chase, 2016). Still, simply participating in sport does not guarantee benefits or positive developmental outcomes, rather that is part of the 'Great Sports Myth' (Coakley, 2011, 2015). Instead, athlete outcomes are impacted by individual characteristics, significant others, and the environment (Gould, 2019) and require specific, intentional attention and targeting (Fraser-Thomas et al., 2005; Petitpas et al., 2005). The youth sports coach is in the best position to teach and promote these positive benefits due to their direct contact with athletes (Chalip & Hutchinson, 2017) and their intended roles as a teacher (Jones, 2006) and caregiver (Cronin & Armour, 2018).

Consequently, the youth sports coach plays a significant role, if not an essential part, in positively impacting individuals' development, determining the quality of the sporting experience delivered, and serving as a transformational leader (Erdal, 2018; Lara-Bercial & McKenna, 2017; Morgan & Bush, 2016). Yet, youth sport coaches are generally under-prepared and under-supported, drastically limiting their ability to support athletes appropriately (Bergeron et al., 2015; Erdal, 2018; Kerr & Stirling, 2015). This lack of knowledge, skill, and support means that most youth sports athletes are underdeveloped due to a youth sports system that does not truly value development for athletes or coaches (Fawver et al., 2020). Historically, coach education programs have focused on large-scale dissemination, and even though some coach development systems have been in place in the past, these are usually unsystematic

(Dieffenbach, 2019). Through developing quality systems to improve coaching, the quality of the sport experience and positive athlete outcomes should improve as well (Lara-Bercial et al, 2017).

One role that has grown in response to the need for a knowledgeable and educated youth sports coach workforce over the last decade is that of the coach developer, or an individual who 'coaches the coaches' across their journey of professional development (Ciampolini et al., 2020; IMG Academy, 2019). On a broader scale, the creation and formalization of this role aligns with a growing trend of additional 'coaching' support personnel for professional development of professionals (Carden et al., 2022). Literature from coaching psychology (Atad & Grant, 2021), train-the-trainer models (e.g., medical, teacher, and physical education teacher educators; see McEvoy et al., 2015), as well as teacher and executive coaching fields, can help to further guide the coach developer field (McCullick et al., 2009).

When the International Council for Coaching Excellence (ICCE) created the International Coach Developer Framework (ICDF; ICCE, 2014), this framework was not strongly informed by coach developer-specific research. In fact, little research has considered the coach developer. To date, the coach development workforce has rarely been perceived as performers worthy of being studied (Watts et al., 2021). Research in this area has focused on: a) tasks and behaviors for the role and content, rather than delivery or qualities for effective coach development (Garner et al., 2021) (which appears to mirror much of the coaching research initially done on and about athletes, with the coach as a by-product rather than the coach as a performer see Callary, 2021b; Sheehy et al., 2018), or b) coach developers outside of the United States mainly functioning in high-performance contexts (e.g., Allanson et al., 2021; Brasil et al., 2018; Callary & Gearity, 2019a, 2019b, 2019c; Stodter & Cushion, 2019; Watts, 2020). Hence, more research is needed to understand the specific roles, the objectives of those roles, and the training necessary for these

individuals to meet those objectives effectively (Harvey et al., 2022). So far, only Abraham and colleagues (2013) have considered the roles and responsibilities of a coach developer in the youth sports space when they specifically looked at The Football Association Youth Coach Educator (FAYCE) in the UK Sport System. However, that position and the associated research occurred before the ICDF (ICCE, 2014) was published, and nearly a decade has passed since.

Even so, Abraham and colleagues (2013) serve as a starting point; Cale and Abraham (2016) call for "more detail relating the demands of each task domain and the required knowledge and skills of coach educators...to more accurately inform professional development methods" (p. 168). Given the overall dearth of research on coach developers in the United States, especially in the youth sports system, which serves the greatest number of athletes compared to other sectors in the US, this area warrants further consideration and study (Harvey et al., 2022).

While there are many areas to explore relative to this role, European Sport Coaching Framework (Lara-Bercial et al., 2017) provides a model. Analyzing the coach developer occupation and domain based on the coach's need and structure of the sport and identifying functions of the coach developer as well as their competence, knowledge, and values are necessary before designing learning outcomes, programs, and assessments (Lara-Bercial et al., 2017). This agrees with the recommendations from Cale and Abraham (2016). Thus, having a better understanding of the roles and responsibilities of the coach developer in the youth sport context in the United States appears to be a logical first step towards formalizing the position of a coach developer in a sport system in order to help improve youth sport coaching by better supporting these coaches in their roles, inevitably leading to better athlete experiences and outcomes (USCCE, 2021).

Typically, there would be a job description for such a position. While some organizations do have one or have made steps in that direction, such as CIMSPA's (2022) identification of knowledge and skills, this has not been the norm in sport coach developers (Abraham, 2016) or in workplace coaching (Carden et al., 2022). Even when present, vague job descriptions are much more likely when considering young professions like the coach developer. The lack of clear competencies and the use of vague job descriptions naturally hinder appropriately recruiting, hiring, and developing individuals in the domain (Abraham, 2016; Passmore & Fillery-Travis, 2011). Therefore, one approach to better understanding the role and responsibilities of a coach developer in a youth sports system is to explore the scope of professional practice by conducting a job analysis.

Job Analysis

> Job analysis is the systematic process of discovery of the nature of a job by dividing it into smaller units, where the process results in one or more written products with the goal of describing what is done on the job or what capabilities are needed to effectively perform the job. (Brannick et al., 2007, p. 8)

According to Brannick and colleagues (2007), the hierarchy of this unit breakdown of work from smallest to largest is a) element; b) activity; c) task; d) duty; e) position; f) job; g) series; h) group; and i) branch. Using this hierarchy, the coach developer would be considered the job whereas the position is the "set of duties, tasks, activities, and elements able to be performed by a single worker" (Brannick et al., 2007, p. 8). Therefore, to better understand the position of a coach developer, it is necessary to understand the elements, activities, tasks, and duties they perform. However, the elements (smallest unit of work), activities (groupings of elements focused on a specific work requirement), tasks (groupings of activities focused on

specific job objectives), and duties (groupings of similar tasks focused on general job goals) that the coach developer is responsible for are unclear (Brannick et al., 2007).

Over the years, types of job analyses have evolved due to differences of thought, primarily based on arguments regarding the changing workplace (see Wilson, 2014 for a history of job analysis). Two more common job analysis approaches are competency modeling and job task analysis. Similar in many regards, one of the main differences is that a job task analysis focuses more on the 'what' of the job or a work-oriented analysis, whereas the competency model focuses more on the 'how' of the job or a worker-oriented analysis (Schippmann et al., 2000; Woods & Hinton, 2017). Although both are meaningful, a typical job analysis project is considered more rigorous than a standard competency model analysis, except for linking findings to the organization's goals and strategies (Schippmann et al., 2000). Since neither approach has formally examined the youth sports coach developer in the United States, exploring the roles and responsibilities of the coach developer through a job analysis that creates a task inventory serves as an entry point. Doing this can help contribute to the further progression of the professional development of coach developers and the professionalization of this domain, as is typical with emerging professions (Wolever et al., 2016).

Coaching Psychology Framework

The role of the coach developer is not unique to the world of sport. In the rapidly growing industry of workplace coaching (Dunlop, 2017), "executive coaching is a one-to-one intervention between a professional coach and a client" (Bozer et al., 2014, p. 883). Coaching models have also expanded to the education sphere through instructional coaching where a coach, "works collaboratively with a teacher to improve that teacher's practice and content knowledge with the ultimate goal of affecting student achievement for the purpose of learning new skills or

improving current skills" (Sutton et al., 2011, p. 2). The coaching industry is "considered an applied aspect of positive psychology" having emerged from humanistic psychology while also drawing from neuroscience and industrial and organizational psychology (Passmore & Evans-Krimme, 2021). Increased focus on self-awareness and personal responsibility led to approaches that were driven by reflection (Lai, 2014) and more facilitative than the sage-on-the-stage model of directed teaching (Whitmore, 1992), as the "sit and get" professional development models have rarely been effective (Sparks, 2002). Yet similar to the sport coaching industry, the journey towards professionalization of coach developers has been long (see Passmore & Evans-Krimme, 2021).

Defining The Coach Developer

Although 'coach developer' is a relatively new formalized term within the lexicon of sport (ICCE, 2014), their roles and responsibilities are not necessarily new. Aspects of this job have been previously embedded within many other positions with different titles in different ways (e.g., coach educators, athletic directors, head coaches, etc.), many of which were unformalized. The formalization and widespread use of the term 'coach developer' has primarily been due to the publication of the ICDF (ICCE, 2014) and the programming of the Nippon Sport Science University Coach Developer Academy (Bales et al., 2019). It should also be noted that not all organizations utilizing coach developers have decided to adopt the coach developer-specific title and phrasing within their organizations though (see US Soccer who has chosen to retain the term 'coach educator'; Crawford, 2022).

In the original ICDF, a coach developer was "trained to develop, support and challenge coaches to go on honing and improving their knowledge and skills to provide positive and effective sports experiences for all participants" (ICCE, 2014, p. 8), but as coaching and coach

education have evolved, the emphasis has shifted from ‘knowledge transfer’ to ‘learning facilitation’ (Bales et al., 2019). Given the evolution, conversations have been revisiting the coach developer’s definition, roles, and responsibilities (Bales et al., 2019; LEADERS, 2019; USCCE, 2021). The ICCE revised their definition to be “to engage, facilitate, educate and support coaches’ learning and behavioural change through a range of opportunities, and many include leading organisational change in coach education programmes and coaching systems” (Bales et al., 2019, p. xix), while most recently The Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) has developed their professional standard for the Coach Developer in the UK (CIMSPA, 2021). In the UK, according to CIMSPA (2021), the coach developer is described as:

> expert support practitioners who plan for, implement, and sustain strategies and interventions in support of skilled performance in sport coaching. Coach development practice takes a coach’s individual, work-related tasks and associated knowledge, skills and experiences as its starting point, preparing for and supporting learning and development with regard to both current and anticipated, future needs. It is an evolving process, reviewed as the relationship develops, and built on trust, mutual respect and professional curiosity. The coach developer’s work is educational, developmental, caring and support-oriented: interventions may include the development of technical skills, enhancing interpersonal relationships, evolving effective strategies to manage specific challenges and constraints, or a combination of these. Whatever the specific nature of a coach developer’s work might be, it will always be characterised by prioritising the health and well-being of the coach. It will also be collaborative, contextually situated, and concerned with helping coaches to develop active, critical knowledge and skills. Coach

> developers frequently work with other stakeholders that share a coach's environment in order to support sustainable, long-term behavioural changes. (p. 4)

Despite a number of organizations recognizing the evolution of the responsibilities of the coach developer role as they revise their coach education training, overall, systems for educating coach developers are lacking (Newman et al., 2020). Job tasks, titles (e.g., coach developer, coach educator, coach mentor, coaching or athletic director, and coach manager), and descriptions can vary immensely by context and the organization (Watts et al., 2021) and may or may not align with industry definition(s) or the ICDF (ICCE, 2014). Within the industry, the various types of coach developers have been described in several different ways. The ICDF breaks down levels of coach developers (coach developer, senior coach developer, master coach developer, and national trainer) relative to the organizational or policy level at which these individuals oversee the development of other coaches (ICCE, 2014). The South African framework describes the levels in their system similarly but identifies them as National Coach Education Advisor (NCEA), National Coach Developer (NCD), and Provisional Coach Developer (PCD) (SASCA, 2022). Horgan and Daly (2015) instead differentiate between those coach developers who are involved in program development (designers) and those coach developers who are concerned with program implementation (facilitators and evaluators). The reality of how these types of coach developers function within the broader industry or specific organizations on a day-to-day basis is unknown and warrants further exploration as the missing shared foundation makes it difficult to develop training and other learning opportunities, evaluate the position and those fulfilling those roles, and grow the profession across the industry.

While some training programs exist (e.g., Nippon Coach Developer Academy and USCCE Coach Developer Academy), there is "a major deficiency in the training of coach

developers [as] very few (if any) of our academic institutions equip graduates with coach developer skills" (Horgan & Daly, 2015, p. 354). Although, effectively designing and implementing 'train-the-trainer' programming have also been a struggle across multiple professions (Darling-Hammond et al., 2005; Kavanagh & Danielson, 2019) and the coach developer role is not an exception. Yet, the value of training others to help support coaches' needs is critical to promoting coaches' and athletes' success (Rocchi & Pelletier, 2017). Hence, there is still much room for progress in coach developers' training, education, and development.

Coach Developer Training

Despite the history of research that has considered coaches' learning preferences (e.g., Dieffenbach, 2008; Erickson et al., 2008; Van Woezik et al., 2021), this vein of the literature tends to ignore what the coach needs in order to be an effective coach; similarly, the same can be said for the coach developer. Given the influence coach developers have on coaches, coach education, and coach development (much like the influence that teachers have on students and coaches have on athletes), their training is not only important to consider (Culver et al., 2019; Dohme et al., 2019), but also must be appropriate (Glen & Lavallee, 2019) as good intentions can only go so far. Broadly, professional development programs should be purposeful with specific objectives (Guskey, 2002) and grounded in adult learning theories (McCarthy et al., 2021). However, in most organizations, coach education and coach development have not been built upon a foundation of educational or learning theories. Instead, the continuation of the 'I played so I can coach' perspective seen in sports coaches is perpetuated with the 'I played, and I coached so I can coach develop' assumption (Brasil et al., 2018; Cushion et al., 2019). These approaches undervalue the role of the coach developer as a source of supporter, guide, mentor, or facilitator in the learning process (Lara-Bercial, 2021) and essentially leave the ongoing

development of the professional to chance (Darling-Hammond et al., 2005). Thus, the individual may develop as a professional slowly over time or not at all (Witherspoon et al., 2021).

The ICDF recommends potential coach developers should have “significant and successful coaching experience” with any additional skills or knowledge being “desirable” (ICCE, 2014, p. 27). Despite coaching being argued as a teaching role by both academics (Jones, 2006) and coaches themselves (Villalon et al., in progress), many coaches in the United States do not have a background in education ("National Coaching Report," in progress). So historically, coach developers have been drawn to the coach developer field due to positive experiences in sport and coaching and a desire to support others (Brasil et al., 2018; ICCE, 2014), and may find themselves promoted from coaching roles into coach developer positions due to coaching expertise rather than their skills to deliver coach education (ICCE; 2014; North et al., 2015, as cited in European Sport Coaching Framework, 2017).

However, having coaching content knowledge is different from having pedagogical or andragogical content knowledge, or understanding how to teach that knowledge to others. Thus, coach developers should have expertise in, and understanding of, learning and learners, professional, interpersonal, and intrapersonal knowledge, and how to develop and manipulate learning environments to achieve learning outcomes (Abraham et al., 2013; Cassidy et al., 2006; ICCE, 2014; Paquette et al., 2019). Therefore, depth and detail of curricular content, method, and design for the coach developer is still an area for improvement (Callary & Gearity, 2019a). Allen & Shaw (2009) recommend an interdisciplinary perspective that includes education, management, sport science, sociology, and psychology instead of the more likely current practice of working from a specific disciplinary lens (Callary, 2021a). Abraham (2016) highlights necessary foundational understanding in six areas for the FAYCE: a) context, strategy, and

politics, b) the coach (who), c) adult learning and development (how), d) coach curriculum development (what), e) process and practice of coach development, and f) self. Yet, when considering Bloom's Taxonomy (Bloom, 1956), simply understanding may not be enough for coach developers to effectively carry out their roles in supporting quality coaching as knowledge alone does not translate to applied skills, efficacy, or impact. Individuals in this position likely also need to know how to apply, evaluate, and create.

CIMSPA (2021) takes an additional step in this direction by providing an initial list of knowledge and skills for coach developers in the UK. However, outside of Abraham (2016) and CIMPSA (2021), what content should or should not be included in training for coach developers is 'undefined' and 'underexplored' (Stodter & Cushion, 2019). Although, Campbell and colleagues (2021) note facilitation recommendations to include: a) unstructured informal social time; b) opportunities for practical application with feedback; c) tailoring the program to coach developers state of professional development and their specific role; and d) on-going support when integrating to their environment. Furthermore, due to lack of program evaluations it is also not known whether any currently offered programs in coach development are effective (Stodter & Cushion, 2019).

Like coaches and physical education teachers, coach developers are also influenced by their subjective warrant and prior experiences when it comes to their skills and practices (Culver et al., 2019; Cushion et al., 2019; Dewar & Lawson, 1984; Leeder et al., 2019; Paquette et al., 2019; Schoenstedt et al., 2016). The familiarity with what they already know or feel comfortable with can impact how they practice (Cushion et al., 2019). Furthermore, several organizations are beginning to realize the value of the educated coach developer, and the importance that person-organization fit and onboarding individuals into their organization play when filling these

positions (Kiosoglous et al., 2021). So, organizations and institutions, like universities, need to do more to help support training and continuing professional development opportunities for coach developers (Ciampolini et al., 2020). In recent years, some programs, especially in the UK (Redgate et al., 2020), have been making strides in developing more structured coach developer training programs but programs in the United States have not grown similarly. Hence, more research is needed to evolve this role and best practices, especially since coach developers may be used in different modes (e.g., only when needed, built into clubs, as a club coaching coordinator, at a coaching camp, as part of a local council-partnership model, and in courses or workshops) and take on multiple complex roles (Sport Australia, 2022).

Roles of the Coach Developer

Coach developers can serve in various roles (Abraham et al., 2013; Bales et al., 2019; Dohme et al., 2019; Horgan & Daly, 2015; McQuade & Nash, 2015; North, 2010). The roles the coach developer will fulfill may depend on the needs of the organization, the skills of the coach developer, and the coaching system and culture of the organization (Bales et al., 2019). Yet, with the newness of the coach developer role being defined (ICCE, 2014) and continuing to evolve (Bales et al., 2019; LEADERS, 2019; USCCE, 2021), and the lack of standardization across the industry, the objectives of the coach developer are relatively fluid.

Given the variation in the roles, it is likely easiest to break them into more specific areas to discuss. Thus, the roles of the coach developer as described by CIMSPA (2021) include: a) planning and initiating coach learning and development, b) supporting and sustaining coach learning and development, c) evaluating and reviewing coach learning and development, and d) being an effective practitioner. Much like doctors have certain specialty areas in which they practice, not every coach developer will fulfill every role across the continuum. Each of these

areas requires specific knowledge in specific areas of study to be most effective, all while broadly understanding adult learners and adult learning theories (ICCE, 2014).

Despite 50% of employee skills becoming outdated three to five years later (Shank & Sitze, 2004), lack of time and money tend to be the most cited reasons for not participating in adult education (Valentine & Darkenwald, 1990). According to Houle (1961), there are three different types of motivation for adult learners: a) those who are extrinsically motivated to achieve a concrete goal or obtain a qualification; b) those who interact socially with a group of other learners; and c) those who are intrinsically motivated due to interest in the subject matter. Since adult learners are more accustomed to making their own decisions, they tend to be more proactive and prefer determining the pace and style of their learning (Housel, 2020). They tend to see themselves as a customer and, as a result, are picky about the opportunities they choose to partake in (Hadfield, 2003). As such, the adult learner's experience can promote further learning or turn these adult learners off and away from what is perceived and supposed to be high-quality education. Hence, understanding the adult learner and adult learning theories is critical due to the coach developer's role in facilitating these professional development experiences. When considering the adult learner, it is important to note that there are multiple adult learning theories. However, these theories tend to "complement and often support each other" (Snyman & van den Berg, 2018, p. 27).

In addition, various models of different stages of learners have been developed over the years to explain adult learning development and stages of professional development (e.g., Schempp et al., 2006). Yet, successfully and effectively impacting learners in a way that leads to paradigm shifts for long-term impact can be challenging (see Occupational Socialization Theory, Lawson, 1986). This is especially true when considering professional development programs

where the effective application of concepts by program participants after returning to their contexts tends to fail (Harris & Sass, 2011; Jacob & Lefgren, 2004). Coach education and development do not differ from other disciplines in this regard. Without having adult learning theories as a supplement, the coach developer may not be making the best decisions regarding content and design of programs.

Planning and Initiating Coach Learning and Development

Effectively facilitating learning opportunities for coaches are complicated and messy (Walsh & Carson, 2019). When designing for adult learners, it is recommended to a) focus on learners and their needs; b) advocate for continuous learning for work and life; c) build learning on and within a real-life context; d) share power in order to empower people and communities; and e) acknowledge that there are many roles to learning (Sanguinetti et al., 2005). It is also essential to consider the teacher, the teaching, the curriculum, and the place in which the learning will occur (Sanguinetti et al., 2005). These designs should also align with the program's athlete development model and coach needs. Thus, declarative content knowledge relative to sport science, sport-specific techniques, coaches' professional, interpersonal, and intrapersonal knowledge, learning theories, facilitation techniques, curricular and instructional design, assessment, and evaluation, as well as procedural application knowledge is crucial for a position relative to this role (Redgate et al., 2020). Some of this may include facilitating working through realistic, contextual coaching challenges and all the messiness and complexities that entails (Ciampolini et al., 2020). Overall, specialized coach developer roles like curriculum developers, instructional designers, and program assessors would function here (Horgan and Daly, 2015).

Coach developers also need to be able to create a safe and inviting learning environment and build relationships with coaches where they establish rapport, connection, and trust

(Knowles, 1980). Such an environment should be learner-centered, engaged, application-based, and incorporate reflection and new knowledge that helps to stretch the learner to grow (see LEARNS framework, Walters et al., 2020). This should occur both inside the classroom and out as well as incorporate a range of formal and non-formal learning opportunities across a coach's career (see Callary & Gearity, 2019b for some examples), not just in the initial training of coaches, to continue to educate, support, and nurture as part of an ongoing professional development framework for coaches (ICCE, 2014).

Supporting and Sustaining Coach Learning and Development

There are numerous ways coach developers can continue to support coaches learning and development (Bales et al., 2019). However, this must begin with the coach developer's ability to build relationships (Dohme et al., 2019; North, 2010; Rodrigue & Trudel, 2020; Sheehy et al., 2019). Specifically, this could include broadly creating a lifelong learning culture as well as more specific tasks relative to mentoring and consulting. While athletic directors or other athletic administrators could fill the coach developer role in this way, most do not, or are not doing so effectively due to limited time, resources, or knowledge and skills (Van Mullem & Mathias, 2021).

Coach developers can work to foster a culture of lifelong learning where coaches support each other's learning during, outside, and after formal programs and sessions (Dohme et al., 2019). Things like facilitating the set-up and organization of a continuing professional development culture within an organization or scheduling opportunities, like communities of practice, can help enhance and improve the coaches' occupational socialization and learning skills. How this functions depends on the hierarchy level within the coach developer system. Thus, this culture facilitation may be limited to within one's organizational context or be much

broader and include influencing and impacting a national or international context (see later discussion in 'Providing Leadership').

In a slightly different manner, coach developers may also take on the mentor role. For head, master, or senior coaches looking to develop their assistant coaches, this is likely the perspective and approach that they would take. However, this is not an easy task as such coach developers in mentorship roles take on dual roles by coaching athletes while also supporting other coaches' development (Ben-Peretz et al., 2010). Mentors can also exist outside of the head-assistant coach relationship (see Gillham & Van Mullem, 2020). Coach developers might take on the role of a one-on-one consultant providing instructional coaching or individualized sessions (e.g., Rodrigue et al., 2019; Lauer et al., 2016), overseeing a team of coach educators (ICCE, 2014), or providing ongoing support beyond any formal education programs (Allen & Shaw, 2009; Newman et al., 2020; Sheehy et al., 2019).

Evaluating and Reviewing Coach Learning and Development

When it comes to evaluating and reviewing coach learning and development this can be done at two different levels: individual (the coach) and organizational (the program). At the individual level, this could include individual assessments and observations while at the organizational level this is more likely described as a program evaluation. The recent growth of research looking at the athlete-coach transition is another way in which evaluating and reviewing coach learning and development could come into play as organizations can assist in supporting that transition (see Chroni et al., 2020; Chroni & Dieffenbach, 2022; Dieffenbach & Pettersen, 2021).

Coach Observation, Assessment, and Evaluations. For coach development programs, successful completion of a program may be based on a single assessment, if one is required at all

(McCarthy et al., 2021). This assessment may be based on a coaching observation or some type of multiple-choice or written exam (Vangrunderbeek & Ponnet, 2020). These typically occur at the end of a course. However, according to McCarthy and colleagues (2021), assessments should be integrated into teaching and learning activities (rather than serving as an end-point), contribute to metacognitive skill development, and be authentic, practical, clear, transparent, challenge-congruent, and collaborative.

Unlike school teachers who tend to be observed by principals, it is much less common that coaches get observed by any supervisor (e.g., coach developer, coaching director, or athletic director) unless they work within an organization that features a coach development system. The role of assessment both within coach education programs and within organizational programs as continuing professional development is arguably an area that has largely been overlooked within the field of coach education and development (McCarthy et al., 2021) with few exceptions (e.g., Coach Behavior Assessment System; Smith et al., 1977). This is a concern from a quality control perspective and an adult learning perspective, given that adults prefer to have clarity of progress towards their goals (Knowles, 1980).

It is also important that the coach developers be trained to facilitate and conduct the assessments (McCarthy et al., 2021). Coach developers fulfilling roles in observing and assessing coaches first need to know how to do a meaningful observation and make sense of what is learned. Then, they need to know what they need to observe or assess, or what standards or objectives need to be considered. This means they should know what tools are available and appropriate for the context in which they are functioning, how to use them and what they mean. They should also be skilled in discussing the assessment with the coach, providing meaningful

and effective feedback, and facilitating conversations about growth, the next steps forward, and professional development plans. All of which can also help inform a broader program evaluation.

Program Observation and Evaluations. When extending the concept of program evaluators to research studying coach development programs, these programs may not target specific coaches' contexts (Campbell & Waller, 2020). In addition, historically, they have tended to be very one-sided, with evaluations of the programs stemming largely from coach participants' accounts and disregarding other related stakeholders (Campbell & Waller, 2020). This is an underutilized and perhaps often overlooked part of coach education systems, yet, "all coach education programs need to evaluate their effectiveness" (Harvey et al., 2022, p. 8). With many coach education systems created as a revenue stream, evaluating the program for effectiveness is viewed as less of a concern by the organization. As such, coach developers are likely not funded or empowered to evaluate their programs once completed. Given the value of observation and assessment in contributing to behavioral change, this is a crucial area for the field to grow.

Being an Effective Practitioner

Providing Leadership. One newly discussed area that has recently seen growth is the role of the coach developer as an agent for change. Often coach developers and educators are forced to engage in micropolitics within organizations (Redgate et al., 2020). They are also often leading the development of organizational culture and modeling behaviors. Furthermore, their ability to provide leadership can help to provide direction and messaging consistency across the organization, and to serve as a conduit from higher tiers of administrators to boots-on-the-ground coaches.

Engaging in Continuing Professional Development. The field of coach education and development is continually evolving. Thus, like other fields and professions, coach developers need to be lifelong learners open to the updated information in order to keep up with the field (Ciampolini et al., 2020). Without a professional certification or professional board, there are no specifications as to what requirements would be relevant or accountable if they are not completed, so beyond these basic recommendations, little else is known about the continuing professional development needs of a coach developer (Callary et al., 2020). It appears that there has only been one such article regarding a community of practice approach (Callary et al., 2020) and one article that touches on the benefit of coach developers engaging in group work exercises at a national meeting (Redgate et al., 2020). However, continuing professional development when done in the traditional 'sit and get' sense is not known for being the most effective or beneficial. This is not only something that the coach developer field struggles with as calls for increased research and understanding of professional educators in other fields are also common (e.g., MacPhail et al., 2019).

Present-Day Coach Developer Context

While these coach developer roles may seem compartmentalized, as described previously, coach developers may be taking on multiple roles not just in coach development but also in the broader organization, and sometimes it can get messy. It is not uncommon for current coach developers to try and both work in the system and on the system and thus they may find themselves splitting their time amongst multiple jobs rather than solely focused on their coach education and development position. So, not only is the field in evolution, but the lines at which one role starts and the other stops relative to job titles lack clarity (Garner et al., 2021; Watts et al., 2021). It should also be noted that "the [COVID-19] pandemic has changed [coach

developers] jobs" (Callary et al., 2020, p. 577). Transitioning to entirely online platforms, focusing on providing care and support for the well-being of coaches and athletes, partnering and helping to support other systems, and putting a greater emphasis on their own professional development are some of the ways the coach developer job has evolved during the pandemic (Callary et al., 2020).

The subset of coaching research considering the coach educator and coach developer roles is growing (Callary, 2021b), partly due to the need to help fill the knowledge gap but also because of the increase in third-generation professionals, or professionals explicitly trained in sports coaching or coach development (see Dieffenbach & Wayda, 2010 for further discussion of generations of professionals in academic disciplines). Given the lack of coach developer-specific research, most of what is known is from the coaching research or other train-the-trainer models and is generally from a top-down perspective. Thus, we know relatively little from a bottom-up perspective, or that which involves the coach developers at the ground level.

If there are issues with the broader coach education or organizational system, only approaching this role from a top-down perspective is a concern (Watts, 2020). For example, power dynamics, the number of qualified individuals, or the way in which upper administration views coaching education programs (i.e. revenue generation compared to an education and development model) may play a role in the structuring of programs and specific offerings. There could also be an issue of organizational or role fit (Watts, 2020). Conflicting philosophies or placing or hiring others without appropriate qualifications to do what is required in the role could result in difficulties as well. This could stem from the lack of systematic understanding as to what the 'right' credentials are. So, although the criticisms of coach education are often also associated with coach educators (Chesterfield et al., 2010; Nash & Sproule, 2012), it is also

important to note that sometimes the issues may be out of the coach developer's control (Lyle, 2002; Watts et al., 2021).

Additionally, historically coach developer-specific research has generally focused on those individuals working in high-performance settings. This can potentially skew the reality of what coach developers do daily, especially at the youth sports level. The ways in which these coach developers are working to help support volunteer youth sport coaches may look very different. Although the ICDF (ICCE, 2014) provided a great starting point, there are calls for the coach developer role to be professionalized (Redgate et al., 2020). As a profession grows ("International Council for Coaching Excellence (ICCE) 13th Global Coach Conference," 2021) and evolves there is a need to reexamine the roles and responsibilities that make up the coach developer's reality, especially in specific contexts.

Given the differences between contexts in the sports environment, this research focused on soccer due to its' international history with the coach developer role with the FA as an early adopter of the coach developer concept (Abraham, 2016). The role then spread and soccer became one of the sports leading the way in this profession in the United States. Unfortunately, the number of individuals currently fulfilling coach developer roles within soccer in the United States is unknown due to the lack of prior research in this area and the decentralized US youth sport structure. Therefore, identifying a specific organization that has invested in coach education and development and their coach developers was key to completing an effective job task analysis for the youth sports coach developer.

In alignment with the recommendation from Harvey and colleagues (2022) to explore the role of coach developers in the U.S and their necessary professional development opportunities and systems of education and support, coupled with recognition of the broader evolving coach

developer role and the increasing recognition of the need for knowledgeable coach developers to assist in supporting volunteer youth sport coaches, this study explored the roles and responsibilities of a coach developer in the United States youth soccer sport context, specifically within a single organization. Exploring this concept can inevitably help to assist in a) informing practical applications to other organizations; b) informing hiring managers of the necessary skills for the role; c) informing curriculum for academic and other training programs; and d) identifying areas in which coach developers can start to be evaluated. Thus, recognizing these tasks, roles, and responsibilities improves these areas, resulting in improvements to the coach developer industry and the systems of education for coach development; by transitive property, this can lead to better education systems and support for a mainly volunteer youth sports coaching workforce and inevitably better athlete experiences.

Method

To appropriately train and support adults in the workplace for specific and relevant competencies and skills, understanding what tasks their job entails is important (Brannick et al., 2007). This understanding can result from a job analysis, specifically a task inventory. Therefore, in order to understand what youth soccer coach developers in the US do, this study explored the roles and responsibilities of coach developers in the youth soccer context, specifically within a single organization, using a task inventory approach through a modified Delphi approach.

Organization

For this study, a case study organization was selected. The multi-sport social impact organization chosen works to create positive experiences for more than 100,000 athletes. The soccer arm of the organization serves more than 60,000 athletes from 4-18 in eight states and pursues two developmental goals: athletic development and character development. Therefore,

the value and importance placed on coaching by this organization is paramount and is understood and supported throughout the administrative chain of command. Thus, unlike other organizations who may view coach education as a revenue-generator or for liability protection, this organization focuses on quality effective coaching as the foundation of the entire organization.

Additionally, this organization has created a structured approach to training new coach developers that incorporates the necessary completion of webinars, observation, co-working, supervised teaching opportunities, and individual meetings before a coach developer is accredited within the organization (personal communication, 2021). This places this organization on the system development continuum between emerging and mature for their specific organization, whereas most other organizations in the US are between unstructured and emerging if they are on the continuum at all (ICCE, 2014). Thus, this organization was determined to be a good fit for the purpose of this study based on the history of the coach developer role internationally within the sport of soccer and the status of the coach developer system within the organization.

The coach developer job description from the organization created a foundation of organizational expectations related to roles and responsibilities. Additionally, the literature provided some insight into these as well, however, these lists had not been examined. Therefore, using a modified Delphi approach allowed panel participants to provide feedback based on their 'boots-on-the-ground' experiences by reviewing the previously constructed list as well as offering recommendations of additional items that should be added to the list. Therefore, in this modified Delphi, the purpose was to create a task inventory identifying the necessary tasks to complete their job as a coach developer.

RQ1: What tasks are the responsibility of the youth sport regional coach developer at the case study organization?

RQ2: What tasks are important to the youth sport regional coach developer at the case study organization?

RQ3: How frequently are the tasks performed by the youth sport regional coach developer at the case study organization?

The methodology for this project is discussed relative to research design, participants, instrumentation, procedure, and data analysis.

Research Design

Given the lack of empirical data regarding coach developer roles and responsibilities and the infeasibility of the time, cost, and logistics of having a nationwide panel meet in-person (especially during the COVID-19 pandemic) or frequently enough to be effective and efficient in their discussions (Farrell & Scherer, 1983; Linstone & Turoff, 1975), a modified Delphi protocol was used in order to explore the roles and responsibilities of a coach developer in the youth soccer context at the case study organization. The panel of experts was provided with a structured questionnaire in the first round (Murry & Hammons, 1995) and looked to arrive at "the most reliable consensus of opinion" on a particular topic area using a systematic looping, repetitive process of sequential questionnaires where frequency distributions determine agreement patterns and each round builds on the previous one (Dalkey & Helmer, 1963, p. 458). This protocol was used to achieve consensus among a panel of experts regarding the tasks of a youth soccer coach developer using a two-round Delphi protocol (Murry & Hammons, 1995; see Appendix A for Modified Delphi Structure Overview). Due to the attrition and fatigue concerns associated with multiple rounds of data collection only two rounds were used (Whitman, 1990).

Each round of online surveys through Qualtrics was emailed to the identified panelists to complete. Panelist responses from each round were then summarized and deidentified before being returned to the group. Using this approach can help aid in facilitating honest and open responses and often has been considered more accurate than in-person discussions (Murry & Hammons, 1995).

Participants

Given the necessity for experts within a modified Delphi study, participants for this study were selected using purposive sampling. The use of purposive sampling helped to ensure that the chosen coach developers were experts in the Coach Development System at their organization (Murry & Hammons, 1995). Participants considered for inclusion in the modified Delphi panel were limited to paid employees working as coach developers for the soccer arm of the organization in the United States. Every participant had to have held their role for a minimum of one year. The case study organization provided the names and emails of their current coach developers. Since there was the expectation that these coach developers were experts in their system, the participants were sent a screening questionnaire to determine which participants were to be invited to participate in the modified Delphi process.

Nineteen individuals were identified to be in regional or senior coach developer roles in the organization. Twelve individuals completed the demographic questionnaire. One individual had not yet been in the position for a year and was excluded from participation due to not meeting that criterion.

According to Bulger and Housner (2007), setting a mortality rate can help to control for participant attrition; they recommend that 80% of panelists must complete each round in order to avoid study compromise concerns. For this study, that percentage was 75%. Of the eight panel

members that contributed (seven males and one female), six completed Round 1 and six completed Round 2. To reach the 80% recommendation it would have meant requiring more panelists to complete Round 2 than had even completed Round 1. Given this fact, along with the specificity of the research project question, the already small population size, and the difficulty of participant participation, especially as part of a voluntary nature, the researcher proceeded with data analysis.

Of those that provided demographic data, the average age of the participants was 34.43 years (*SD* = 8.08). All panelists were White or Caucasian, seven male and one female. Relative to formal education, seven had received a bachelor's degree, five of those had concentrations in sport-specific disciplines including four with degrees that emphasized sports coaching. All panelists reported having had coaching experience at the youth recreation (*M* = 10.43 years, *SD* = 8.02) and performance (*M* = 12.14 years, *SD* = 7.34) levels, the majority reported having had coaching experience at the high school (85.71%) and college (57.14%) levels, while a few also had professional coaching experience (28.57%). Average time spent at those levels included 4 years coaching high school (*SD* = 1.67), 2.25 years coaching college (*SD* = 1.23), and 0.75 years coaching professionally (*SD* = 0.35). All panelists competed as athletes at the youth recreation and performance, as well as at the high school level. The majority also competed as athletes at the collegiate level (57.14%) and adult level (85.17%). On average, the panelists had been with the organization for 6.07 years (*SD* = 3.25) and had been working as a regional coach developer with the organization for 2.43 years (*SD* = 0.53) (see Table 1).

Instrumentation

As part of the initial screening process, participants were asked to complete a short questionnaire (see Appendix B for Screening Process Invitation Email, Appendix C for

Screening Process Invitation IRB Consent Form, and Appendix D for Modified Delphi Timeline). The responses to this initial screening questionnaire (see Appendix E) determined which participants should be invited as panelists. While some of the items relate to the inclusion criteria for panelists, responses to these additional demographic items, such as one's formal education and training, helped to ensure that the selected panel has both homogeneous and heterogeneous aspects (Clayton, 1997). Participants selected to be panelists based on the initial screening were then sent a link to an online Qualtrics survey for the 1st round of the Delphi process. Participants who completed Round 2 were then provided with a link to a personalized Google Sheets file that included their ratings from Round 1 for each task, the panel average ratings for Round 1 for each task, and the questions for Round 2. The rating process used in each of those rounds will be discussed.

Initial Screening Questionnaire

In the Initial Screening Questionnaire (see Appendix E), participants were asked if they are currently a coach developer with the organization. Those that responded in the negative, using skip logic, were advanced to the end of the questionnaire and thanked for their time. Those that responded in the affirmative, were asked how many years they had had that position and whether that position was paid. They were also asked to share any relevant certifications or training(s) related to their coach developer position and their preferred name and email address, should they be chosen as a participant for the study.

The initial screen also asked participants to share their age, gender, ethnicity, formal education in terms of the highest level completed and the name of their college degree(s) and major(s). Participants were then asked to share any prior coaching history in terms of the number of years coaching, sports coached, and athlete context (*youth participation, youth performance,*

middle school, high school, collegiate, adult, professional, Olympics) as well as their own level of athletic participation (*youth participation, youth performance, middle school, high school, collegiate, adult, professional, Olympics*). Each participant could also share a copy of their resume if they chose.

Round 1 Questionnaire

Using information gathered from the literature regarding coach developer roles and responsibilities (especially the ICDF (ICCE, 2014)), coupled with the roles and responsibilities described in the organization's Coach Developer onboarding materials (see Appendix F), the researcher created a potential list of tasks for the coach developer position (Ross et al., 2014). To increase the content validity of the structured questionnaire, this list (see Appendix G) was reviewed by multiple experts within the field of coach development prior to being provided as part of the structured questionnaire for Round 1 of the modified Delphi. These reviewers would be considered by their peers to be leaders at the national and international level when it comes to coach education and development. Feedback on the questionnaire's format, ordering, and content was requested and recommendations for additional items to be added to the list were also invited. Versions of the list were continually edited until reviewers were satisfied with verbiage and content. Tasks were written from an action-based perspective as is expected in a task inventory (Brannick et al., 2007), and organized using the hierarchy of Duty, Task, and Activity, if necessary (Brannick et al., 2007).

For Round 1, panelists were asked to review the list (see Appendix H for Round 1 Questionnaire). Then they were asked to respond with their level of agreement about whether a coach developer with the organization was responsible for each task (DeAngelis & Wolcott, 2019). Panelists were also asked their perception of their level of agreement regarding how

important the task was relative to the role of the coach developer at the organization. Multiple choice responses for each item included (0) *Strongly Disagree*, (1) *Disagree,* (2) *Neutral,* (3) *Agree,* and (4) *Strongly Agree* (Taliaferro & Bulger, 2020).

Panelists could also add any additional tasks to the list they felt were missing by responding to the open-ended question: '*What additional tasks are necessary to complete your job as a coach developer that was not included in the previous list?*' Panelists were welcome to submit as many additional tasks as they felt were needed for the role. They could submit their responses through an open-ended text box format or upload a word processor file (e.g., Microsoft Word document) into their Qualtrics submission.

Round 2 Questionnaire

In Round 2, panelists were asked to review the mean scores from Round 1 for each task. Then, for the entirety of the list, using the same rating categories as Round 1, panelists were asked to re-rate each item relative to the coach developer's responsibility for the task and how important the task was to the organization's coach developer (see Appendix I for the Round 2 Questionnaire). Panelists were also asked to rate each item in two additional areas: difficulty and frequency. Responses relative to the perceived difficulty of the task as it relates to the coach developer's role included: (0) *Not Applicable*, (1) *Not at all Difficult*, (2) *Slightly Difficult*, (3) *Moderately Difficult*, (4) *Very Difficult*, and (5) *Extremely Difficult*. Responses relative to how frequently they work on each task in their role as a coach developer included: (0) *Never*, (1) *Annually*, (2) *Monthly*, (3) *Weekly*, and (4) *Daily* (DeAngelis & Wolcott, 2019).

Procedure

The procedures for this modified Delphi study were informed by previously published protocols (see Bulger & Housner, 2007; Ross et al., 2014). These procedures will be discussed relative to Round 1 Procedures and Round 2 Procedures.

Round 1 Procedures

After receiving university Institutional Review Board approval, the list of potential participants was emailed an invitation to participate in the study and a link to Qualtrics to complete the screening questionnaire (see Appendix B for Screening Process Invitation Email, Appendix C for Screening Process Invitation IRB Consent Form, and Appendix D Modified Delphi Timeline). In this email, potential participants were informed of the purpose of the study, provided a copy of the informed consent form, and requested to complete the screening questionnaire on Qualtrics. Those individuals who had not yet completed the screening questionnaire eight days after the initial email request were sent a first follow-up reminder (see Appendix J). A second reminder was sent nine days after the first reminder (see Appendix K).

Participants had to complete the informed consent before beginning the screening questionnaire. Those who completed the screening questionnaire and fit the inclusion criteria were automatically emailed an invitation to participate in the study and provided with an explanation of the modified Delphi method process (see Appendix L for the Round 1 Instructions). Participants had approximately three weeks to complete and return the first round. Multiple reminder emails were sent to those who had not submitted their responses: eight days, 17 days, and 24 days after the initial email (see Appendix M for Round 1 Reminder Emails). The panelists' responses were then downloaded by the researcher from Qualtrics onto a password-

protected computer. The researcher calculated the mean group rating for each item before sending the panelists Round 2 one week later.

Round 2 Procedures

Every participant who completed Round 1 was sent the results from Round 1 in the format of individual responses and group means for each item (Ross et al., 2014) through a unique personalized Google Sheet document (See Appendix N for Round 2 Instructions). This allowed participants to compare their individual responses to the group ratings in working towards consensus. Every participant who completed the informed consent and demographics questionnaire but not Round 1 was sent the results from Round 1 in the format of group means for each item (see Appendix N). However, since they had not completed Round 1 they could not be provided with their individual responses from Round 1.

Considering the Round 1 results, panelists were asked to complete the questionnaire from Round 1 again, as well as rate each task relative to frequency and difficulty to learn. Participants were sent reminders 13 days and 21 days after the initial Round 2 email (See Appendix N). Only one participant had submitted their responses for Round 2 within three weeks of the initial Round 2 email. Many of the participants informed the researcher that they did not have time or were otherwise unable to complete the questionnaire for Round 2. After multiple discussions with executives at the organization, five additional panelists completed Round 2 within four months of the initial email. This number matched the number of panelists from Round 1. The researcher then analyzed the data. After the analysis of Round 2 was completed, an executive summary was shared with the panelists.

Data Analysis

The intention of this modified Delphi protocol was to explore the roles and responsibilities of a coach developer in the youth soccer context at a specific case study organization through a panel of experts coming to a consensus regarding a task inventory that identified the tasks necessary for a regional coach developer. Once the panel reviewed, edited, and confirmed the structured questionnaire ready for distribution, and the potential participants were screened, Round 1 was sent.

Round 1 Data Analysis

The modified Delphi panel responded to whether they were responsible for each task as a coach developer with their organization and how important they perceived the task to be to the role of coach developer. The responses from the Round 1 Qualtrics questionnaire submissions were exported to a password-protected Excel database. Items recommended being added to the list through the open-ended responses were reviewed, to eliminate any duplicates, and then added to the list of tasks to be reviewed in Round 2 in order to create the most inclusive list possible (Ross et al., 2014). Then, mean group ratings were calculated for each task.

Round 2 Data Analysis

As in the Round 1 analysis, mean group ratings were calculated for each task with the remaining responses. Additionally, a count of how many panelists had rated an item as 3 or higher was included. Similar to recommendations by Taliaferro & Bulger (2020), in order to be considered for an item to have reached consensus it needed to have a mean of three or greater (Agree) with 70% of panelists rating it a three or greater (*Agree* or *Strongly Agree*). A list of the tasks with the group means for responsibility, importance, and frequency was provided for the necessary tasks for the coach developer with the organization. Comparisons across these lists

were then considered, resulting in a singular final list of tasks that were agreed to be the responsibility of the organization's Regional Coach Developer, important to the role of the organization's Regional Coach Developer, and completed by the organization's Regional Coach Developer at least weekly.

Positionality

The researcher has completed coach developer training both from a higher education institution and from a leadership organization within the broader industry, worked as a coach developer in high school and collegiate athletics and higher education contexts, and worked in training other coach developers in higher education settings. However, the researcher had virtually no background in playing or coaching the sport of soccer nor coaching or working as a coach developer within the organization's Coaching System. Despite this, the researcher was familiar with the current youth sports environment in the United States, and the evolution of how that environment has come to be (See Appendix O). Furthermore, the researcher had been involved in communities of practice conversations among coach developers in different sports and consequently was familiar with many of the roles and challenges that individuals in this field have struggled with.

Results

In this survey there were: a) 21 tasks associated with Building Relationships; b) 39 tasks associated with Observing and Assessing Coaches; c) 27 tasks associated with Designing, Delivering, and Evaluating Programs for Coaches; d) 20 tasks associated with Designing, Delivering, and Evaluating Programs for Coach Developers; e) 36 tasks associated with Facilitating Learning Opportunities; f) 14 tasks associated with Supporting and Mentoring Coaches; g) 14 tasks associated with Providing Leadership as a Coach Developer; and h) 13

tasks associated with Engaging in Continuing Professional Development as a Coach Developer. This led to a total of 184 tasks (see Appendix G). Each task was responded to relative to the level of agreement regarding whether the task was a current responsibility of the regional coach developer with the organization and how important the task was to the role of a coach developer in two different rounds. Additionally, each task was also responded to regarding the frequency at which the task was performed by the organization's Regional Coach Developer, as well as how difficult the task was to learn.

Consensus

All items that received a mean greater than three (3) also had at least 5 panelists rating the task as *Agree* (3) or *Strongly Agree* (4) and therefore were considered to have reached consensus.

Panelist Task Contribution

Only one panelist submitted one task during Round 1, ('Seek support from Head of Coach Development within organization to design, deliver, and evaluate programs for coaches'). However, this task did not meet agreement consensus from the panel relative to responsibility ($M = 2.83$, $SD = 0.75$) or importance ($M = 2.50$, $SD = 0.71$). It was considered to be completed monthly ($M = 2$, $SD = 0.71$) and either not applicable or not at all difficult to learn by panelists.

Responsibility

After Round 1, there were 20 tasks that all panelists 'Strongly Agreed' were currently part of the responsibilities of a regional coach developer with the organization (see Table 2. These were related to the duties of observing and assessing coaches (13), facilitating learning opportunities (4), and providing leadership as a coach developer (3). Overall, there were 104 tasks of the total 184 tasks (56.52%) that had an average related to 'Agree' or greater that were

the responsibility of a regional coach developer. Interestingly the averages were skewed towards agreement as there were no tasks for which the mean averaged less than 'Disagree'.

After Round 2, there were 37 tasks that all panelists 'Strongly Agreed' were currently part of the responsibilities of a regional coach developer with the organization (See Table 2. These were related to the duties of building relationships (1), observing and assessing coaches (18), facilitating learning opportunities (11), supporting and mentoring coaches (2), providing leadership as a coach developer (3), and engaging in continuing professional development (2). Overall, there were 108 tasks that had an average related to 'Agree' or greater that were the responsibility of a regional coach developer. Similar to Round 1, the averages were skewed towards agreement as there were no tasks for which the mean averaged less than 'Disagree'.

In both Rounds 1 and 2, when considering averages across duty areas, Observing and Assessing Coaches, Facilitating Learning Opportunities, and Supporting and Mentoring Coaches had the highest means, while Design, Deliver, and Evaluate Programs for Coach Developers; Design, Deliver, and Evaluate Programs for Coaches; and Building Relationships had the lowest means (see Table 2.

When considering whether these tasks were currently part of the responsibilities of a regional coach developer with the organization: a) the mean for 13 of the Building Relationships tasks increased from Round 1 to Round 2 while the mean for four of these tasks decreased from Round 1 to Round 2 (see Table 3); b) the mean for 19 of the Observing and Assessing tasks increased from Round 1 to Round 2 while the mean for five of these tasks decreased from Round 1 to Round 2 (see Table 4); c) the mean for 12 of the Designing, Delivering, and Evaluating Programs for Coaches tasks increased from Round 1 to Round 2, while the mean for eight of these tasks decreased from Round 1 to Round 2 (see Table 5); d) the mean for six of the

Designing, Delivering, and Evaluating Programs for Coach Developer tasks increased from Round 1 to Round 2, while the mean for seven of these tasks decreased from Round 1 to Round 2 (see Table 6); e) the mean for 19 of these Facilitating Learning Opportunities tasks increased from Round 1 to Round 2 while the mean for four of these tasks decreased from Round 1 to Round 2 (see Table 7); f) the mean for nine of these Supporting and Mentoring Coaches tasks increased from Round 1 to Round 2 while the mean for one of these tasks decreased from Round 1 to Round 2 (see Table 8); g) the mean for seven of these Providing Leadership as a Coach Developer tasks increased from Round 1 to Round 2 (see Table 9); h) the mean for nine of these Engaging in Continuing Professional Development tasks increased from Round 1 to Round 2 while the mean for one of these tasks decreased from Round 1 to Round 2 (see Table 10).

Importance

After Round 1, there were 33 tasks that all panelists 'Strongly Agreed' were important to the role of a regional coach developer with the organization (See Table 11). These were related to building relationships (3), observing and assessing coaches (15), facilitating learning opportunities (10), supporting and mentoring coaches (1), and providing leadership as a coach developer (4). Overall, 138 tasks had an average related to 'Agree' or greater that were important to the role of a regional coach developer. Like the responsibility items, importance was also skewed negatively with no tasks for which the mean averaged less than 'Disagree', and only three items whose mean averaged less than 'Neutral'.

After Round 2, there were 46 tasks that all panelists 'Strongly Agreed' were important to the role of a regional coach developer with the organization (See Table 11). These were related to building relationships (2), observing and assessing coaches (18), facilitating learning opportunities (14), supporting and mentoring coaches (3), providing leadership as a coach

developer (4), and engaging in continuing professional development as a coach developer (5). Overall, there were 131 tasks that averaged 'Agree' or greater relative to the task being important to the role of a regional coach developer with the organization. The negative skew of importance is still seen in Round 2.

After Round 1, when considering averages across topic areas, Observing and Assessing Coaches also had the highest mean relative to importance (*M*= 3.62, *SD* = 0.40), followed by a tie between Supporting and Mentoring Coaches (*M* = 3.57, *SD* = 0.60) and Facilitating Learning Opportunities (*M* = 3.57, *SD* = 0.46). After Round 2, Supporting and Mentoring Coaches had the highest mean average relative to importance (*M* = 3.74, *SD* = 0.37), followed by Facilitating Learning Opportunities (*M* = 3.63, *SD* = 0.34), and both Observing and Assessing coaches (*M* = 3.59, *SD* = 0.29) and Providing Leadership as a Coach Developer (*M* = 3.58, *SD* = 0.36). Like the responsibility concept, the same three categories (Design, Deliver, and Evaluate Programs for Coach Developers; Design, Deliver, and Evaluate Programs for Coaches; and Building Relationships) had the lowest means in both Round 1 and Round 2 (see Table 11).

When considering whether these tasks were important to the role of the regional coach developer at the organization: a) the mean for five of these Building Relationships tasks increased from Round 1 to Round 2 while the mean for 10 of these tasks decreased from Round 1 to Round 2 (see Table 12), b) the mean for eight of these Observing and Assessing tasks increased from Round 1 to Round 2 while the mean for eight of these tasks decreased from Round 1 to Round 2 (see Table 13), c) the mean for three of these Designing, Delivering, and Evaluating Programs for Coaches tasks increased from Round 1 to Round 2 while the mean for 16 of these tasks decreased from Round 1 to Round 2 (see Table 14), d) the mean for three of these Designing, Delivering, and Evaluating Programs for Coach Developers tasks increased

from Round 1 to Round 2 while the mean for 12 of these tasks decreased from Round 1 to Round 2 (see Table 15), e) the mean for 10 of these Facilitating Learning Opportunities tasks increased from Round 1 to Round 2 while the mean for three of these tasks decreased from Round 1 to Round 2 (see Table 16), f) the mean for nine of these Supporting and Mentoring Coaches tasks increased from Round 1 to Round 2 (see Table 17), g) the mean for seven of these Providing Leadership as a Coach Developer tasks increased from Round 1 to Round 2 while the mean for two of these tasks decreased from Round 1 to Round 2 (see Table 18), and h) the mean for nine of these Engaging in Continuing Professional Development tasks increased from Round 1 to Round 2 while the mean for four of these tasks decreased from Round 1 to Round 2 (see Table 19).

Frequency

How frequently a task was performed by a regional coach developer at the organization was only requested from the participants in Round 2. No tasks averaged never being performed, six tasks were averaged to be performed less frequently than annually, 15 tasks averaged being performed annually, 46 tasks averaged being performed more frequently than annually but less frequently than monthly, 20 tasks averaged being performed monthly, 46 tasks averaged being performed more frequently than monthly but less frequently than weekly, eight tasks averaged being performed weekly, 34 tasks averaged being performed more frequently than weekly but less frequently than daily, and nine tasks averaged being performed daily. The nine daily tasks included facilitating learning opportunities (4) and providing leadership (5). Providing Leadership as a Coach Developer had the highest mean relative to frequency (M = 3.44, SD = 0.30) and Design, Deliver, and Evaluate Programs for Coach Developers had the lowest (M = 1.14, SD = 0.52). For more specific details, see Table 20.

Difficulty

How difficult a task was to learn by a coach developer was also only requested from the participants after Round 2. Two items averaged being not at all difficult to learn, 81 items averaged between not at all difficult and slightly difficult to learn, 34 items averaged being slightly difficult to learn, and 43 items averaged being between slightly difficult to learn and moderately difficult to learn. No items were averaged to be moderately difficult or greater to learn. There were also 24 tasks in which at least one participant reported that the difficulty of the task to learn was not applicable to the regional coach developer with the organization.

Comparing Responsibility Ratings to Importance Ratings

It is important to note that in both Round 1 and Round 2, in every single category importance averaged a higher mean value than responsibility. Overall, responses to individual tasks averaged higher importance ratings than responsibility ratings. Although this shifted downward slightly in Round 2 from Round 1 (see Figures 1 and 2).

Consensus Task Lists

There were large jumps between the number of tasks that reached consensus for responsibility and the number of tasks that reached consensus for importance (see Table 21). Nine tasks reached a consensus for responsibility and importance which were reported as being performed daily; these mainly involved creating and modeling organizational culture and professional expectations regarding behavior and communication (see Table 22). Forty weekly tasks reached a consensus for responsibility and importance; these focused on aspects of creating and fostering a learning-focused and coach-centered organizational culture by communicating and building relationships (mainly with coaches), in order to provide the feedback and support that they need in an effective manner. Fifty-three monthly tasks reached a consensus for

responsibility and importance; these tended to focus more on the coach observation and assessment activity and the reflection, debrief, and feedback that occurred after the observation. There also appeared to be more communication with groups that occurred, likely as part of continuing professional development activities. Lastly, six yearly tasks reached a consensus for responsibility and importance; these included things like designing and delivering coach and coach developer training and attending their own continuing professional development.

Discrepancies in Consensus Lists

One task reached consensus for responsibility but not importance (‘Explain learning outcomes and how they will be delivered.’), while 22 tasks reached a consensus for importance but not responsibility (See Table 23). Broadly, these were related to building relationships with organizational administrators and coach developers outside of the organization; connecting with a mentor; and creating, delivering, facilitating, and evaluating trainings and learning opportunities for coaches and coach developers. When also considering frequency, there was one task, ‘Empower people and communities,’ that was agreed to be important and performed at least weekly but was not agreed to be a responsibility. There were also two tasks (‘Build relationships with athletes’ and ‘Serve as a conduit from coaches to administrators’) that although reported as being performed at least weekly made neither the responsibility nor the importance consensus lists.

Discussion

Quality people are an organization’s most important resource, and perhaps the most important part of overseeing an organization is the hiring, promoting, and assigning people to different roles, but “before you can hire quality people, you must know what you are looking for” (Oliver, 2020, p. 52). Much in the same way that a successful athlete does not necessarily

make a successful coach (see athlete-coach transition research by Chroni et al., 2020), a successful coach would not necessarily make a successful coach developer; although there may be some overlap, arguably the skill sets are different. Within the field of coach development, particularly in the United States and especially for the role of a youth sport coach developer, there is not a consensus across the industry on what an organization should look for. Therefore, supported by recommendations from Harvey and colleagues (2022) for more research relevant to understanding the specific roles of the coach developer, the objectives of those roles, and the training required in order to effectively meet those objectives, the purpose of this study was to explore the roles and responsibilities of a youth sport coach developer.

A job task analysis approach was taken using a modified Delphi method with coach developers at a single organization, which has invested heavily in helping to educate and support their coaches including a system of coach developers. After the researcher created a list of 184 tasks based on the coach developer literature, including the ICDF (ICCE, 2014), and the organization's onboarding materials, it was validated for content by academics and pracademics in the coach developer space. Then a panel of coach developers from the organization reviewed the list: 108 tasks were agreed upon as part of the responsibility of the regional coach developer, 131 tasks were agreed to be important to the role of the coach developer, and 51 tasks were completed at least weekly. Of these, 48 tasks were on the responsibility and importance consensus lists and performed at least weekly.

A typical job has five to 12 duties and 30 - 100 tasks (Morgeson et al., 2019). Therefore, the number of tasks agreed to be the responsibility of the regional coach developer in this study is higher than the typical job. The number of tasks that were agreed upon to be important to the role of the coach developer was even greater. However, when considering the number of tasks

that were agreed upon as completed at least weekly, that fits better within the expected range, yet most of those do not align with the list provided by the organization in their onboarding process. More information would be needed in order to consider these discrepancies, given that the regional coach developer role was also not these individual's full-time job, there may be a concern regarding the number of tasks that are expected to be associated with the role, even on a weekly basis.

On the flip side, there were no tasks that were mutually agreed upon not to be the regional coach developer's responsibility or agreed upon to be unimportant to the role of the coach developer, and only six tasks that averaged being completed less frequently than annually. There was only one task ('Explain learning outcomes and how they will be delivered') that was currently part of the initial task list of the responsibilities of the coach developer that did not reach the consensus of agreement of importance. However, given that this is essentially a two-part task it is unknown as to whether the concern here is with the perceived importance of the coach developers' ability to explain the learning outcome or their ability to explain how they will be delivered, or both.

Twenty-two tasks were agreed to be important to the role of the coach developer but were not currently part of the responsibility of the coach developer. These mainly focused on creating, designing, delivering, facilitating, and evaluating coach and coach developer trainings. This aligns with many of the aspects noted in the ICDF (ICCE, 2014) and informed by the knowledge recommended by CIMPSA (2021). There was also one task ('Empower people and communities') that was performed at least weekly by the regional coach developer and was agreed to be important but not the responsibility of the regional coach developer. This is particularly interesting especially given that so many of the other leadership tasks reached a

consensus for responsibility. This, therefore, appears to be a recognition by the regional coach developers as an area for additional growth, but additional research, such as interviews, would be necessary to confirm or provide further context.

There were also two tasks that regional coach developers performed weekly but were neither the responsibility nor important to the role of the regional coach developer. These included ‘Build relationships with athletes’ and ‘Serve as a conduit from coaches to administrators.’ While the first could perhaps be a bit of a surprise, given that many of these regional coach developers are juggling multiple roles it aligns with what is seen in other organizations (Watts et al., 2021). The second, is arguably more expected, but the fact that it was determined to be neither the responsibility of nor important to the role of the regional coach developer is perhaps more interesting and warrants further investigation.

There is also a potential concern relative to the 48 important weekly tasks, as this is more than double the 22 roles and responsibilities included in the bullet points listed in the organization's onboarding materials. Although, the narrowed perspective of the roles and responsibilities listed in the onboarding materials compared to the more than 100 in the task inventory surveys is not limited to the coach developer field or this organization (see Wyse & Babcock, 2018). However, it may demonstrate a gap between those who are doing the job on the ground and what the job appears to be on paper. This disconnect can be a concern from the expectations of supervising administrators, as well as from a liability and pay perspective. In comparing the original list from the organization to the panelists responses in this study, many of the daily and weekly tasks that were agreed to be important and the responsibility of the regional coach developer have to do with environment creation, culture management, and general support for coaches, which also aligns with mentions in the ICDF (ICCE, 2014), while the roles and

responsibilities provided by the organization focused much more heavily on specifics of the coach observation and assessment process, which appears to be the focus of the initial coach developer onboarding as well (I. Hughes, personal communication, 2021).

Implications

The intended implications of exploring the roles and responsibilities of a youth sport coach developer were to help: a) inform the practical application to other organizations; b) inform hiring managers of the necessary skills for the role; c) inform curriculum for academic and other training programs; and d) identify areas in which coach developers can start to be evaluated. However, this initial list also left out a key part, informing the organization of possible gaps and recommendations for growth areas.

To start, the creation of a specific job description for the organization (as well as any other organization looking to formalize this role) could help to further clarify this role for the individuals in the role, administrators responsible for supervising the role, and hiring managers responsible to finding and hiring new individuals for the role. Right now, like much of the rest of the field, it appears unclear as to who can become a coach developer and what qualifications they would need in order to be qualified to do so or would be beneficial to their specific role. Although based on their demographic responses the individuals on this panel appear to have a lengthy and multi-contextual coaching history, and stronger formal education in sports coaching compared to many other similar youth sport organizations, it is unknown as to whether these attributes are similar across the rest of the organization’s Coach Developer population. Additionally, looking down the road, many times if a coach education/development or coach educator/developer program is tied to a single person, when that individual leaves the

organization the program can fall apart. Therefore, the ability to take steps towards building the system for coach developers would be recommended as a next step for this organization.

Although this study is specific to the organization, and therefore not generalizable to other organizations, hopefully the acknowledgement of the importance of conducting a job task analysis and information regarding the process of doing so for the role of the youth sport coach developer will be beneficial not only for other interested organizations, but also for the overall field of coach development. Using a similar job task analysis approach can start to standardize some of the conversations regarding different types of coach development work. This may also help start to inform how to start to find some common ground for considering similarities and differences in coach developer roles across different organizations so that it does not feel like everyone has to recreate the same wheel.

Perhaps the sheer number of tasks agreed upon as part of the coach developer's responsibility in this specific organization, which mainly focuses on the formal observing and assessing of coaches, will provide more tangible evidence of the specific nuances and complexity of the coach developer role on a daily, weekly, monthly, and yearly basis. Although this organization is special in that they are privately funded while many other youth sport organizations are working from a non-profit model and therefore do not have as many resources, incorporating a system to support and facilitate coaches' growth through the implementation of coaching observations and assessments may be a good place to start.

Ideally, this study can also help serve as a start list for the types of tasks that youth sport coach developers would be responsible for. Upon deciding those, being able to identify the necessary knowledge, skills, and attitudes would be relevant not only to inform hiring managers of the necessary skills for the role (so that job descriptions match the job), but there is also clarity

to the responsibilities of the role to inform potential applicants, curriculum for academic and training programs, and evaluation processes. Within curriculum development the backwards design approach begins with the end in mind. This end outcome helps to drive the process along the way. Without a clear job description and job task analysis, what the end outcome should look like is incredibly fuzzy. This is not to say that the job may not change and evolve over time, but when it does so, the job description and tasks should change as well. Without an outcome, creating curriculum, trainings assessments, and evaluations is nebulous. While it is entirely possible for individuals to still find their way on their own, it puts additional pressure on the individual to do so rather than the system.

Limitations

Although recommendations for Delphi panel sizes vary (Brooks, 1979; Delbecq et al., 1975; Ziglio, 1996), and panels as small as three have been used (Boulkedid et al., 2011; Lynn, 1986), six participants in each round of this Delphi was smaller than hoped for out of a population of 19. However, in alignment with Clayton (1997), the time the panelists could commit to this process was limited (panelist email, personal communication, 2022). This thereby limited the responses to the perspectives of those individuals who opted in to complete the surveys. The individuals who participated may be more interested in their coach developer role or have a different perspective on their coach developer role than those who did not complete the surveys. Additionally, from a gender and race perspective, this sample had limited diversity with all White participants and only one female participant. As this demographic breakdown is representative of what is seen in the broader coach developer landscape, it is an important area for future growth.

This job task analysis focused on the tasks which were grouped by duty titles created based on information in the coach developer literature. However, consideration should be given to whether these are the correct groupings of duties since CIMPSA (2021), which was published after this research was conducted, uses a different grouping approach. The focus only on tasks in this job task analysis also leaves room to further consider the specific activities and elements that would align with each task. Furthermore, using a virtual survey approach meant there was no opportunity to conduct in-depth discussions about the topics or know how the tasks were being interpreted by panelists. Feedback provided by some panelists to the organization's executive who was helping to facilitate the completion of the project noted some concerns regarding perceived repetition or duplication of tasks (personal communication, 2022). It is also possible that in trying to ensure specificity in the writing and inclusion of the tasks for a job that has little related literature that the researcher and the experts providing content validity were overly specific and named activities and elements in addition to the broader task categories. This may have influenced the high number of tasks reported in the study, compared to a typical job, as well as the perception of repetition of tasks in the list. Thus, while having a start list in Round 1 was intended to consider the broader literature related to coach developers and the industry of coach development tasks beyond just what the organization's onboarding materials included, it should also be acknowledged if that list had not been provided to panelists to start, there is a strong likelihood that the final consensus list may have looked different.

It is important to note that the panelists in this modified Delphi were chosen for this study based on their job title of being a coach developer within a single organization. As such, this task inventory cannot be generalized to other organizations with regional coach developers. While the argument is made for their expertise as part of a Delphi panel focused on a job task analysis of

their job at their organization, without clear expectations and requirements in the broader undefined profession of coach developer, the argument for their broader expertise as a coach developer cannot be made.

Furthermore, information regarding how each regional coach developer was selected for their job was not collected. Given the number of years spent in the system and their coaching resume, it is assumed that these individuals' knowledge of the system and knowledge of the tasks of a coach impacted being offered such a role. However, this does not mean that the individual automatically and inherently knows how to be an effective coach developer. Such an evaluation or assessment was beyond the scope of this study. Although there is an extended training process that the regional coach developers go through at this organization, which appears to follow a ‘tell, show, do’ model as it relates to coach observations and feedback (I. Hughes, personal conversation, 2021), if this process only focuses on the 22 tasks noted in the onboarding materials rather than the more than 100 tasks identified in this study (which extend beyond just the duty of observing and assessing coaches), there may still be a deficiency in the training of these coach developers as is seen across the discipline (Horgan & Daly, 2015). This may also account for why the ratings for how difficult a task was to learn skewed positively or towards the less difficult side. However, additional research observing the tasks performed and the quality at which they are evaluated, as well as interviews considering previously learned equivalent or similar skills, would need to be conducted in order to provide additional context and evaluate why those ratings were scored as such. It is also possible that one’s primary job responsibilities, formal education training, or the passage of time since beginning this role (since all panelists had been in the role for a minimum of one year) may be interfering with one’s memory or perceptions of a task’s difficulty to learn as well. Finally, because coach development was not

these individuals' full-time job, it is possible that the panelists' responses could differ if a regional coach developer were a full-time job with the organization.

Recommendations for Future Research

Future research in this area should look to identify full-time coach developers in the youth sport context. This may help to provide clarity to the specific job of a coach developer and alleviate any possible confusion that may have been associated with coach developers juggling multiple different other jobs or roles in addition to their coach developer roles as is currently common in the industry. Working simultaneously in the system and on the system can be incredibly difficult. However, perhaps the number of tasks that have been identified as the responsibility of and important to the coach developer role in this study will encourage other organizations to begin to do more formal job task analyses to identify what specific tasks the coach developers in their organization believe to be part of their current responsibility, important to their role, and the frequency at which they occur. Whether this job task analysis is conducted in-house by a qualified individual or outsourced to a competent entity, identifying specific tasks of the job informs the broader roles and responsibilities that would be important for creating a job description for the position and identifying the necessary knowledge, skills, and attitudes required for an individual to be effective and efficient in the position. This could inevitably lead to informing curriculum and training development both in-house and in the broader industry.

Another next step would be to complete a competency model approach to a job task analysis. This would allow for a more in-depth look not just to consider ‘what’ tasks are done, but ‘how’ they are done. Being able to observe these coach developers on a day-to-day basis would provide additional context to the tasks, as well as help to identify any tasks that were not included on the initial task inventory list.

Further, one-on-one interviews are needed with coach developers relative to not only their day-to-day tasks, but also relative to the effectiveness of their training for their position and any additional recommendations that would be beneficial. Considerations for selection criteria to be a coach developer, alignment of that selection criteria with the job tasks, and evaluations of the onboarding training programs relative to the effectiveness of developing quality coach developers is important in progressing the overall quality of the coach developer profession. Despite the coach developer role becoming more popular within some youth sports like soccer in the United States, many youth sport organizations in other sports may not be familiar with or have a central person fulfilling that responsibility. Even if organizations do have someone in a coaching manager or director role, there is no clarity or consensus in terms of the preparation needed in order to do the job or what the job description should entail. Working to do more to help support the development of the profession in this area should be a high priority.

Going beyond the youth sport context, although this project looked at youth sport coach developers, research looking at the ways in which head coaches work to develop assistant coaches on their staff as well as research regarding the athletic director's role as a coach developer, especially at the high school and collegiate level is also needed. Helping coaches continue to develop professionally is likely not viewed by many athletic directors as part of their role, but if it is not part of their role, then whose role would it be? If coaches are going to argue that coaching is a profession (Villalon et al., in progress), but it does not include benchmarks or standards to protect the public or their profession, then lack of supervision and accountability is a huge liability for all stakeholders.

Conclusion

The findings of this study portray the roles and responsibilities of the organization's Regional Coach Developer as created through a two-round modified Delphi research method. Although by name it is a new job, by definition, the coach developer has been part of many different jobs in the sports world in the past, and its growth as a unique position all its own aligns with the increased specialization of jobs across multiple industries, many times relating to a hybrid of similar train-the-trainer and professional support-based jobs. However, there is still much room for growth when it comes to research regarding coach developers. Hopefully this study serves as an additional advocate for echoing the recommendations by Cale and Abraham (2016) and Harvey and colleagues (2021) of the need for the identification of more specific knowledge, skills, and attitudes for coach developer positions in order to better inform professional development opportunities, especially for those in the youth sport context.

References

Abraham, A. (2016). Task analysis of coach developers: Applications to the FA youth coach educator role. In W. Allison, A. Abraham, & A. Cale (Eds.), *Advances in coach education and development* (pp. 73-85). Routledge.

Abraham, A., Morgan, G., North, J., Muir, B., Duffy, P., Allison, W., Cale, A., & Hodgson, R. (2013). *Task analysis of coach developers: Applications to the FA Youth Coach Educator role* International Conference on Naturalistic Decision Making, Marseille, France.

Allanson, A., Potrac, P., & Nelson, L. (2021). The career experiences of football association coach educators: Lessons in micropolitical literacy and action. *Qualitative Research in Sport, Exercise and Health*, *13*(2), 360-374. https://doi.org/10.1080/2159676X.2019.1690563

Allen, J. B., & Shaw, S. (2009). Women coaches' perceptions of their sport oganizations' social environment: Supporting coaches' psychological needs? *The Sport Psychologist*, *23*, 346-366. https://doi.org/10.1123/tsp.23.3.346

Atad, O. I., & Grant, A. M. (2021). How does coach training change coaches-in-training? Differential effects for novice vs. experienced 'skilled helpers'. *Coaching: An International Journal of Theory, Research and Practice, 14*, 3-19.

Bales, J. D., Crisfield, P. M., Ito, M., & Alder, J. P. (2019). Foreword. In B. Callary & B. T. Gearity (Eds.), *Coach education and development in sport: Instructional strategies* (pp. xvii-xix). Routledge.

Ben-Peretz, M., Kleeman, S., Reichenberg, R., & Shimoni, S. (2010). Educators of educators: their goals, perceptions and practices. *Professional Development in Education*, *36*(1-2), 111-129. https://doi.org/10.1080/19415250903454908

Bergeron, M. F., Mountjoy, M., Armstrong, N., Chia, M., Cote, J., Emery, C. A., Faigenbaum, A., Hall, G., Jr., Kriemler, S., Leglise, M., Malina, R. M., Pensgaard, A. M., Sanchez, A., Soligard, T., Sundgot-Borgen, J., van Mechelen, W., Weissensteiner, J. R., & Engebretsen, L. (2015). International Olympic Committee consensus statement on youth athletic development. *Br J Sports Med*, *49*(13), 843-851. https://doi.org/10.1136/bjsports-2015-094962

Bloom, B. S. (1956). *Taxonomy of educational objectives. Vol. 1: Cognitive domain.* Longman.

Boulkedid, R., Abdoul, H., Loustau, M., Sibony, O., & Alberti, C. (2011). Using and reporting the Delphi method for selecting healthcare quality indicators: A systematic review. *PloS one*, *6*(6), e20476. https://doi.org/10.1371/journal.pone.0020476

Bozer, G., Sarros, J. C., & Santora, J. C. (2014). Academic background and credibility in executive coaching effectiveness. *Personnel Review (43)*, 881-897.

Brannick, M. T., Levine, E. L., & Morgeson, F. P. (2007). *Job and work analysis: Methods, research, and applications for human resource management* (2nd ed.). SAGE Publications, Inc. https://doi.org/10.4135/9781483329505

Brasil, V. Z., Ramos, V., Milistetd, M., Culver, D. M., & do Nascimento, J. V. (2018). The learning pathways of Brazilian surf coach developers. *International Journal of Sports Science & Coaching*, *13*(3), 349-361. https://doi.org/10.1177/1747954117739717

Brooks, K. W. (1979). Delphi technique: Expanding applications. *North Central Association Quarterly*, *53*(3), 377-385.

Bulger, S., & Housner, L. D. (2007). Modified Delphi investigation of exercise science in physical education teacher education. *Journal of Teaching in Physical Education*, *26*, 57-80. https://doi.org/10.1123/jtpe.26.1.57

Cale, A., & Abraham, A. (2016). Future directions in coaching research. In W. Allison, A. Abraham, & A. Cale (Eds.), *Advances in coach education and development* (pp. 183-196). Routledge.

Callary, B. (2021a). *Discussion with the Editor in Chief of the International Sport Coaching Journal* [conference presentation]. 13th ICCE Global Coach Conference, Lisbon, Portugal.

Callary, B. (2021b). Practical advances in sport coaching research in International Sport Coaching Journal. *International Sport Coaching Journal*, *8*(3), 281-282. https://doi.org/10.1123/iscj.2021-0044

Callary, B., Brady, A., Kiosoglous, C., Clewer, P., Resende, R., Mehrtens, T., Wilkie, M., & Horvath, R. (2020). Making sense of coach development worldwide during the COVID-19 pandemic. *International Journal of Sport Communication*, *13*(3), 575-585. https://doi.org/10.1123/ijsc.2020-0221

Callary, B., & Gearity, B. (2019a). Coach developer special issue: Global perspectives in coach education for the coach developer. *International Sport Coaching Journal*, *6*(3), 261-262. https://doi.org/10.1123/iscj.2019-0067

Callary, B., & Gearity, B. (2019b). *Coach education and development in sport: Instructional strategies*. Routledge.

Callary, B., & Gearity, B. (2019c). Voices from the field: Q& A with coach developers around the world. *International Sport Coaching Journal*, *6*(3), 366-369. https://doi.org/10.1123/iscj.2019-0070

Campbell, S., & Waller, S. (2020). Systematic review of the contemporary research on coach development programs. *International Journal of Coaching Science*, *14*(1).

Campbell, S. M., Fallaize, A., & Schempp, P. (2021). Most valued experiences in an an international coach developer training programme. *International Sport Coaching Journal*, *8*(1), 130-135. https://doi.org/10.1123/iscj.2019-0063

Carden, Passmore, & Jones. (2022). Exploring the role of self-awareness in coach development: A grounded theory study, *International Journal of Training and Development,* 26, 343-363. https://doi.org/10.1111/Ijtd.12261

Cassidy, T., Potrac, P., & McKenzie, A. (2006). Evaluating and reflecting upon a coach education initiative: The CoDe of rugby. *The Sport Psychologist*, *20*, 145-161. https://doi.org/10.1123/tsp.20.2.145

Chalip, L., & Hutchinson, R. (2017). Reinventing youth sport: Formative findings from a state-level action research project. *Sport in Society*, *20*(1), 30-46. https://doi.org/10.1080/17430437.2015.1124562

Chesterfield, G., Potrac, P., & Jones, R. (2010). 'Studentship' and 'impression management' in an advanced soccer coach education award. *Sport, Education and Society*, *15*, 299-314. https://doi.org/10.1080/13573322.2010.493311

Chroni, S. A., Pettersen, S., & Dieffenbach, K. (2020). Going from athlete-to-coach in Norwegian winter sports: Understanding the transition journey. *Sport in Society*, *23*(4), 751-773. https://doi.org/10.1080/17430437.2019.1631572

Chroni, S. A., & Dieffenbach, K. (2022). Facilitating and supporting the elite athlete-to-coach transition: Lessons learned from Norwegian coaches and federations. *Journal of Sport Psychology in Action*, *13*, 27-39. https://doi.org/10.1080/21520704.2020.1861145

Ciampolini, V., Tozetto, A. V. B., Milan, F. J., Camiré, M., & Milistetd, M. (2020). Lifelong learning pathway of a coach developer operating in a national sport federation.

International Journal of Sports Science & Coaching, *15*(3), 428-438. https://doi.org/10.1177/1747954120912384

Chartered Institute for Management of Sport and Physical Activity (2021). *CIMSPA Professional Standard: Coach Developer*. https://www.cimspa.co.uk/globalassets/document-downloads-library-all/education-and-training/prof-standards-and-mts/cimspa-ps-coach-developer-v1.0.pdf

Clayton, M. J. (1997). Delphi: a technique to harness expert opinion for critical decision-making tasks in education. *Educational Psychology*, *17*(4), 373-386. https://doi.org/10.1080/0144341970170401

Coakley, J. (2011). Youth sports: What counts as "Positive development?". *Journal of Sport and Social Issues*, *35*(3), 306-324. https://doi.org/10.1177/0193723511417311

Coakley, J. (2015). Assessing the sociology of sport: On cultural sensibilities and the great sport myth. *International Review for the Sociology of Sport*, *50*(4-5), 402-406. https://doi.org/10.1177/1012690214538864

Crawford, Z. (2022, June 10). *Who educates the educators?* [Keynote Presentation] North American Coach Developer Summit, Spokane, WA.

Cronin, C., & Armour, K. (2018). *Care in sport coaching: Pedagogical cases*. Routledge.

Culver, D. M., Werthner, P., & Trudel, P. (2019). Coach developers as 'facilitators of learning' in a large-scale coach education programme: One actor in a complex system. *International Sport Coaching Journal*, *6*(3), 296-306. https://doi.org/10.1123/iscj.2018-0081

Cushion, C. J., Griffiths, M., & Armour, K. (2019). Professional coach educators in-situ: A social analysis of practice. *Sport, Education and Society*, *24*(5), 533-546. https://doi.org/10.1080/13573322.2017.1411795

Dalkey, N., & Helmer, O. (1963). An experimental application of the Delphi method to the use of experts. *Management Science*, *9*(3), 458-467. https://doi.org/10.1287/mnsc.9.3.458

Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. (2005). The design of teacher education programs. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 390-441). Jossey-Bass.

DeAngelis, J. T., & Wolcott, M. D. (2019). A job analysis to define the role of the pharmacy preceptor. *American Journal of Pharmaceutical Education*, *83*, 1480-1491. https://doi.org/10.5688/ajpe7196

Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). *Group techniques for program planning: A guide to nominal group and Delphi processes*. Scott, Foresman.

Dewar, A. M., & Lawson, H. A. (1984). The subjective warrant and recruitment into physical education. *Quest*, *36*(1), 15-25. https://doi.org/10.1080/00336297.1984.10483797

Department of Health and Human Services (DHHS). (2019). *The National Youth Sports Strategy*.

Dieffenbach, K. (2008). Exploring learning among USA Cycling licensed coaches. *Journal of Coaching Education*, *1*(2), 19-37. https://doi.org/10.1123/jce.1.2.19

Dieffenbach, K. (2019). Frameworks for coach education. In K. Dieffenbach & M. Thompson (Eds.), *Coaching Education Essentials* (pp. 3-16). Human Kinetics.

Dieffenbach, K., & Pettersen, S. (2021). An exploration of recruitment of elite athletes to coaching within federations. *International Sport Coaching Journal, 8*, 315-327. https://doi.org/10.1123/iscj.2020-0056

Dieffenbach, K., & Wayda, V. (2010). A critical review of American academic coaching education programs. *Journal of Coaching Education*, *3*(2), 21-39. https://doi.org/10.1123/jce.3.2.21

Dohme, L.-C., Rankin-Wright, A. J., & Lara-Bercial, S. (2019). Beyond knowledge transfer: The role of coach developers as motivators for lifelong learning. *International Sport Coaching Journal*, *6*(3), 317-328. https://doi.org/10.1123/iscj.2019-0034

Dunlop, C. W. (2017). The success and failure of the coaching industry. *Forbes.com* https://www.forbes.com/sites/forbescoachescouncil/2017/10/05/the-success-and-failure-of-the-coaching-industry/?sh=14a917a6765f

Erdal, K. (2018). *The adulteration of children's sports: Waning health and well-being in the age of organized play*. Rowman & Littlefield.

Erickson, K., Bruner, M. W., MacDonald, D. J., & Cote, J. (2008). Gaining insight into actual and preferred sources of coaching knowledge. *International Journal of Sports Science & Coaching*, *3*(4), 527-538. https://doi.org/10.1260/174795408787186468

Farrell, P., & Scherer, K. (1983). The Delphi technique as a method for selecting criteria to evaluate nursing care. *Canadian Journal of Nursing Research Archive*, 51-60.

Fawver, B., Beatty, G. F., Roman, J. T., & Kurtz, K. (2020). The status of youth coach training in the United States: Existing programs and room for improvement. *International Sport Coaching Journal*, *7*(2), 239-251. https://doi.org/10.1123/iscj.2019-0017

Fraser-Thomas, J. L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education & Sport Pedagogy*, *10*(1), 19-40. https://doi.org/10.1080/1740898042000334890

Garner, P., Turnnidge, J., Roberts, W., & Côté, J. (2021). How coach educators deliver formal coach education: A full range leadership perspective. *International Sport Coaching Journal*, *8*(1), 23-33. https://doi.org/10.1123/iscj.2019-0074

Gillham, A., & Van Mullem, P. (2020). Coaching the coach: Helping coaches improve their performance. In R. Resende & A. R. Gomes (Eds.), *Coaching for Human Development and Performance in Sports*. Springer. https://doi.org/10.1007/978-3-030-63912-9_20

Glen, J., & Lavallee, D. (2019). How do coach educators influence meaningful behavior change in sports coaches? *Kinesiologia Slovenica*, *25*(3), 16-30.

Gould, D. (2019). The current youth sport landscape: Identifying critical research issues. *Kinesiology Review*, *8*(3), 150-161. https://doi.org/10.1123/kr.2019-0034

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching*, *8*(3), 381-391. https://doi.org/10.1080/135406002100000512

Hadfield, J. (2003). Recruiting and retaining adult students. *New Directions for Student Services*, *2003*(102), 17-26. https://doi.org/https://doi.org/10.1002/ss.85

Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics*, *95*(7-8), 798-812. https://doi.org/10.1016/j.jpubeco.2010.11.009

Harvey, S., Gano-Overway, L., Baghurst, T., Blom, L., & Eisenmann, J. (2022). 50 Million Strong™: The contribution of sports coaching. *Research Quarterly for Exercise and Sport*, DOI: 10.1080/02701367.2021.1976715

Horgan, P., & Daly, P. (2015). The role of the coach developer in supporting and guiding coach learning: A commentary. *International Sport Coaching Journal*, *2*(3), 354-356. https://doi.org/10.1123/iscj.2015-0077

Houle, C. O. (1961). *The Inquiring Mind*. University of Wisconsin Press.

Housel, D. A. (2020). When co-occurring factors impact adult learners: Suggestions for instruction, preservice training, and professional development. *Adult Learning*, *31*(1), 6-16. https://doi.org/10.1177/1045159519849910

ICCE. (2014). *International Coach Developer Framework*. International Council for Coaching Excellence.

IMG Academy. (2019). *Coaching the Coaches*. LEADERS Performance Institute.

International Council for Coaching Excellence (ICCE) 13th Global Coach Conference. (2021). *International Sport Coaching Journal*, *8*(S1), S1-S80. https://doi.org/10.1123/iscj.2021-0066

Jacob, B. A., & Lefgren, L. (2004). The impact of teacher training on student achievement quasi-experimental evidence from school reform efforts in Chicago. *Journal of Human Resources*, *39*(1), 50-79. https://doi.org/10.3368/jhr.XXXIX.1.50

Jones, R. L. (2006). *The sports coach as educator: Re-conceptualising sports coaching*. Routledge.

Kavanagh, S. S., & Danielson, K. A. (2019). Practicing justice, justifying practice: Toward critical practice teacher education. *American Educational Research Journal*, *57*(1), 69-105. https://doi.org/10.3102/0002831219848691

Kerr, G. A., & Stirling, A. E. (2015). Professionalization of coaches to reduce emotionally harmful coaching practices: Lessons learned from the education sector. *International Journal of Coaching Science*, *9*, 21-35.

Kiosoglous, C., Dieffenbach, K., & Thompson, M. (2021). *A community of practice (CoP) for coach developers: Making meaning during the pandemic* [conference presentation]. 13th ICCE Global Coach Conference, Lisbon, Portugal.

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Cambridge Adult Education.

Lai, Y. (2014). Enhancing Evidence-based Coaching Through the Development of a Coaching Psychology Competency Framework: Focus on the Coaching Relationship. School of Psychology, University of Surrey, Guildford, U.K.

Lara-Bercial, S. (2021). *Strengthening coaching systems* [conference presentation]. 13th ICCE Global Coach Conference, Lisbon, Portugal.

Lara-Bercial, S., & McKenna, J. (2017). No Coach, No gain: The central role of the coach in the personal development of youth performance athletes. *Journal of Sport Psychology*, *27*(3), 50-59.

Lara-Bercial, S., North, J., Petrovic, L., Minkhorst, J., Oltmanns, K., & Hamalainen, K. (2017). *The European sport coaching framework*. Project CoachLearn.

Lauer, L., Driska, A., & Cowburn, I. (Eds.). (2016). *Sport psychology professionals as trusted advisors in high performance environments*. Nova.

Lawson, H. A. (1986). Occupational socialization and the design of teacher education programs. *Journal of Teaching in Physical Education*, *5*(2). https://doi.org/10.1123/jtpe.5.2.107

LEADERS. (2019). *Coaching the Coaches*. IMG Academy.

Leeder, T. M., Russell, K., & Beaumont, L. C. (2019). "Learning the hard way": Understanding the workplace learning of sport coach mentors. *International Sport Coaching Journal*, *6*(3), 263-273. https://doi.org/10.1123/iscj.2018-0069

Linstone, H. A., & Turoff, M. (1975). *The delphi method*. Addison-Wesley Reading, MA.

Lyle, J. (2002). *Sport coaching concepts: A framework for coaching practice*. Routledge.

Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research*, *35*(6), 382-386. https://doi.org/10.1097/00006199-198611000-00017

MacPhail, A., Ulvik, M., Guberman, A., Czerniawski, G., Oolbekkink-Marchand, H., & Bain, Y. (2019). The professional development of higher education-based teacher educators: Needs and realities. *Professional Development in Education*, *45*(5), 848-861. https://doi.org/10.1080/19415257.2018.1529610

McCarthy, L., Vangrunderbeek, H., & Piggott, D. (2021). Principles of good assessment practice in coach education: An initial proposal. *International Sport Coaching Journal*, 1-11. https://doi.org/10.1123/iscj.2021-0009

McCullick, B., Schempp, P., Mason, I., Foo, C., Vickers, B., & Connolly, G. (2009). A scrutiny of the coaching education program scholarship since 1995. *Quest*, *61*, 322-335. https://doi.org/10.1080/00336297.2009.10483619

McEvoy, E., MacPhail, A., & Heikinaro-Johansson, P. (2015). Physical education teacher educators: A 25-year scoping review of literature. *Teaching and Teacher Education*, *51*, 162-181. https://doi.org/10.1016/j.tate.2015.07.005

McQuade, S., & Nash, C. (2015). The role of the coach developer in supporting and guiding coach learning. *International Sport Coaching Journal*, *2*(3), 339-346. https://doi.org/10.1123/iscj.2015-0059

Morgan, H. J., & Bush, A. J. (2016). Sports coach as transformative leader: Arresting school disengagement through community sport-based initiatives. *Sport, Education and Society*, *21*(5), 759-777. https://doi.org/10.1080/13573322.2014.935319

Morgeson, F. P., Brannick, M. T., & Levine, E. L. (2019). *Job and work analysis: Methods, research, and applications for human resource management*. Sage Publications.

Murry, J. W., & Hammons, J. O. (1995). Delphi: A versatile methodology for conducting qualitative research. *The Review of Higher Education*, *18*(4), 423-436. https://doi.org/10.1353/rhe.1995.0008

Nash, C., & Sproule, J. (2012). Coaches perceptions of their coach education experiences. *International Journal of Sport Psychology*, *43*, 33-52.

National Coaching Report. (in progress).

Newman, T. J., Santos, F., Cardoso, A., & Pereira, P. (2020). The experiential nature of coach education within a positive youth development perspective: Implications for practice and research. *International Sport Coaching Journal*, *7*(3), 398-406. https://doi.org/10.1123/iscj.2019-0106

North, J. (2010). Using ‘coach developers’ to facillitate coach learning and development: Qualitative evidence from the UK. *International Journal of Sports Science & Coaching*, *5*(2), 239-256. https://doi.org/10.1260/1747-9541.5.2.239

North, J. et al. (2015). Evaluation of the UEFA Coaching Convention. Nyon: UEFA

Oliver, P. (2020). Why Conduct a Job Task Analysis?. *Ohio Police Chief, 68*, 52.

Paquette, K., Trudel, P., Duarte, T., & Cundari, G. (2019). Participating in a learner-centered coach education program: Composite vignettes of coaches’ and coach educators’

experiences. *International Sport Coaching Journal*, *6*(3), 274-284. https://doi.org/10.1123/iscj.2018-0085

Passmore, J. & Evans-Krimme, R. (2021). The future of coaching: A conceptual framework for the coaching sector from personal craft to scientific process and the implications for practice and research. *Frontiers in Psychology.* https://doi.org/10.3389/fpsyg.2021.715228

Passmore, J., & Fillery-Travis, A. (2011). A critical review of executive coaching research: a decade of progress and what's to come. *Coaching: An International Journal of Theory, Research and Practice*, *4*(2), 70-88. https://doi.org/10.1080/17521882.2011.596484

Petitpas, A. J., Cornelius, A. E., Van Raalte, J. L., & Jones, T. (2005). A framework for planning youth sport programs that foster psychosocial development. *The Sport Psychologist*, *19*(1), 63-80. https://doi.org/10.1123/tsp.19.1.63

Redgate, S., Potrac, P., Boocock, E., & Dalkin, S. (2020). Realist evaluation of the Football Association's Post Graduate Diploma (PG Dip) in Coach Development. *Sport, Education and Society*, 1-16. https://doi.org/10.1080/13573322.2020.1847066

Rocchi, M., & Pelletier, L. G. (2017). The antecedents of coaches' interpersonal behaviors: The role of the coaching context, coaches' psychological needs, and coaches' motivation. *Journal of Sport and Exercise Psychology*, *39*(5), 366-378. https://doi.org/10.1123/jsep.2016-0267

Rodrigue, F., & Trudel, P. (2020). A "personal learning coach" for high-performance coaches: A companion to reflect and learn from one's own coaching practice. In *Coach education and development in sport: Instructional strategies.* (pp. 141-153). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780429351037-12

Rodrigue, F., Trudel, P., & Boyd, J. (2019). Learning from practice: The value of a personal learning coach for high-performance coaches. *International Sport Coaching Journal*, *6*(3), 285-295. https://doi.org/10.1123/iscj.2018-0078

Ross, S., Metcalf, A., Bulger, S. M., & Housner, L. D. (2014). Modified Delphi investigation of motor development and learning in physical education teacher education. *Research Quarterly for Exercise and Sport*, *85*(3), 316-329. https://doi.org/10.1080/02701367.2014.930087

Sanguinetti, J., Waterhouse, P., & Maunders, D. (2005). Pedagogies on the edge: Researching complex practice in youth and adult community education. *Studies in Continuing Education*, *27*(3), 271-287. https://doi.org/10.1080/01580370500394252

SASCA. (2022). South African Sports Coaching Association. https://sasca-pb.co.za

Schempp, P., McCullick, B., & Mason, I. S. (2006). The development of expert coaching. In R. L. Jones (Ed.), *Sports coach as educator*. Routledge.

Schippmann, J. S., Ash, R. A., Batista, M., Carr, L., Eyde, L. D., Hesketh, B., Kehoe, J., Pearlman, K., Prien, E. P., & Sanchez, J. I. (2000). The practice of competency modeling. *Personnel Psychology*, *53*, 703-740. https://doi.org/10.1111/j.1744-6570.2000.tb00220.x

Schoenstedt, L., Vickers, B., & Carr, D. (2016). Perceptions of coaching education in 17 physical education curriculums. *International Journal of Humanities and Social Science*, *6*(2), 1-8.

Shank, P., & Sitze, A. (2004). *Making sense of online learning: A guide for beginners and the truly skeptical*. John Wiley & Sons.

Sheehy, T., Zizzi, S., Dieffenbach, K., & Sharp, L.-A. (2019). “. . . Didn’t only change my coaching, changed my life”: Coaches’ use of sport psychology for their own development

and performance. *The Sport Psychologist*, *33*(2), 137-147. https://doi.org/10.1123/tsp.2018-0061

Sheehy, T. L., Dieffenbach, K., & Reed, P. (2018). An exploration of coaching research in Journal of Applied Sport Psychology from 1989 to 2017. *Journal of Applied Sport Psychology*, *31*(3), 352-365. https://doi.org/10.1080/10413200.2018.1494642

Sheehy, T. L., Dieffenbach, K., & Villalon, C. (in progress). Considering the coach: An analysis of coach focused literature published within the sport psychology disciplines.

Smith, R. E., Smoll, F. L., & Hunt, E. (1977). A system for the behavioral assessment of athletic coaches. *Research Quarterly. American Alliance for Health, Physical Education and Recreation*, *48*(2), 401-407. https://doi.org/10.1080/10671315.1977.10615438

Snyman, M., & van den Berg, G. (2018). The significance of the learner profile in recognition of prior learning. *Adult Education Quarterly*, *68*(1), 24-40. https://doi.org/10.1177/0741713617731809

Sparks, D. (2002). *Designing powerful professional development for teachers and principals.* National Staff Development Council.

Sport Australia. (2022). *Which coach developer model for my national sporting organisation?* Sport Australia. https://www.sportaus.gov.au/__data/assets/pdf_file/0005/684986/Which_coach_developer_model_for_my_national_sporting_organisation.pdf

Stodter, A., & Cushion, C. J. (2019). Layers of learning in coach developers' practice-theories, preparation and delivery. *International Sport Coaching Journal*, *6*(3), 307-316. https://doi.org/10.1123/iscj.2018-0067

Sutton, J. T., Yopp, D., & Burroughs, E. A. (2011). Coaching knowledge: Domains and definitions. *Journal of Mathematics Education Leadership, 13*(2), 13–20.

Taliaferro, A. R., & Bulger, S. M. (2020). A Delphi Study of Effective Adapted Physical Education Practicum Experiences. *Adapted Physical Activity Quarterly*, *37*(1), 20-40. https://doi.org/10.1123/apaq.2018-0199

USCCE. (2021). *United States Center for Coaching Excellence*. https://www.uscoachexcellence.org/

Valentine, T., & Darkenwald, G. G. (1990). Deterrents to participation in adult education: Profiles of potential learners. *Adult Education Quarterly*, *41*, 29-42. https://doi.org/10.1177/0001848190041001003

Van Mullem, P., & Mathias, K. (2021). Coach development: Practical recommendations for interscholastic sport. *International Sport Coaching Journal*, *8*(1), 101-112. https://doi.org/10.1123/iscj.2020-0007

Van Woezik, R. A., McLaren, C. D., Côté, J., Erickson, K., Law, B., Lafrance Horning, D., Callary, B., & Bruner, M. W. (2021). Real versus ideal: Understanding how coaches gain knowledge. *International Sport Coaching Journal*, 1-14. https://doi.org/10.1123/iscj.2021-0010

Vangrunderbeek, H., & Ponnet, H. (2020). The history of coach education in Flanders. *International Sport Coaching Journal*, *7*(3), 380-389. https://doi.org/10.1123/iscj.2020-0049

Vealey, R. S., & Chase, M. A. (2016). *Best practice for youth sport*. Human Kinetics.

Villalon, C., Dieffenbach, K., & Kiosoglous, C. (in progress). Perceptions of professionalism by collegiate rowing coaches.

Walsh, J., & Carson, F. (2019). Searching for a signature pedagogy in novice coach education. *International Sport Coaching Journal*, *6*(3), 349-353. https://doi.org/10.1123/iscj.2018-0049

Walters, S., Rogers, A., & Oldham, A. (2020). A competency-based approach to coach learning: The sport New Zealand coach developer program. In B. Callary & B. Gearity (Eds.), *Coach education and development in sport: Instructional strategies* (pp. 154-165). Routledge.

Watts, D. (2020). *Exploring professional coach educators in the United Kingdom: Experiences, roles and realities* [dissertation, Loughborough University].

Watts, D. W., Cushion, C. J., & Cale, L. (2021). Exploring professional coach educators' journeys and perceptions and understandings of learning. *Sport, Education and Society*, 1-15. https://doi.org/10.1080/13573322.2021.1887115

Whitman, N. I. (1990). The Delphi technique as an alternative for committee meetings. *Journal of Nursing Education*, *29*(8), 377-379. https://doi.org/10.3928/0148-4834-19901001-13

Whitmore, J. (1992). *Coaching for Performance*. London: Nicholas Brealey.

Wilson, M. A. (2014). A history of job analysis. In *Historical perspectives in industrial and organizational psychology* (pp. 249-272). Psychology Press.

Witherspoon, E. B., Ferrer, N. B., Correnti, R. R., Stein, M. K., & Schunn, C. D. (2021). Coaching that supports teachers' learning to enact ambitious instruction. *Instructional Science*, *49*, 877-898. https://doi.org/10.1007/s11251-021-09536-7

Wolever, R. Q., Jordan, M., Lawson, K., & Moore, M. (2016). Advancing a new evidence-based professional in health care: Job task analysis for health and wellness coaches. *BMC Health Services Research*, *16*(1). https://doi.org/10.1186/s12913-016-1465-8

Woods, S. A., & Hinton, D. P. (2017). What do people really do at work? Job analysis and design. In N. Chmiel, F. Fraccaroli, & M. Sverke (Eds.), *An introduction to work and organizational psychology: An international perspective* (3rd ed., pp. 3-24).

Wyse, A. E., & Babcock, B. (2018). A comparison of subject matter experts' perceptions and job analysis surveys. *Practical Assessment, Research, and Evaluation, 23*, 10.

Ziglio, E. (1996). The Delphi Method and its contribution to decision-making. In M. Adler & E. Ziglio (Eds.), *Gazing into the oracle: The Delphi Method and its application to social policy and public health* (pp. 3-33). Jessica Kingsley Publishers.

Table 1

Participant Demographics

	M	*SD*
Age	34.43	8.08
Time at Organization	6.07	3.25
Time as Coach Developer at Organization	2.43	0.53

Table 2

Responsibility of Task to Regional Coach Developer by Duty Groupings for Rounds 1 & 2

	Build relationships		Observe and assess		Design, deliver, and evaluate programs for coaches		Design, deliver, and evaluate programs for CDs		Facilitate learning opportunities		Support and mentor coaches		Provide leadership as a CD		Engage in CPD as a CD		Total	
n	21		39		27		20		36		14		14		13		184	
Round	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
M	2.59	2.76	3.47	3.54	2.48	2.54	2.28	2.20	3.37	3.47	3.33	3.50	3.20	3.39	2.86	3.08	3.00	3.10
SD	0.79	0.60	0.50	0.25	1.02	0.55	1.41	0.64	0.66	0.36	0.72	0.50	0.66	0.38	0.84	0.41	0.79	0.44
Frequency of Responsibility of Task																		
Strongly Disagree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Strongly Disagree - Disagree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Disagree - Neutral	7	5	3	2	2	2	3	6	0	0	0	0	0	0	1	1	16	16
Neutral	1	1	0	2	0	2	3	2	0	0	0	0	1	0	0	0	5	7
Neutral - Agree	3	6	4	3	22	20	13	11	8	6	1	0	2	3	6	4	59	53
Agree	0	0	2	0	0	1	1	0	4	3	2	2	3	0	1	3	13	9
Agree - Strongly Agree	10	8	17	14	3	2	0	1	20	16	11	10	5	8	5	3	71	62
Strongly Agree	0	1	13	18	0	0	0	0	4	11	0	2	3	3	0	2	20	37

Note. CD = coach developer, CPD = continuing professional development

Table 3

Responsibility of Task to Regional Coach Developer for Building Relationships Tasks

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Building Relationships Tasks	*M*	*SD*	*M*	*SD*
Build relationships with coaches	3.83	0.41	4.00	0.00
Communicate with individual coaches	3.67	0.52	3.83	0.41
Build relationships with other CDs in your organization	3.67	0.82	3.83	0.41
Communicate with individual CDs in your organization	3.67	0.82	3.83	0.41
Communicate with groups of CDs in your organization	3.67	0.82	3.67	0.52
Build relationships with members of the performance staff	3.17	0.75	3.50	0.55
Communicate with individual members of the performance staff	3.33	0.82	3.50	0.55
Communicate with groups of members of the performance staff	3.17	0.75	3.50	0.55
Communicate with groups of coaches	3.33	0.82	3.33	0.52
Build relationships with organizational administrator(s)	3.17	0.75	2.83	0.41
Communicate with individual organization administrator	2.83	0.75	2.83	0.41
Communicate with groups of organizational administrators	2.50	1.05	2.67	0.52
Build relationships with athletes	2.33	0.82	2.17	0.41
Build relationships with other CDs outside your organization	1.17	0.41	2.17	0.75
Communicate with individual CDs outside your organization	1.17	0.41	2.17	0.75
Communicate with groups of athletes	2.00	0.89	2.00	0.63
Communicate with individual athletes	1.67	1.03	1.83	0.75
Build relationships with parents	1.50	1.05	1.83	0.98
Communicate with groups of CDs outside your organization	1.17	0.41	1.83	1.17
Communicate with individual parents	1.67	1.21	1.33	1.03
Communicate with groups of parents	1.67	1.21	1.33	0.82

Note. CD = coach developer

Table 4

Responsibility of Task to Regional Coach Developer for Observe and Assess Tasks

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Observe and Assess Tasks	*M*	*SD*	*M*	*SD*
Schedule observation or assessment	3.83	0.41	4.00	0.00
Introduce self to coaches	4.00	0.00	4.00	0.00
Brief coach prior to an observation or assessment	3.67	0.82	4.00	0.00
Email coach before attending practice(s)	2.83	1.17	2.33	0.52
Ask for a copy of the coaches' practice plan for observation of practice to review prior to arriving at observation or assessment	3.67	0.52	3.83	0.41
Review coaches' previously recommended areas of improvement prior to observation or assessment	3.67	0.52	3.67	0.52
Choose which professional development form will be completed	3.83	0.41	4.00	0.00
Observe coaches at practice	4.00	0.00	4.00	0.00
Document coaching practices or behaviors at practice(s)	4.00	0.00	4.00	0.00
Make notes regarding coaching practices or behaviors at practice(s)	4.00	0.00	4.00	0.00
Observe coaches at competition(s)	4.00	0.00	4.00	0.00
Document coaching practices or behaviors at the competition(s)	4.00	0.00	4.00	0.00
Make notes regarding coaching practices or behaviors at the competition(s)	4.00	0.00	4.00	0.00
Conduct assessments of coaches' knowledge at training or professional development	3.00	1.26	3.17	0.41
Assess coaches' prior knowledge	1.83	1.17	2.00	0.63
Assess coaches' knowledge throughout training or professional development	2.67	1.03	2.17	0.55
Use observation/assessment tool(s) to assess coaches' application of coaching practices or behaviors during training or professional development	3.50	0.55	3.67	0.52
Conduct assessments of coaches' knowledge after training or professional development	2.17	1.33	2.00	0.00
Proctor certification exam	1.33	0.82	1.50	0.84
Watch a mock practice plan delivery	1.50	0.55	1.67	0.82
Evaluate a practice plan delivery	2.83	1.47	2.83	0.41
Conduct assessments of coaches' application of coaching practices or behaviors at practice	3.67	0.52	3.83	0.41
Use observation/assessment tool(s) to assess coaches at practice(s)	3.67	0.52	3.83	0.41
Evaluate coach's ability to implement practice plan(s)	3.67	0.52	4.00	0.00
Conduct assessments of coaches' application of coaching practices or behaviors at the competition(s)	3.67	0.52	4.00	0.00

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Observe and Assess Tasks	*M*	*SD*	*M*	*SD*
Use observation/assessment tool(s) to assess coach at the competition(s)	3.50	0.55	3.83	0.41
Follow-up with coaches after observation or assessment	4.00	0.00	4.00	0.00
Thank coaches for their time after observation or assessment	3.83	0.41	4.00	0.00
Send reflection form to the coach after observation or assessment	4.00	0.00	3.83	0.41
Schedule a meeting time with the coach to discuss coach observation or assessment	3.67	0.52	3.83	0.41
Analyze information from coach observation or assessment	3.83	0.41	3.67	0.52
Review coach's written reflection(s) on practice	4.00	0.00	4.00	0.00
Review coach's written reflection(s) on competition(s)	4.00	0.00	4.00	0.00
Review coach's previously recommended areas of improvement after observation or assessment	3.17	1.17	3.67	0.52
Determine competence based on results from coach observation or assessment	3.00	1.26	3.17	0.41
Determine areas for improvement based on coach observation or assessment	4.00	0.00	4.00	0.00
Meet individually with coach to share assessment feedback, results, and/or decision(s) from coach observation or assessment	3.83	0.41	3.83	0.41
Complete documentation of observation or assessment in organization's files	4.00	0.00	4.00	0.00
Contact supervisor as necessary	3.67	0.52	3.83	0.41

Note. CD = coach developer

Table 5

Responsibility of Task to Regional Coach Developer for Design, Deliver, and Evaluate Programs for Coaches Tasks

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Design, Deliver, and Evaluate Programs for Coaches Tasks	*M*	*SD*	*M*	*SD*
Evaluate athlete development within the organization	2.17	1.33	2.17	0.98
Create resources for coaches	2.17	0.98	2.50	0.55
Create practice plan(s) for other coaches to use	1.83	1.17	1.67	0.52
Create season plan(s) for other coaches to use	1.67	1.21	1.67	0.52
Create training or programming for coaches	2.33	1.21	2.50	0.55
Use adult learning theories to design learning opportunities for coaches	2.17	0.98	2.00	0.63
Create learning opportunities that are purposeful and relevant for coaches	3.17	0.75	3.17	0.41
Create learning opportunities that incorporate active participation for coaches	2.83	0.98	2.83	0.41
Design opportunities for coaches to practice coaching in a structured setting	2.17	1.17	2.17	0.75
Design formal learning opportunities for coaches	2.17	1.17	2.00	0.89
Design non-formal learning opportunities for coaches	2.50	1.05	2.67	0.52
Design coach education initial coach training or programming	2.83	0.75	3.00	0.63
Design coach development initial coach training or programming	2.17	1.17	2.50	0.55
Design continuing coach education training or programming	2.17	1.17	2.33	0.52
Design continuing coach development training or programming	2.17	1.17	2.83	0.41
Deliver learning opportunities for coaches	3.17	0.41	3.17	0.41
Deliver formal learning opportunities for coaches	2.83	0.98	2.50	0.55
Deliver non-formal learning opportunities for coaches	2.67	1.03	2.50	0.55
Deliver coach education initial coach training or programming	2.83	0.98	2.67	0.52
Deliver coach development initial coach training or programming	3.17	0.41	2.83	0.41
Design continuing coach education training or programming	2.67	0.82	2.50	0.55
Design continuing coach development training or programming	2.50	1.05	2.67	0.52
Evaluate coach training or programming	2.67	1.03	2.67	0.52
Evaluate coach education initial coach training or programming	2.33	1.21	2.83	0.41
Evaluate coach development initial coach training or programming	2.33	1.21	2.83	0.41
Evaluate continuing coach education training or programming	2.50	1.22	2.67	0.82
Evaluate continuing coach development training or programming	2.67	1.03	2.83	0.41

Table 6

Responsibility of Task to Regional Coach Developer for Design, Deliver, and Evaluate Programs for Coach Developer Tasks

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Design, Deliver, and Evaluate Programs for CD Tasks	*M*	*SD*	*M*	*SD*
Create resources for CDs	2.17	1.17	1.50	0.84
Create assessment(s) to measure coaches' level of knowledge	1.67	1.21	1.67	0.82
Create assessment(s) to measure coaches' competence in applying coaching behaviors and practices	2.17	1.47	1.67	0.82
Create training or programming for other CDs	2.00	1.67	1.67	0.52
Use adult learning theories to design learning opportunities for CDs	1.33	0.82	1.50	0.55
Create learning opportunities that are purposeful and relevant for CDs	1.83	1.47	1.33	0.52
Create learning opportunities that incorporate active participation for CDs	2.00	1.67	2.00	0.63
Design opportunities for CDs to practice coach development in a structured setting	2.33	1.63	2.33	0.52
Design formal learning opportunities for CDs	2.00	1.67	2.17	0.75
Design non-formal learning opportunities for CDs	2.33	1.63	2.67	0.52
Design initial coach developer training or programming	2.33	1.63	2.00	0.89
Design continuing coach developer training or programming	2.33	1.63	2.67	0.52
Deliver learning opportunities for other CDs	2.67	1.03	2.50	0.55
Deliver formal learning opportunities for CDs	2.33	1.21	2.33	0.82
Deliver non-formal learning opportunities for CDs	2.67	1.03	2.33	0.82
Deliver initial coach developer training or programming	3.00	1.10	3.17	0.75
Deliver continuing coach developer training or programming	2.83	1.17	2.83	0.41
Evaluate coach developer training or programming	2.50	1.64	2.50	0.55
Evaluate coach developer initial training or programming	2.50	1.64	2.67	0.52
Evaluate continuing coach developer training or programming	2.50	1.64	2.50	0.55

Note. CD = coach developer

Table 7

Responsibility of Task to Regional Coach Developer for Facilitating Learning Opportunities Tasks

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Facilitating Learning Opportunities Tasks	*M*	*SD*	*M*	*SD*
Apply a variety of learning theories and models when facilitating learning opportunities for coaches	2.67	0.52	2.67	0.82
Facilitate formal learning situations through prescribed coach education programs with minimal customization	2.50	0.55	2.17	0.75
Explain learning outcomes and how they will be delivered	2.67	0.52	3.00	0.00
Develop learning environments for coaches to optimize professional development	3.00	0.63	3.00	0.00
Create and maintain a positive environment	3.67	0.52	3.83	0.41
Create and maintain a supportive environment	3.83	0.41	3.83	0.41
Create and maintain a safe learning environment	3.83	0.41	3.83	0.41
Create and maintain an inviting learning environment	4.00	0.00	4.00	0.00
Create and maintain an engaging environment	3.83	0.41	4.00	0.00
Adjust and adapt learning experiences for individual learners	3.83	0.41	4.00	0.00
Manage class time to optimize learning	2.83	0.98	2.67	0.82
Communicate information effectively with coaches	3.83	0.41	3.83	0.41
Present information to coaches clearly and succinctly	4.00	0.00	4.00	0.00
Use voice in a clear, modulated, and varied way	3.83	0.41	4.00	0.00
Use simple and clear words and sentences that are free from jargon and discriminatory language	3.83	0.41	4.00	0.00
Use non-verbal communication to complement the verbal message when speaking to coaches	3.50	0.84	3.67	0.52
Use audio-visual aids to help communicate information to coaches	3.17	0.98	3.17	0.75
Provide constructive feedback to coaches	4.00	0.00	4.00	0.00
Use organization-suggested language when	3.17	1.17	3.50	0.55

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Facilitating Learning Opportunities Tasks	*M*	*SD*	*M*	*SD*
providing feedback				
Use a framework to provide effective feedback	4.00	0.00	4.00	0.00
Use a range of delivery styles and methods to optimize learning in coach education and development settings	2.83	1.17	3.33	0.52
Tell coaches information	3.17	0.75	3.17	0.75
Ask coaches effective questions	3.67	0.52	3.83	0.41
Practice active listening when coaches speak	3.67	0.52	4.00	0.00
Help coaches to reflect on their experience(s)	3.83	0.41	4.00	0.00
Help coaches to reflect on their behavior(s)	3.83	0.41	4.00	0.00
Facilitate the practicing and application of coaching behaviors	3.17	0.75	3.67	0.52
Challenge coaches to use new methods of teaching and coaching with their athletes	3.33	1.21	3.33	0.82
Encourage coaches' experimentation of using different methods of teaching and coaching with their athletes	3.00	1.55	3.17	0.75
Incorporate activities that are purposeful and relevant	3.50	1.22	3.67	0.52
Facilitate formal learning opportunities with coaches	2.83	0.75	2.50	0.55
Facilitate non-formal learning opportunities with coaches	3.00	0.63	2.83	0.41
Facilitate continuing professional development opportunities for coaches	3.17	0.75	3.50	0.55
Facilitate communities of practice for coaches	2.33	1.21	2.50	1.05
Facilitate one-on-one conversations with coaches about their professional development	2.83	0.98	3.17	0.41
Help coaches create an action plan for their professional development	3.00	1.26	3.00	0.00

Note. CD = coach developer

Table 8

Responsibility of Task to Regional Coach Developer for Support and Mentor Coaches Tasks

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Support and Mentor Coaches Tasks	*M*	*SD*	*M*	*SD*
Identify and respond to coaches' needs	3.17	0.41	3.50	0.55
Provide one-on-one instructional support to coaches	3.33	0.52	3.67	0.52
Serve as a consultant for other coaches in the club or organization	2.67	1.03	3.00	0.63
Serve as a mentor to other coaches	3.67	0.52	4.00	0.00
Provide ongoing support to coaches outside of formal education experiences	3.67	0.52	4.00	0.00
Support the evolution of the coach's coaching philosophy	3.33	0.52	3.17	0.75
Support the coach as an autonomous problem solver	3.00	0.89	3.00	0.00
Provide care and support for the well-being of coaches	3.17	0.75	3.50	0.55
Support coaches in caring for their athletes' well-being	3.67	0.52	3.83	0.41
Encourage coaches to take ownership of their learning	3.83	0.41	3.83	0.41
Promote the development of critical thinking skills in coaches	3.17	1.17	3.33	0.82
Promote the development of decision-making skills in coaches	3.17	1.17	3.17	0.75
Promote the development of self-reflection in coaches	3.83	0.41	3.83	0.41
Promote the development of emotional intelligence in coaches	3.00	1.26	3.17	1.17

Table 9

Responsibility of Task to Regional Coach Developer for Provide Leadership as a Coach Developer Tasks

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Provide Leadership as a Coach Developer Tasks	*M*	*SD*	*M*	*SD*
Serve as a leader in the organization	3.50	0.84	3.83	0.41
Lead the development of organizational culture	3.00	0.89	3.33	0.52
Provide messaging consistency across the organization	3.33	0.52	3.33	0.52
Serve as a conduit from coaches to administrators	2.00	1.10	2.17	0.41
Organize continuing professional development opportunities for coaches	3.17	0.75	3.50	0.55
Advocate for lifelong learning	3.00	0.89	3.67	0.52
Foster a culture of lifelong learning among coaches	3.17	0.98	3.67	0.52
Foster a culture of lifelong learning within the organization	3.00	0.89	3.33	0.52
Partner with other support systems	2.17	0.98	2.17	0.41
Empower people and communities	2.67	1.03	2.67	0.52
Model professional expectations for CDs	3.83	0.41	3.83	0.41
Promote professional expectations for coaches	4.00	0.00	4.00	0.00
Promote respectful coaching behaviors	4.00	0.00	4.00	0.00
Promote inclusive coaching behaviors	4.00	0.00	4.00	0.00

Note. CD = coach developer

Table 10

Responsibility of Task to Regional Coach Developer for Engaging in Continuing Professional Development Tasks

	This task is currently part of the responsibilities of a regional coach developer with XXX.			
	Round 1		Round 2	
Engaging in Continuing Professional Development Tasks	*M*	*SD*	*M*	*SD*
Engage in continuing professional development	3.67	0.52	4.00	0.00
Stay up-to-date with current research and best practices on athlete development	3.33	0.52	3.67	0.52
Stay up-to-date with current research and best practices on coach development	3.50	0.55	3.67	0.52
Attend continuing professional development opportunities in coach development	3.17	0.75	3.67	0.52
Engage in self-reflection on own coach development practices	3.83	0.41	4.00	0.00
Record facilitation and assessment	2.33	1.21	2.83	0.41
Maintain a reflective log or journal	1.83	0.98	1.67	0.52
Connect with a mentor	2.67	1.03	2.83	0.98
Participate in communities of practice	2.50	0.55	2.50	0.55
Create an action plan to improve personal facilitation and assessment skills	2.17	1.33	2.17	0.75
Evaluate own coach development skills and practices	2.83	0.75	3.00	0.00
Evaluate own coach development philosophy	2.33	1.21	3.00	0.63
Support other CDs to improve their practices	3.00	1.10	3.00	0.00

Note. CD = coach developer

Table 11

Importance of Task to Regional Coach Developer by Duty Groupings for Rounds 1 and 2

	Build relationships		Observe and assess		Design, deliver, and evaluate programs for coaches		Design, deliver, and evaluate programs for CDs		Facilitate learning opportunities		Support and mentor coaches		Provide leadership as a CD		Engage in CPD as a CD		Total	
n	21		39		27		20		36		14		14		13		184	
Round	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Mean	3.14	3.06	3.62	3.59	2.93	2.77	2.78	2.67	3.57	3.63	3.57	3.74	3.51	3.58	3.33	3.42	3.33	3.32
SD	0.55	0.48	0.40	0.29	0.73	0.43	0.99	0.62	0.46	0.34	0.60	0.37	0.55	0.36	0.59	0.36	0.58	0.39
	Frequency of Importance of Task																	
Strongly Disagree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Strongly Disagree - Disagree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Disagree - Neutral	0	1	1	2	1	2	1	1	0	0	0	0	0	0	0	0	3	6
Neutral	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Neutral - Agree	10	5	4	4	11	13	11	13	3	4	0	0	1	2	3	3	43	44
Agree	1	1	1	1	6	7	1	6	3	2	1	1	2	0	1	1	16	19
Agree - Strongly Agree	7	9	18	14	9	5	7	0	20	16	12	10	7	8	9	4	89	66
Strongly Agree	3	2	15	18	0	0	0	0	10	14	1	3	4	4	0	5	33	46

Note. CD = coach developer, CPD = continuing professional development

Table 12

Importance of Task to Regional Coach Developer for Building Relationships Tasks

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Building Relationships Tasks	*M*	*SD*	*M*	*SD*
Communicate with individual coaches	3.83	0.00	4.00	0.00
Communicate with individual CDs in your organization	4.00	0.00	4.00	0.00
Build relationships with coaches	4.00	0.00	3.83	0.41
Communicate with individual members of the performance staff	3.67	0.89	3.83	0.41
Build relationships with other CDs in your organization	3.83	0.45	3.83	0.41
Communicate with groups of CDs in your organization	4.00	0.00	3.83	0.41
Communicate with groups of coaches	3.83	0.00	3.67	0.52
Build relationships with other CDs outside your organization	3.17	0.84	3.67	0.52
Communicate with groups of members of the performance staff	3.50	0.89	3.50	0.55
Communicate with individual CDs outside your organization	2.83	0.84	3.50	0.55
Build relationships with members of the performance staff	3.50	0.89	3.33	0.52
Build relationships with organizational administrator(s)	3.00	0.71	3.00	0.00
Communicate with individual organization administrator	2.83	0.84	2.83	0.41
Communicate with groups of organizational administrators	2.50	1.14	2.83	0.41
Communicate with groups of CDs outside your organization	2.83	0.84	2.83	0.75
Build relationships with athletes	2.67	0.00	2.17	0.75
Build relationships with parents	2.50	0.45	2.17	0.98
Communicate with individual athletes	2.33	0.55	2.00	0.63
Communicate with groups of athletes	2.67	0.55	2.00	0.63
Communicate with groups of parents	2.33	0.84	2.00	0.63
Communicate with individual parents	2.17	0.84	1.50	0.55

Note. CD = coach developer

Table 13

Importance of Task to Regional Coach Developer for Observe and Assess Coaches Tasks

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Observe and Assess Coaches Tasks	*M*	*SD*	*M*	*SD*
Schedule observation or assessment	4.00	0.00	4.00	0.00
Introduce self to coaches	4.00	0.00	4.00	0.00
Brief coach prior to an observation or assessment	3.67	0.89	4.00	0.00
Email coach before attending practice(s)	2.67	0.71	2.17	0.75
Ask for a copy of the coaches' practice plan for observation of practice to review prior to arriving at observation or assessment	3.33	0.45	3.50	0.84
Review coaches' previously recommended areas of improvement prior to observation or assessment	3.83	0.00	3.67	0.82
Choose which professional development form will be completed	3.83	0.45	4.00	0.00
Observe coaches at practice	4.00	0.00	4.00	0.00
Document coaching practices or behaviors at practice(s)	4.00	0.00	4.00	0.00
Make notes regarding coaching practices or behaviors at practice(s)	4.00	0.00	4.00	0.00
Observe coaches at competition(s)	4.00	0.00	4.00	0.00
Document coaching practices or behaviors at the competition(s)	4.00	0.00	4.00	0.00
Make notes regarding coaching practices or behaviors at the competition(s)	4.00	0.00	4.00	0.00
Conduct assessments of coaches' knowledge at training or professional development	3.33	0.84	3.33	0.82
Assess coaches' prior knowledge	2.83	0.84	2.83	0.41
Assess coaches' knowledge throughout training or professional development	3.33	0.55	2.50	0.00
Use observation/assessment tool(s) to assess coaches' application of coaching practices or behaviors during training or professional development	3.67	0.55	3.50	0.55
Conduct assessments of coaches' knowledge after training or professional development	2.83	1.30	2.50	0.55
Proctor certification exam	1.83	1.48	1.67	0.52

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Observe and Assess Coaches Tasks	*M*	*SD*	*M*	*SD*
Watch a mock practice plan delivery	2.17	1.10	1.83	0.98
Evaluate a practice plan delivery	3.67	0.45	3.00	1.10
Conduct assessments of coaches' application of coaching practices or behaviors at practice	3.67	0.45	3.83	0.41
Use observation/assessment tool(s) to assess coaches at practice(s)	3.83	0.45	3.83	0.41
Evaluate coach's ability to implement practice plan(s)	3.83	0.45	3.83	0.41
Conduct assessments of coaches' application of coaching practices or behaviors at the competition(s)	3.83	0.45	3.83	0.41
Use observation/assessment tool(s) to assess coach at the competition(s)	3.67	0.55	3.83	0.41
Follow-up with coaches after observation or assessment	4.00	0.00	4.00	0.00
Thank coaches for their time after observation or assessment	4.00	0.00	4.00	0.00
Send reflection form to the coach after observation or assessment	4.00	0.00	4.00	0.00
Schedule a meeting time with the coach to discuss coach observation or assessment	3.83	0.45	3.83	0.41
Analyze information from coach observation or assessment	3.83	0.00	3.83	0.41
Review coach's written reflection(s) on practice	4.00	0.00	4.00	0.00
Review coach's written reflection(s) on competition(s)	4.00	0.00	4.00	0.00
Review coach's previously recommended areas of improvement after observation or assessment	3.33	1.10	3.83	0.41
Determine competence based on results from coach observation or assessment	3.00	1.41	3.17	0.41
Determine areas for improvement based on coach observation or assessment	4.00	0.00	4.00	0.00
Meet individually with coach to share assessment feedback, results, and/or decision(s) from coach observation or assessment	3.67	0.45	4.00	0.00
Complete documentation of observation or assessment in organization's files	4.00	0.00	4.00	0.00
Contact supervisor as necessary	3.83	0.45	3.83	0.41

Table 14

Importance of Task to Regional Coach Developer for Design, Deliver, and Evaluate Programs for Coaches Tasks

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Design, Deliver, and Evaluate Programs for Coaches Tasks	*M*	*SD*	*M*	*SD*
Evaluate athlete development within the organization	2.83	0.84	2.33	0.82
Create resources for coaches	3.17	0.45	2.50	0.55
Create practice plan(s) for other coaches to use	2.17	1.00	1.83	0.75
Create season plan(s) for other coaches to use	1.83	0.89	1.50	0.55
Create training or programming for coaches	3.17	0.84	2.67	0.52
Use adult learning theories to design learning opportunities for coaches	2.67	0.89	2.33	0.82
Create learning opportunities that are purposeful and relevant for coaches	3.67	0.45	3.17	0.41
Create learning opportunities that incorporate active participation for coaches	3.33	0.55	3.17	0.41
Design opportunities for coaches to practice coaching in a structured setting	3.17	0.84	3.17	0.41
Design formal learning opportunities for coaches	2.67	0.89	2.67	0.52
Design non-formal learning opportunities for coaches	2.67	0.89	2.67	0.52
Design coach education initial coach training or programming	2.83	0.84	3.00	0.63
Design coach development initial coach training or programming	2.83	0.84	2.83	0.41
Design continuing coach education training or programming	2.83	0.84	2.67	0.52
Design continuing coach development training or programming	2.83	0.84	3.00	0.63
Deliver learning opportunities for coaches	3.17	0.45	3.33	0.52
Deliver formal learning opportunities for coaches	3.00	0.71	3.00	0.00
Deliver non-formal learning opportunities for coaches	3.17	0.45	3.00	0.00
Deliver coach education initial coach training or programming	3.17	0.45	3.17	0.41
Deliver coach development initial coach training or programming	3.17	0.45	3.00	0.00
Design continuing coach education training or programming	2.83	0.84	2.67	0.52
Design continuing coach development training or programming	2.83	0.84	2.67	0.52
Evaluate coach training or programming	3.00	0.71	3.00	0.00
Evaluate coach education initial coach training or programming	3.00	0.71	2.83	0.41
Evaluate coach development initial coach training or programming	3.00	0.71	2.83	0.41
Evaluate continuing coach education training or programming	3.00	0.71	2.83	0.41
Evaluate continuing coach development training or programming	3.00	0.71	3.00	0.00

Table 15

Importance of Task to Regional Coach Developer for Design, Deliver, and Evaluate Programs for Coach Developers Tasks

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Design, Deliver, and Evaluate Programs for CD Tasks	*M*	*SD*	*M*	*SD*
Create resources for CDs	2.50	1.14	2.50	0.84
Create assessment(s) to measure coaches' level of knowledge	2.50	0.89	2.17	0.75
Create assessment(s) to measure coaches' competence in applying coaching behaviors and practices	2.67	1.14	2.33	0.52
Create training or programming for other CDs	2.33	1.30	2.33	0.52
Use adult learning theories to design learning opportunities for CDs	1.83	0.84	1.83	0.41
Create learning opportunities that are purposeful and relevant for CDs	2.17	1.30	2.50	0.55
Create learning opportunities that incorporate active participation for CDs	2.50	1.52	2.83	0.41
Design opportunities for CDs to practice coach development in a structured setting	2.50	1.52	2.67	0.52
Design formal learning opportunities for CDs	2.67	1.30	2.67	0.52
Design non-formal learning opportunities for CDs	2.83	1.30	2.50	0.55
Design initial coach developer training or programming	2.83	1.30	2.83	0.98
Design continuing coach developer training or programming	2.83	1.30	2.67	0.82
Deliver learning opportunities for other CDs	3.17	0.45	2.83	0.75
Deliver formal learning opportunities for CDs	3.00	0.45	2.67	0.52
Deliver non-formal learning opportunities for CDs	3.17	0.45	3.00	0.63
Deliver initial coach developer training or programming	3.33	0.55	3.00	0.63
Deliver continuing coach developer training or programming	3.33	0.55	3.00	0.63
Evaluate coach developer training or programming	3.17	0.84	3.00	0.63
Evaluate coach developer initial training or programming	3.17	0.84	3.00	0.63
Evaluate continuing coach developer training or programming	3.17	0.84	3.00	0.63

Note. CD = coach developer

Table 16

Importance of Task to Regional Coach Developer for Facilitating Learning Opportunities Tasks

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Facilitating Learning Opportunities Tasks	*M*	*SD*	*M*	*SD*
Apply a variety of learning theories and models when facilitating learning opportunities for coaches	2.67	0.55	2.67	0.82
Facilitate formal learning situations through prescribed coach education programs with minimal customization	2.33	0.84	2.33	0.82
Explain learning outcomes and how they will be delivered	2.83	0.45	2.83	0.41
Develop learning environments for coaches to optimize professional development	3.33	0.55	3.33	0.52
Create and maintain a positive environment	3.83	0.00	3.83	0.41
Create and maintain a supportive environment	3.83	0.00	3.83	0.41
Create and maintain a safe learning environment	3.83	0.00	3.83	0.41
Create and maintain an inviting learning environment	4.00	0.00	4.00	0.00
Create and maintain an engaging environment	4.00	0.00	4.00	0.00
Adjust and adapt learning experiences for individual learners	4.00	0.00	4.00	0.00
Manage class time to optimize learning	3.00	1.10	2.83	0.75
Communicate information effectively with coaches	4.00	0.00	4.00	0.00
Present information to coaches clearly and succinctly	4.00	0.00	4.00	0.00
Use voice in a clear, modulated, and varied way	4.00	0.00	4.00	0.00
Use simple and clear words and sentences that are free from jargon and discriminatory language	3.83	0.45	4.00	0.00
Use non-verbal communication to complement the verbal message when speaking to coaches	3.67	0.89	3.67	0.52
Use audio-visual aids to help communicate information to coaches	3.83	0.45	3.67	0.52
Provide constructive feedback to coaches	4.00	0.00	4.00	0.00
Use organization-suggested language when providing feedback	3.33	1.30	3.67	0.52
Use a framework to provide effective feedback	4.00	0.00	4.00	0.00
Use a range of delivery styles and methods to	3.00	1.41	3.33	0.52

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Facilitating Learning Opportunities Tasks	*M*	*SD*	*M*	*SD*
optimize learning in coach education and development settings				
Tell coaches information	3.17	0.84	3.17	0.75
Ask coaches effective questions	3.67	0.45	3.67	0.52
Practice active listening when coaches speak	4.00	0.00	4.00	0.00
Help coaches to reflect on their experience(s)	4.00	0.00	4.00	0.00
Help coaches to reflect on their behavior(s)	3.83	0.45	4.00	0.00
Facilitate the practicing and application of coaching behaviors	3.50	0.89	4.00	0.00
Challenge coaches to use new methods of teaching and coaching with their athletes	3.50	0.89	3.67	0.52
Encourage coaches' experimentation of using different methods of teaching and coaching with their athletes	3.67	0.55	3.67	0.52
Incorporate activities that are purposeful and relevant	3.67	0.45	3.83	0.41
Facilitate formal learning opportunities with coaches	3.00	1.00	3.00	0.63
Facilitate non-formal learning opportunities with coaches	3.33	0.55	3.33	0.52
Facilitate continuing professional development opportunities for coaches	3.33	0.84	3.83	0.41
Facilitate communities of practice for coaches	3.17	0.84	3.00	0.89
Facilitate one-on-one conversations with coaches about their professional development	3.50	0.55	3.83	0.41
Help coaches create an action plan for their professional development	3.83	0.45	4.00	0.00

Table 17

Importance of Task to Regional Coach Developer for Supporting and Mentoring Coaches Tasks

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Supporting and Mentoring Coaches Tasks	*M*	*SD*	*M*	*SD*
Identify and respond to coaches' needs	3.33	0.55	3.67	0.52
Provide one-on-one instructional support to coaches	3.50	0.55	3.83	0.41
Serve as a consultant for other coaches in the club or organization	3.00	1.00	3.00	0.63
Serve as a mentor to other coaches	3.67	0.45	3.83	0.41
Provide ongoing support to coaches outside of formal education experiences	3.67	0.45	3.83	0.41
Support the evolution of the coach's coaching philosophy	3.33	0.55	3.33	0.52
Support the coach as an autonomous problem solver	3.33	0.89	3.67	0.52
Provide care and support for the well-being of coaches	3.50	0.45	3.83	0.41
Support coaches in caring for their athletes' well-being	3.83	0.45	4.00	0.00
Encourage coaches to take ownership of their learning	3.83	0.45	4.00	0.00
Promote the development of critical thinking skills in coaches	3.67	0.89	3.67	0.52
Promote the development of decision-making skills in coaches	3.83	0.45	3.83	0.41
Promote the development of self-reflection in coaches	4.00	0.00	4.00	0.00
Promote the development of emotional intelligence in coaches	3.50	1.34	3.83	0.41

Table 18

Importance of Task to Regional Coach Developer for Providing Leadership as a Coach Developer Tasks

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Providing Leadership as a Coach Developer Tasks	*M*	*SD*	*M*	*SD*
Serve as a leader in the organization	3.50	0.89	3.83	0.41
Lead the development of organizational culture	3.17	0.84	3.50	0.55
Provide messaging consistency across the organization	3.50	0.55	3.83	0.41
Serve as a conduit from coaches to administrators	2.83	1.30	2.50	0.55
Organize continuing professional development opportunities for coaches	3.67	0.55	3.67	0.52
Advocate for lifelong learning	3.50	0.55	3.67	0.52
Foster a culture of lifelong learning among coaches	3.67	0.55	3.83	0.41
Foster a culture of lifelong learning within the organization	3.33	0.55	3.83	0.41
Partner with other support systems	3.00	0.71	2.33	0.82
Empower people and communities	3.00	1.22	3.17	0.41
Model professional expectations for CDs	4.00	0.00	4.00	0.00
Promote professional expectations for coaches	4.00	0.00	4.00	0.00
Promote respectful coaching behaviors	4.00	0.00	4.00	0.00
Promote inclusive coaching behaviors	4.00	0.00	4.00	0.00

Note. CD = coach developer

Table 19

Importance of Task to Regional Coach Developer for Engage in Continuing Professional Development as a Coach Developer Tasks

	This task is important to the role of the regional coach developer at XXX.			
	Round 1		Round 2	
Engage in Continuing Professional Development as a CD Tasks	*M*	*SD*	*M*	*SD*
Engage in continuing professional development	3.83	0.45	4.00	0.00
Stay up-to-date with current research and best practices on athlete development	3.67	0.45	4.00	0.00
Stay up-to-date with current research and best practices on coach development	3.67	0.45	4.00	0.00
Attend continuing professional development opportunities in coach development	3.67	0.45	4.00	0.00
Engage in self-reflection on own coach development practices	3.83	0.45	4.00	0.00
Record facilitation and assessment practice	2.83	0.84	3.00	0.63
Maintain a reflective log or journal	2.50	1.14	2.17	0.75
Connect with a mentor	3.33	0.55	3.17	0.75
Participate in communities of practice	2.67	0.55	2.50	0.55
Create an action plan to improve personal facilitation and assessment skills	3.00	0.71	2.83	0.41
Evaluate own coach development skills and practices	3.33	0.55	3.50	0.55
Evaluate own coach development philosophy	3.50	0.55	3.67	0.52
Support other CDs to improve their practices	3.50	0.55	3.67	0.52

Note. CD = coach developer

Table 20

Frequency of Task to Regional Coach Developer by Duty Groupings for Round 2

	Build relationships	Observe and assess	Design, deliver, and evaluate programs for coaches	Design, deliver, and evaluate programs for CDs	Facilitate learning opportunities	Support and mentor coaches	Provide leadership as a CD	Engage in CPD as a CD	Total
n	21	39	27	20	36	14	14	13	184
M	2.42	2.00	1.34	1.14	2.87	3.21	3.44	2.43	
SD	0.82	0.32	0.46	0.52	0.70	0.85	0.60	0.96	
Frequency of Frequency of Task									
Never	0	0	0	0	0	0	0	0	0
Never - Annually	2	2	0	2	0	0	0	0	6
Annually	0	0	6	7	2	0	0	0	15
Annually - Monthly	3	3	21	11	4	0	1	3	46
Monthly	0	19	0	0	1	0	0	0	20
Monthly - Weekly	9	15	0	0	10	3	1	8	46
Weekly	3	0	0	0	2	0	1	2	8
Weekly - Daily	4	0	0	0	13	11	6	0	34
Daily	0	0	0	0	4	0	5	0	9

Note. CD = coach developer, CPD = continuing professional development

Table 21

Consensus on Responsibility, Importance, and Performed Weekly

		Responsibility Consensus		Importance Consensus		Weekly Consensus	
	n	*n*	%	*n*	%	*n*	%
Building Relationships	21	9	42.9%	12	57.1%	7	33.3%
Observing and Assessing Coaches	39	32	82.1%	33	84.6%		
Designing, Delivering, and Evaluating Programs for Coaches	27	3	11.1%	12	44.4%		
Designing, Delivering, and Evaluating Programs for CDs	20	1	5%	6	30%		
Facilitating Learning Opportunities	36	30	83.3%	32	88.9%	19	52.8%
Supporting and Mentoring Coaches	14	14	100%	14	100%	11	78.6%
Providing Leadership as a Coach Developer	14	11	78.6%	12	85.7%	12	85.7%
Engaging in Continuing Professional Development as a CD	13	8	61.5%	10	76.9%	2	15.4%
Total	184	108	58.7%	131	71.2%	51	27.7%

Note. CD = coach developer

Table 22

List of Tasks that Reached Consensus Organized by Performance Frequency

Daily	Creating and Modeling Organizational Culture	Create and maintain - A positive environment - An inviting learning environment Model professional expectations for coach developers
	Promoting Professional Expectations Regarding Behavior	Promote - Inclusive coaching behaviors - Professional expectations for coaches - Respectful coaching behaviors
	Communicating Clearly	Provide messaging consistency across the organization Use simple and clear words and sentences that are free from jargon and discriminatory language Use voice in a clear, modulated, and varied way
Weekly	Creating and Fostering a Learning-focused and Coach-centered Organizational Culture	Advocate for lifelong learning Create and maintain - a safe learning environment - a supportive environment - an engaging environment Encourage coaches to take ownership of their learning Foster a culture of lifelong learning - among coaches - within the organization Use a range of delivery styles and methods to optimize learning in coach education and development settings
	Communicating	Communicate information effectively with coaches Communicate with - groups of coaches - individual coach developers in your organization - individual coaches - individual members of the performance staff Practice active listening when coaches speak Tell coaches information Use non-verbal communication to complement the verbal message when speaking to coaches
	Facilitating Coach Learning and Development	Facilitate the practicing and application of coaching behaviors Promote the development of - critical thinking skills in coaches - decision-making skills in coaches - emotional intelligence in coaches - self-reflection in coaches
	Providing Leadership	Lead the development of organizational culture Serve as a

		- leader in the organization - mentor to other coaches
	Practicing Continuing Professional Development	Engage in continuing professional development
	Providing Effective Feedback and Support	Ask coaches effective questions Build relationships - with coaches - with members of the performance staff Help coaches to reflect on their behavior(s) Help coaches to reflect on their experience(s) Identify and respond to coaches needs Provide care and support for the well-being of coaches Provide constructive feedback to coaches Provide one-on-one instructional support to coaches Provide ongoing support to coaches outside of formal education experiences Support coaches in caring for their athletes & well-being Support other coach developers to improve their practices Use a framework to provide effective feedback Use organization-suggested language when providing feedback
Monthly	Observing and Assessing	Analyze information from coach observation or assessment Ask for a copy of the coaches' practice plan for observation of practice to review prior to arriving at observation or assessment Brief coach prior to an observation or assessment Choose which professional development form will be completed Complete documentation of observation or assessment in organization's files Conduct assessments of coaches' application of coaching practices or behaviors at practice Conduct assessments of coaches' application of coaching practices or behaviors at the competition(s) Conduct assessments of coaches' knowledge at training or professional development Determine areas for improvement based on coach observation or assessment Determine competence based on results from coach observation or assessment Document coaching practices or behaviors at practice(s)

		Document coaching practices or behaviors at the competition(s) Follow-up with coaches after observation or assessment Introduce self to coaches Make notes regarding coaching practices or behaviors at practice(s) Make notes regarding coaching practices or behaviors at the competition(s) Meet individually with coach to share assessment feedback, results, and/or decision(s) from coach observation or assessment Observe coaches at competition(s) Observe coaches at practice Review coach's previously recommended areas of improvement after observation or assessment Review coach's written reflection(s) on competition(s) Review coach's written reflection(s) on practice Review coaches' previously recommended areas of improvement prior to observation or assessment Schedule a meeting time with the coach to discuss coach observation or assessment Schedule observation or assessment Send reflection form to the coach after observation or assessment Thank coaches for their time after observation or assessment Use observation/assessment tool(s) to assess coach at the competition(s) Use observation/assessment tool(s) to assess coaches at practice(s) Use observation/assessment tool(s) to assess coaches'; application of coaching practices or behaviors during training or professional development Evaluate coach's ability to implement practice plan(s)
	Building Professional Relationships	Build relationships with other CDs in your organization Communicate with groups of CDs in your organization Communicate with groups of members of the performance staff
	Practicing Continuing Professional Development	Engage in self-reflection on own coach development practices Evaluate own coach development philosophy Evaluate own coach development skills and practices Stay up-to-date with current research and best practices on athlete development Stay up-to-date with current research and best practices on coach development

	Facilitating Coach Learning and Development	Adjust and adapt learning experiences for individual learners Challenge coaches to use new methods of teaching and coaching with their athletes Develop learning environments for coaches to optimize professional development Encourage coaches' experimentation of using different methods of teaching and coaching with their athletes Facilitate continuing professional development opportunities for coaches Facilitate one-on-one conversations with coaches about their professional development Help coaches create an action plan for their professional development Incorporate activities that are purposeful and relevant Organize continuing professional development opportunities for coaches Present information to coaches clearly and succinctly Serve as a consultant for other coaches in the club or organization Support the coach as an autonomous problem solver Support the evolution of the coach's coaching philosophy Use audio-visual aids to help communicate information to coaches
Yearly	Facilitating Coach and Coach Developer Learning and Development	Create learning opportunities that are purposeful and relevant for coaches Deliver - initial coach developer training or programming - learning opportunities for coaches Design coach education initial coach training or programming
	Practicing Continuing Professional Development	Attend continuing professional development opportunities in coach development
	Seek Assistance	Contact supervisor as necessary

Table 23

List of Interesting Tasks That Did Not Reach Both Responsibility and Importance Consensus

Task
Agreement of Responsibility Only
Explain learning outcomes and how they will be delivered
Agreement of Importance Only
Build relationships with organizational administrator(s)
Build relationships with other coach developers outside your organization
Connect with a mentor
Create learning opportunities that incorporate active participation for coaches
Deliver coach development initial coach training or programming
Deliver coach education initial coach training or programming
Deliver continuing coach developer training or programming
Deliver formal learning opportunities for coaches
Deliver non-formal learning opportunities for coach developers
Deliver non-formal learning opportunities for coaches
Design continuing coach development training or programming
Design opportunities for coaches to practice coaching in a structured setting
Evaluate a practice plan delivery
Evaluate coach developer initial training or programming
Evaluate coach developer training or programming
Evaluate coach training or programming
Evaluate continuing coach developer training or programming
Evaluate continuing coach development training or programming
Facilitate communities of practice for coaches
Facilitate formal learning opportunities with coaches
Facilitate non-formal learning opportunities with coaches
Record facilitation and assessment practice
Agreement of Importance and Performed at Least Weekly but not Responsibility of RCD
Empower people and communities
Performed at Least Weekly but Neither Important nor Responsibility of RCD
Build relationships with athletes
Serve as a conduit from coaches to administrators

Note. RCD = Regional Coach Developer

Figure 1

Responsibility Mean Compared to Importance Mean for Round 1

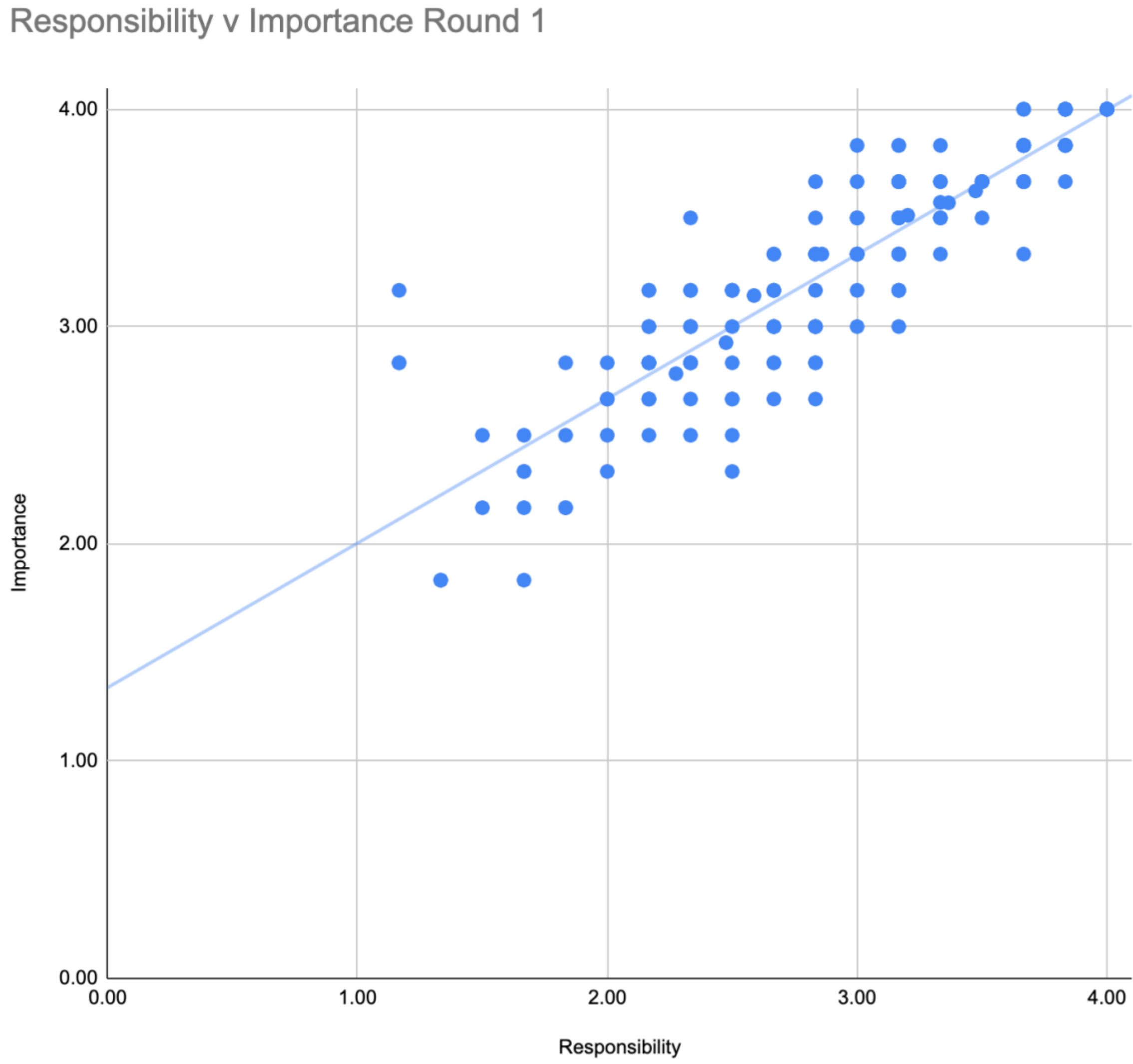
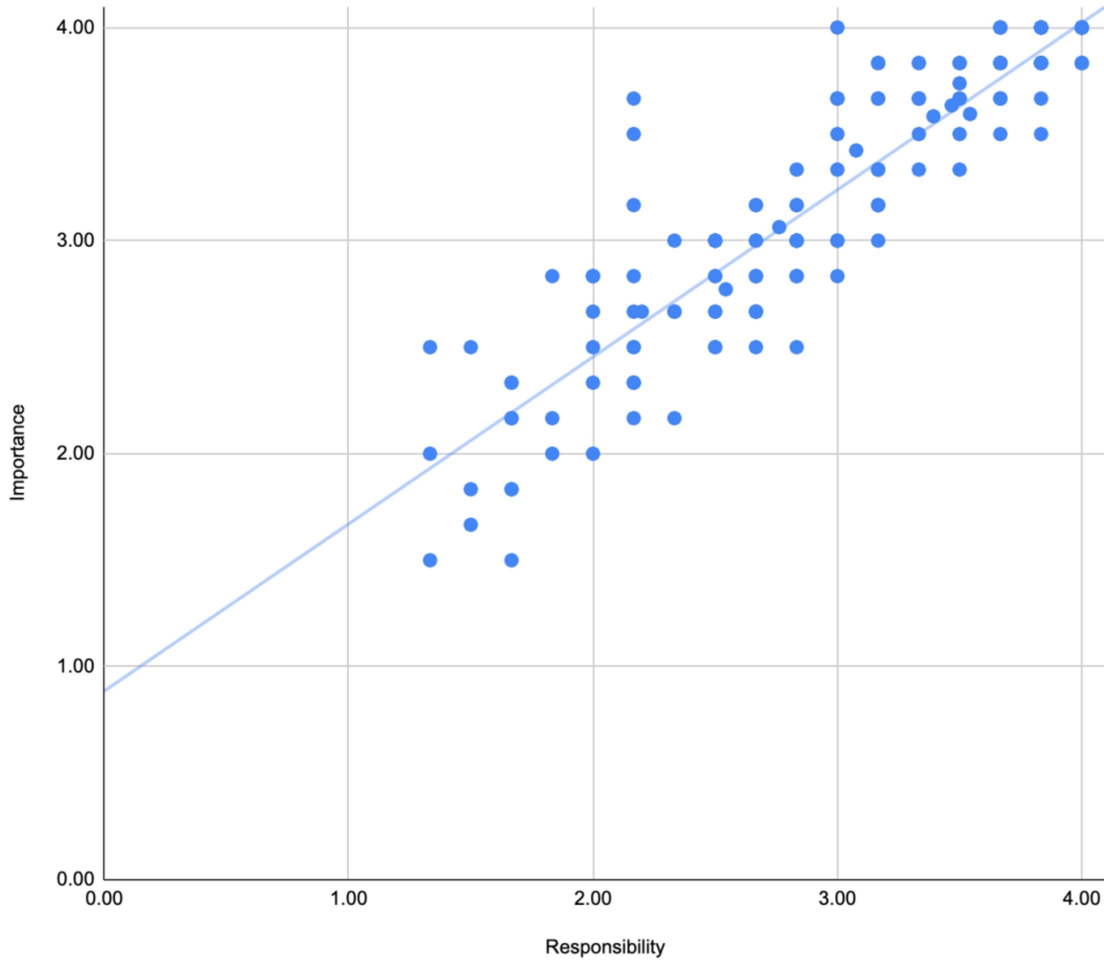


Figure 2

Responsibility Mean Compared to Importance Mean for Round 2



Appendix A

Modified Delphi Structure Overview

Date	Item	Purpose	Participant Action	Researcher Action
Round 1				
3/14	Delphi Introductory email Delphi Timeline	To inform participants about Delphi protocol and how to submit consent	Read email and follow Qualtrics link	Send email to selected panelists
	IRB Consent	To gain panelist consent	Submit consent	
	Qualtrics Questionnaire	To add any missing tasks to the task inventory	Submit self-created list of missing tasks from inventory	Addition of New Tasks to List
		To gain consensus on tasks necessary to the youth sport coach developer	Submit responsibility and importance ratings in the questionnaire to Qualtrics	Responsibility & Importance Consensus
3/22	Reminder Email (1st)	To limit panelist attrition	Submit Qualtrics Questionnaire	Send email to selected panelists
3/31	Reminder Email (2nd)			
Round 2				
4/13	Round 2 Email	To inform participants about Round 2 protocol and how to submit	Read email and follow Qualtrics link	Send email to selected panelists
	Qualtrics Questionnaire	To gain consensus on tasks necessary to the youth sport coach developer	Submit responsibility and importanc ratings in the questionnaire to Qualtrics for panelists recommended items	Responsibility & Importance Consensus
			Submit frequency and difficulty ratings in the questionnaire to Qualtrics	Frequency & Difficulty Consensus
4/26	Reminder Email (1st)	To limit panelist attrition	Submit Qualtrics Questionnaire	Send email to selected panelists
5/4	Reminder Email (2nd)			
Executive Summary				
	Executive summary email	To share consensus findings on tasks necessary to the youth sport coach developer		Send email to selected panelists

Appendix B

Screening Process Invitation Email

Good morning,

My name is Christina Villalon and I am conducting a research project for my dissertation in order to fulfill the requirements for a PhD in Coaching and Teaching Studies at West Virginia University. In partnering with XXX, I am specifically interested in ways in which to improve support for the youth sport coach developer. Thus far the literature in this area has focused on coach developers in countries outside of the United States or on those individuals working in high-performance contexts, not from the individuals who are working in the field at the ground level. Therefore, I am looking to put together a panel to better understand the roles and responsibilities of youth sport coach developers. You have been identified as someone who may be able to provide some insight on coach development for youth sport coaches.

This research project plans to use a modified Delphi design. This design is based on gathering a group to reach a consensus on a single area of interest, in this case that area of interest is the roles and responsibilities of the coach developer in a youth sport setting. This project will be conducted entirely virtually using Qualtrics online surveys. There will be two rounds of surveys, and you will have about two weeks to complete each round, with a week off in-between each round while I review the submissions. See attached Modified Delphi Timeline for anticipated dates. We predict each round will take approximately 30 - 90 minutes for you to complete.

Your input is critical in being able to answer this question and thus help support others in the field who are also doing this important work. If this is something that you would be willing and able to participate in, please complete the consent form at this link. After submitting your consent, please follow the instructions to complete the demographic questionnaire. If you meet the qualifications for participation, you will then be emailed the instructions for Round 1 of the Delphi.

The demographic questionnaire will likely take about 10 minutes, and Round 1 of the Delphi will probably take 30 – 90 minutes. If you have any questions about the study please do not hesitate to reach out via email (cav0016@mix.wvu.edu or Kristen.Dieffenbach@mail.wvu.edu) or phone (361-249-1911).

Thank you for your time,

Christina Villalon
Doctoral Candidate

Kristen Dieffenbach, PhD, CMPC
Primary Investigator

Appendix C

Screening Process Invitation IRB Consent Form

Dear Prospective Participant,

This letter is a request for you to participate in a research project to explore the roles and responsibilities of a coach developer at Steel Sports. This project is being conducted by Christina Villalon, M.S. in the Athletic Coaching Education department at WVU under the supervision of Dr. Kristen Dieffenbach, an Assistant Professor in the Athletic Coaching Education department to fulfill requirements for a PhD in Coaching and Teaching Studies.

If you decide to participate, you will be asked to participate in an online modified Delphi protocol in which you will receive two rounds of online surveys to complete. Your participation in this project will take approximately 30-90 minutes per round; you will have 2 weeks to return each round and a week off between each round. You must be 18 years of age or older to participate.

Your participation in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. Your participation is entirely voluntary. You may skip any question that you do not wish to answer, and you may stop participating at any time. The West Virginia University Institutional Review Board's approval of this project is on file with the WVU Office of Human Research Protections.

If you have any questions about this research project, please feel free to contact me at (361) 249-1911 or by email at cav0016@mix.wvu.edu or Dr. Kristen Dieffenbach at Kristen.dieffenbach@mail.wvu.edu. Additionally, you can contact the WVU Office of Human Research Protections at 304-293-7073.

I hope that you will participate in this research project, as it could help us better understand the roles and responsibilities of youth sport coach developers. Thank you for your time and consideration.

Sincerely,

Christina Villalon

Approved:4-Mar-2022Expires:3-Mar-2027Number:2202517665

Appendix D

Modified Delphi Timeline

Modified Delphi Timeline	
Researcher emails Study Invitation to Panelists	March 14th
Researcher emails Round 1 Reminder (1st) to Panelists	March 22nd
Researcher email Round 1 Reminder (2nd) to Panelists	March 25th
Panelists submit Round 1 to Qualtrics	March 27th
Researcher collects data from Round 1	March 28th
Researcher analyzes data from Round 1	March 28th - April 3rd
Researcher emails Round 2 Prompt to Panelists	April 4th
Researcher emails Round 2 Reminder (1st) to Panelists	April 12th
Researcher emails Round 2 Reminder (2nd) to Panelists	April 15th
Panelists submit Round 2 to Qualtrics	April 19th
Researcher collects data from Round 2	April 20th
Researcher analyzes data from Round 2	April 20th - May 1st
Researcher emails Executive Summary to Panelists	May 2nd

Appendix E

Initial Screening Questionnaire

Please complete the following information to see if you qualify for participation in this study:

Are you currently a coach developer with XXX?

Yes
No

[Skip Logic: Continue on only if 'Yes' is selected]
How many years have you been a coach developer with XXX? ________________

Is that position with XXX paid?

Yes, full-time salary-based
Yes, full-time hourly-based
Yes, part-time salary-based
Yes, part-time hourly-based
Yes, stipend
Yes, other- please specify ______________
No

Please list any relevant certifications or training(s) that you have completed that relate to your coach developer position within XXX.

____

If you are considered to be a participant for this study, what would be the best name to use to contact you? ____________________________________

If you are considered to be a participant for this study, what would be the best email to contact you? ____________________________________

What is your current age? _______

Which gender do you most identify with?

Female
Male
Non-binary
Prefer not to specify
Prefer to self-describe: ____________

Which would best describe your ethnicity? (Select all that apply.)

Asian
Black or African American
Hispanic, Latino/a, or Spanish origin
Middle Eastern

Native American or Alaskan Native
Native Hawaiian or Pacific Islander
White or Caucasian
Prefer not to specify
Prefer to self-describe: ___________

What is the highest level of education you have completed?
Some high school
High-school Diploma
Some College or Associate / Trade Degree
Bachelor's Degree
Master's / Professional Degree

[Display Logic: If selected Bachelor's Degree or Master's / Professional Degree]
What was your major(s) for your Bachelor's degree? ________________________________
If applicable, what was your minor(s) for your Bachelor's degree? ____________________

[Display Logic: If selected Master's / Professional Degree]
What was your area of study for your Master's or Professional degree? ________________

Have you ever coached, if so, what levels of athletes have you coached before? (Select all that apply.)
Youth recreation
Youth - high school select/travel/club
Middle school
High school
Collegiate
Adult
Professional
Olympics
No, I have never coached before

[Display Logic: If does not select 'No, I have never coached before']
What sport(s) did you coach? __________________

[Display Logic: If does not select 'No, I have never coached before' ask for each athlete level selected]
How many years did you coach <u>[coded to auto-fill based on prior question]?</u> _________

Do/did you ever participate in organized sports as an athlete? If so, what levels did you participate in?
Youth recreation
Youth - high school select/travel/club
Middle school
High school
Collegiate

Adult
Professional
Olympics
No, I have never participated as an athlete

Please feel free to upload your resume to the drop box below.

Thank you for taking the time to complete this questionnaire to see if you meet the screening criteria to participate in this project!

If you meet the selection criteria, I will contact you in a few days regarding the next steps of this project. If you do not meet the selection criteria at this time, I appreciate your time and willingness to complete this initial questionnaire.

[End of Questionnaire]

Appendix F

Organization's CD Role & Responsibilities Onboarding Slides

Accreditation & Reaccreditation

- Complete all training aspects related to becoming an accredited Coach Developer
- Complete additional educational training both in person and virtually
- Do at least x4 Professional Development in the calendar year
- If Coach Developers complete the above then they'll be reaccredited for the following year

Coaches

- Any new coach to the organization should receive a 'non-scoring' at their first observation
- Each coach will receive at least x1 game day observation
- Coaches will receive 1 to 3 PD sessions a year based on experience and role
- Coaches receive x1 CEU for completing the process which includes their reflection
- At least one of the coaches observation should be recorded and shared with the coach

Process - Before & During

- Coaches can request a PD session with a particular group
- Coach Developers can email coaches on the morning of the practice
- Coach Developers should review previous PD forms to note specific areas of improvement previously recommended
- Coach Developers should determine what professional development form will be completed. Coaches have access to the review forms before the PD session.
- On arrival Coach Developers should introduce themselves to the coach and ask for a copy of the session plan
- During the practice, the Coach Developer should be intrusive and make their notes.
- At the end of the practice, thank the coach for their time. Do not give feedback at this stage.

Process - After

- Coach Developers should send the reflection form to the coach. Coaches have 48 hours to complete the reflection
- Coach Developers should start to write their feedback. The feedback should be submitted not later than 48 hours after the coaches have completed the reflection
- Coach Developers should make reference to the coaches reflection however this shouldn't influence the Coach Developers feedback
- Once the feedback has been sent via the formsite platform then the Coach Developer should arrange to speak to the coach to discuss the feedback and confirm the action plan
- If the coach doesn't agree with some of the feedback open dialogue with the coach to address any concerns
- Contact the VP of Player, Coach & Curriculum Development Officer for additional support

Appendix G

Task Inventory List

Build Relationships

Build relationships with coaches

Communicate with individual coaches

Communicate with groups of coaches

Build relationships with athletes

Communicate with individual athletes

Communicate with groups of athletes

Build relationships with parents

Communicate with individual parents

Communicate with groups of parents

Build relationships with organizational administrator(s)

Communicate with individual organization administrator

Communicate with groups of organizational administrators

Build relationships with members of the performance staff

Communicate with individual members of the performance staff

Communicate with groups of members of the performance staff

Build relationships with other coach developers in your organization

Communicate with individual coach developers in your organization

Communicate with groups of coach developers in your organization

Build relationships with other coach developers outside your organization

Communicate with individual coach developers outside your organization

Communicate with groups of coach developers outside your organization

Observe and Assess Coaches

Schedule observation or assessment

Introduce self to coaches

Brief coach prior to an observation or assessment

Email coach before attending practice(s)

Ask for a copy of the coaches' practice plan for observation of practice to review prior to arriving at observation or assessment

Review coaches' previously recommended areas of improvement prior to observation or

assessment

Choose which professional development form will be completed

Observe coaches at practice

Document coaching practices or behaviors at practice(s)

Make notes regarding coaching practices or behaviors at practice(s)

Observe coaches at competition(s)

Document coaching practices or behaviors at the competition(s)

Make notes regarding coaching practices or behaviors at the competition(s)

Conduct assessments of coaches' knowledge at training or professional development

Assess coaches' prior knowledge

Assess coaches' knowledge throughout training or professional development

Use observation/assessment tool(s) to assess coaches' application of coaching practices or behaviors during training or professional development

Conduct assessments of coaches' knowledge after training or professional development

Proctor certification exam

Watch a mock practice plan delivery

Evaluate a practice plan delivery

Conduct assessments of coaches' application of coaching practices or behaviors at practice

Use observation/assessment tool(s) to assess coaches at practice(s)

Evaluate coach's ability to implement practice plan(s)

Conduct assessments of coaches' application of coaching practices or behaviors at the competition(s)

Use observation/assessment tool(s) to assess coach at the competition(s)

Follow-up with coaches after observation or assessment

Thank coaches for their time after observation or assessment

Send reflection form to the coach after observation or assessment

Schedule a meeting time with the coach to discuss coach observation or assessment

Analyze information from coach observation or assessment

Review coach's written reflection(s) on practice

Review coach's written reflection(s) on competition(s)

Review coach's previously recommended areas of improvement after observation or assessment

Determine competence based on results from coach observation or assessment

Determine areas for improvement based on coach observation or assessment

Meet individually with coach to share assessment feedback, results, and/or decision(s) from coach observation or assessment

Complete documentation of observation or assessment in organization's files

Contact supervisor as necessary

Design, Deliver, & Evaluate Programs for Coaches

Evaluate athlete development within the organization

Create resources for coaches

Create practice plan(s) for other coaches to use

Create season plan(s) for other coaches to use

Create training or programming for coaches

Use adult learning theories to design learning opportunities for coaches

Create learning opportunities that are purposeful and relevant for coaches

Create learning opportunities that incorporate active participation for coaches

Design opportunities for coaches to practice coaching in a structured setting

Design formal learning opportunities for coaches

Design non-formal learning opportunities for coaches

Design coach education initial coach training or programming

Design coach development initial coach training or programming

Design continuing coach education training or programming

Design continuing coach development training or programming

Deliver learning opportunities for coaches

Deliver formal learning opportunities for coaches

Deliver non-formal learning opportunities for coaches

Deliver coach education initial coach training or programming

Deliver coach development initial coach training or programming

Evaluate coach training or programming

Evaluate coach education initial coach training or programming

Evaluate coach development initial coach training or programming

Evaluate continuing coach education training or programming

Evaluate continuing coach development training or programming

Design, Deliver, & Evaluate Programs for Coach Developers

Create resources for coach developers

Create assessment(s) to measure coaches' level of knowledge

Create assessment(s) to measure coaches' competence in applying coaching behaviors and practices

Create training or programming for other coach developers

Use adult learning theories to design learning opportunities for coach developers

Create learning opportunities that are purposeful and relevant for coach developers

Create learning opportunities that incorporate active participation for coach developers

Design opportunities for coach developers to practice coach development in a structured setting

Design formal learning opportunities for coach developers

Design non-formal learning opportunities for coach developers

Design initial coach developer training or programming

Design continuing coach developer training or programming

Deliver learning opportunities for other coach developers

Deliver formal learning opportunities for coach developers

Deliver non-formal learning opportunities for coach developers

Deliver initial coach developer training or programming

Deliver continuing coach developer training or programming

Evaluate coach developer training or programming

Evaluate coach developer initial training or programming

Evaluate continuing coach developer training or programming

Facilitate Learning Opportunities

Apply a variety of learning theories and models when facilitating learning opportunities for coaches

Facilitate formal learning situations through prescribed coach education programs with minimal customization

Explain learning outcomes and how they will be delivered

Develop learning environments for coaches to optimize professional development

Create and maintain a positive environment

Create and maintain a supportive environment

Create and maintain a safe learning environment

Create and maintain an inviting learning environment

Create and maintain an engaging environment

Adjust and adapt learning experiences for individual learners

Manage class time to optimize learning

Communicate information effectively with coaches

Present information to coaches clearly and succinctly

Use voice in a clear, modulated, and varied way

Use simple and clear words and sentences that are free from jargon and discriminatory language

Use non-verbal communication to complement the verbal message when speaking to coaches

Use audio-visual aids to help communicate information to coaches

Provide constructive feedback to coaches

Use organization-suggested language when providing feedback

Use a framework to provide effective feedback

Use a range of delivery styles and methods to optimize learning in coach education and development settings

Tell coaches information

Ask coaches effective questions

Practice active listening when coaches speak

Help coaches to reflect on their experience(s)

Help coaches to reflect on their behavior(s)

Facilitate the practicing and application of coaching behaviors

Challenge coaches to use new methods of teaching and coaching with their athletes

Encourage coaches' experimentation of using different methods of teaching and coaching with their athletes

Incorporate activities that are purposeful and relevant

Facilitate formal learning opportunities with coaches

Facilitate non-formal learning opportunities with coaches

Facilitate continuing professional development opportunities for coaches

Facilitate communities of practice for coaches

Facilitate one-on-one conversations with coaches about their professional development

Help coaches create an action plan for their professional development

Support and Mentor Coaches

Identify and respond to coaches' needs

Provide one-on-one instructional support to coaches

Serve as a consultant for other coaches in the club or organization

Serve as a mentor to other coaches

Provide ongoing support to coaches outside of formal education experiences

Support the evolution of the coach's coaching philosophy

Support the coach as an autonomous problem solver

Provide care and support for the well-being of coaches

Support coaches in caring for their athletes' well-being

Encourage coaches to take ownership of their learning

Promote the development of critical thinking skills in coaches

Promote the development of decision-making skills in coaches

Promote the development of self-reflection in coaches

Promote the development of emotional intelligence in coaches

Provide Leadership as a Coach Developer

Serve as a leader in the organization

Lead the development of organizational culture

Provide messaging consistency across the organization

Serve as a conduit from coaches to administrators

Organize continuing professional development opportunities for coaches

Advocate for lifelong learning

Foster a culture of lifelong learning among coaches

Foster a culture of lifelong learning within the organization

Partner with other support systems

Empower people and communities

Model professional expectations for coach developers

Promote professional expectations for coaches

Promote respectful coaching behaviors

Promote inclusive coaching behaviors

Engage in Continuing Professional Development as a Coach Developer

Engage in continuing professional development

Stay up-to-date with current research and best practices on athlete development

Stay up-to-date with current research and best practices on coach development

Attend continuing professional development opportunities in coach development

Engage in self-reflection on own coach development practices

Record facilitation and assessment practice

Maintain a reflective log or journal

Connect with a mentor

Participate in communities of practice

Create an action plan to improve personal facilitation and assessment skills

Evaluate own coach development skills and practices

Evaluate own coach development philosophy

Support other coach developers to improve their practices

Appendix H

Round 1 Questionnaire

Due to the formatting and the nature of this survey, this survey is best completed on a computer screen rather than on a phone screen. If you are not currently using a computer screen to view this survey, I strongly recommend that you switch to one in order to do so.

Please provide your first and last name so we can track who has submitted their responses and who we should reach out to if we have any follow-up questions. This information will only be used to track survey completion and to inform the administration of the Delphi research process. Only averages of responses across the entire group will be reported when writing up the results.

First name: ____________________ Last name: ____________________

Round 1: Coach Developer Task Inventory Delphi

The purpose of this research project is to explore the roles and responsibilities of the coach developer at XXX. Based on the XXX Coach Developer roles and responsibilities description and the coach developer literature, we have started a list of some of the tasks that a coach developer might engage in as part of their role. To view and/or print this list, please go to this link.

First, you will be asked to respond with your level of agreement to each of two statements for each of the items listed in the Task Inventory. The list of items that you previously received have been broken into smaller groups to help with reading and responding.

Task	**This task is currently part of the responsibilities of a coach developer with XXX.**	**This task is important to the role of the coach developer at XXX.**
Task listed here from Task Inventory	Strongly Disagree Disagree Neutral Agree Strongly Agree	Strongly Disagree Disagree Neutral Agree Strongly Agree

Part II: After you have read and reviewed the tasks listed in the Task Inventory and noted for each of those tasks, consider if there are any additional tasks that the list is missing. In the textbox below add any additional tasks that are necessary to complete the job as a regional coach developer that were not included in the previous list.

Are there any additional comments you would like to make?

Thank you for your time and effort completing this questionnaire. After I receive the other panelist's responses and I have reviewed the data I will reach out with the Round 2 instructions!

Appendix I

Round 2 Questionnaire

Please respond with your level of agreement to each of the statements for each of the items listed in the Task Inventory.

Click the arrow in each cell to see the dropdown list of options.

	This task is currently part of the responsibilities of a regional coach developer with XXX.		**This task is important to the role of the regional coach developer at XXX.**		**How often does a regional coach developer do this task?**	**How difficult is it to learn this task as a coach developer?**
	Panel Average from Round 1	*Your Round 2 Response*	*Panel Average from Round 1*	*Your Round 2 Response*		
Task		Strongly Disagree Disagree Neutral Agree Strongly Agree		Strongly Disagree Disagree Neutral Agree Strongly Agree	Never Annually Monthly Weekly Daily	Not applicable Not at all difficult Slightly difficult Moderately difficult Very difficult Extremely difficult

Appendix J

Screening Email Reminders

Screening Email - 1st Reminder

Good afternoon,

I am following up on my previous email last week regarding your invitation to participate in the modified Delphi research project exploring the roles and responsibilities of the coach developer at XXX. Based on the XXX Coach Developer job description and the coach developer literature, we have started a list of some of the tasks that a coach developer might engage in as part of their role. We need your help to figure out which of these you do as part of your coach developer role in a youth sport setting.

If you are interested in participating in the two rounds of this project, please use this link to access the Qualtrics questionnaire to begin the process. If you have any issues with using Qualtrics, please do not hesitate to reach out.

According to those who have already completed Round 1, the Round 1 survey will take about 30 minutes to complete. You will receive the link to that survey via email after completing the informed consent and background information. (If you do not receive the follow-up link please let me know).

Please submit both the informed consent and your responses to Round 1 by March 27th.

After the other panelists have submitted their responses and I have reviewed the data, I will be back in touch with your instructions for Round 2. Thank you for your time and participation in this project!

Best,
Christina Villalon
Doctoral Candidate

Kristen Dieffenbach, PhD, CMPC
Primary Investigator

Appendix K

Screening Email Reminders

Screening Email - 2nd Reminder

Good morning,

We are still looking for panelists for this project. According to those who have completed the first round so far, it appears to take about 30-40 minutes. I know this amount of time can be a big ask, but your perspective would be extremely beneficial and greatly appreciated. Thus far, around the world, the perspectives of coach developers have largely been underutilized or ignored in coach education and coach development research. I would like to help bring the coach developer's voice, your voice, into the conversation.

Please submit whether or not you are interested in participating in this modified Delphi research study regarding youth sport coach developers' roles and responsibilities to the Qualtrics link (https://wvu.qualtrics.com/jfe/form/SV_9yOgYpGG4II1qqW) by April 3rd.

If you are having any issues with the instructions, the Qualtrics survey software, or will not be able to meet this deadline but are still interested in participating in this project, please let me know via email or phone (361-249-1911).

Thank you for your time and consideration.

Best,
Christina Villalon
Doctoral Candidate

Kristen Dieffenbach, PhD, CMPC
Primary Investigator

Appendix L

Round 1 Instructions

Hello,

Thank you for agreeing to participate in this study and completing the demographic questionnaire. As I mentioned before, I am specifically interested in improving support for the youth sport coach developer. Therefore, the purpose of this research project is to explore the roles and responsibilities of the coach developer at XXX. Based on the XXX Coach Developer job description and the coach developer literature we have started a list of the tasks that a coach developer might engage in as part of their role. You can find this list at this link.

Review this list and consider which of these tasks are currently part of the responsibilities of a regional coach developer with XXX, and how important each of these tasks are to that role. Then use this Qualtrics survey to rate each of these items. Due to the formatting and the nature of this survey, this survey is best completed on a computer screen rather than on a phone screen.

As you go through this list, consider if there are any additional tasks you believe to be lacking from this list that are part of the responsibilities of a regional coach developer with XXX. You will have an opportunity to recommend those additional tasks in the Qualtrics survey.

We predict this first round will take approximately 30 - 90 minutes for you to complete. Please submit your responses to Qualtrics by March 27th. If you have any questions about the study please do not hesitate to reach out via email (cav0016@mix.wvu.edu or Kristen.Dieffenbach@mail.wvu.edu) or phone (361-249-1911).

Thank you for your time,

Christina Villalon
Doctoral Candidate

Kristen Dieffenbach, PhD, CMPC
Primary Investigator

Appendix M

Round 1 Reminder Emails

Round 1 - 1st Reminder

Good afternoon,

Thank you for agreeing to participate in this study and completing the demographic questionnaire.

I am following up on my previous email last week regarding completing Round 1 of this project. This research project aims to explore the roles and responsibilities of the coach developer at XXX. Based on the XXX Coach Developer job description and the coach developer literature we have started a list of the tasks that a coach developer might engage in as part of their role. You can find this list at this link.

Please review this list and consider which of these tasks are currently part of the responsibilities as a regional coach developer with XXX, and how important each of these tasks are to that role. Then use this Qualtrics survey to rate each of the items in the list. Due to the survey's formatting, it is best completed on a computer screen rather than on a phone screen.

As you go through this list, also consider if there are any additional tasks you believe to be lacking from this list that are part of the responsibilities of a regional coach developer with XXX. You will have an opportunity to recommend those additional tasks in the Qualtrics survey as well.

According to those who have already completed Round 1, the Round 1 survey will take about 30 minutes to complete. Please submit your responses to Round 1 by March 27th. If you have any questions about the study please do not hesitate to reach out via email (cav0016@mix.wvu.edu or Kristen.Dieffenbach@mail.wvu.edu) or phone (361-249-1911). After the other panelists have submitted their responses and I have reviewed the data, I will be back in touch with your instructions for Round 2. Thank you for your time and participation in this project!

Thank you for your time,

Christina Villalon
Doctoral Candidate

Kristen Dieffenbach, PhD, CMPC
Primary Investigator

Round 1 - 2nd Reminder

Good morning,

I noticed that you completed the initial demographics survey and informed consent form but have not yet completed the Round 1 survey.

We are still looking for panelists for this project. According to those who have completed the first round so far, it appears to take about 30 minutes. I know this amount of time can be a big ask, but your perspective would be extremely beneficial and greatly appreciated. Thus far, around the world, the perspectives of coach developers have largely been underutilized or ignored in coach education and coach development research. I would like to help bring the coach developer's voice, your voice, into the conversation.

If you are no longer interested in participating in this modified Delphi research study regarding youth sport coach developers' roles and responsibilities please let me know.

If you are still interested in participating, please complete Round 1 at the following Qualtrics link (https://wvu.qualtrics.com/jfe/form/SV_8ogpQdBaaH4Jwfc) by April 3rd. Neither your participation nor your individual responses will be shared with XXX.

If you are having any issues with the instructions, the Qualtrics survey software, or will not be able to meet this deadline but are still interested in participating in this project, please let me know via email or phone (361-249-1911).

Thank you for your time and consideration.

Best,
Christina Villalon
Doctoral Candidate

Kristen Dieffenbach, PhD, CMPC
Primary Investigator

Round 1 - 3rd Reminder

Hi,

I just wanted to follow up because I noticed that you completed the informed consent form for this project, but had not yet submitted your responses for Round 1. I know unfortunately, it is a bit on the long side and this is a busy time of year, but your perspective will be very beneficial and we would like to include it if possible. Is this project still something that you would be interested in participating in? If so, by what date do you think you would be able to respond? If you are no longer interested or available, I understand that as well and I will remove your name from my list.

Here is the link to Round 1 to get you started if you are still interested:
https://wvu.qualtrics.com/jfe/form/SV_8ogpQdBaaH4Jwfc

I look forward to hearing from you. Please let me know if you have any questions.

Thank you,
Christina

Appendix N

Round 2 Instructions

Round 2 - Initial Email: Round 1 Panelist

Good morning,

Thank you for your responses in Round 1 of the modified Delphi project regarding the youth sport coach developer. Apologies for the delay in getting back to you; we wanted to allow all panelists that were interested in participating in this project an opportunity to do so.

In Round 1, you responded regarding the responsibility and importance for each of these tasks within the XXX regional coach developer role and made recommendations for any additional tasks you believed should be added. I have reviewed all of the submissions from Round 1 and have added the additional recommendations from the panel to the updated task inventory list.

For Round 2, you are provided with a Google Sheet at the following link:

In this sheet, you have been provided with the group mean scores from the panel for each of the tasks as they relate to responsibility and importance as well as how you scored each task in Round 1. Feel free to review how your rating compares to the rating of the rest of the group. You can then either change your response or keep your response from Round 1. You can use the dropdown arrows in Columns E and H to note your responses accordingly.

In addition to being asked about responsibility and importance, you are also asked to rate each of those items relative to difficulty and frequency. You can find the specific statements as they relate to difficulty and frequency in the Google Sheet. You can then also use the dropdown arrows in Columns I & J to choose your specific rating selections.

This round will likely take between 45 - 90 minutes so you may want to break it up over multiple days. I also recommend completing it on a computer screen (as opposed to a phone screen). Once you have completed your ratings please let me know via email. If possible we would like to have all responses completed by the end of April.

If you have any questions please do not hesitate to reach out via email or phone (361-249-1911). After the other panelists have submitted their responses and I have reviewed the data, I will send the executive summary of the findings.

Thank you so much again for your help with this important project!

Best,

Christina Villalon	Kristen Dieffenbach, PhD, CMPC
Doctoral Candidate	Primary Investigator

Round 2 - Initial Email: Informed Consent

Good morning,

Although we did not receive a submission of your responses from Round 1, since you did complete the informed consent and demographic data we wanted to reach out and see if you would be interested in completing responses for Round 2?

In Round 1, panelists responded to each of a number of tasks regarding the responsibility and importance of each of the tasks within the XXX regional coach developer role and made recommendations for any additional tasks they believed should be added. I have reviewed all the submissions from Round 1 and have added the additional recommendations from the panel to the updated task inventory list.

For Round 2, you are provided with a Google Sheet at the following link:

In this sheet, you have been provided with the group mean scores from the panel for each of the tasks as they relate to responsibility and importance. Feel free to review the ratings of the rest of the group. You can use the dropdown arrows in Columns E and H to note your response for Round 2 accordingly.

In addition to being asked about responsibility and importance, you are also asked to rate each of those items relative to difficulty and frequency. You can find the specific statements as they relate to difficulty and frequency in the Google Sheet. You can then also use the dropdown arrows in Columns I & J to choose your specific rating selections.

This round will likely take between 45 - 90 minutes so you may want to break it up over multiple days. I also recommend completing it on a computer screen (as opposed to a phone screen). Once you have completed your ratings please let me know via email. If possible, we would like to have all responses completed by the end of April.

If you have any questions, please do not hesitate to reach out via email or phone (361-249-1911). After the other panelists have submitted their responses and I have reviewed the data, I will send the executive summary of the findings. Thank you so much again for your help with this important project!

Best,

Christina Villalon	Kristen Dieffenbach, PhD, CMPC
Doctoral Candidate	Primary Investigator

Round 2 - 1st Reminder

Good morning,

I am following up on my previous email regarding your critical role as an expert panelist in this modified Delphi research project exploring the roles and responsibilities of the regional coach developer at XXX.

For Round 2 you have been asked to review the average ratings of the rest of the group from Round 1 and then note what you would like your response to be. Use the dropdown arrows in Columns E and H or type in the number in the box to note your response, whichever you prefer.

In addition to being asked about responsibility and importance, you are also asked to rate each of those tasks relative to difficulty and frequency. Use the dropdown arrows in Columns I & J to choose your specific rating selections (or you can type the first letter in the box to bring up your intended selection without having to click the dropdown arrow for each box).

You can find the link to your personal Google sheet at the following URL:

(If you would prefer to complete this round in the Qualtrics survey format instead of in the Google Sheet document, please let me know and I will send you a link to be able to do so.)

This round will likely take between 45 - 90 minutes so you may want to break it up over multiple days. I also recommend completing it on a computer screen (as opposed to a phone screen). Once you have completed your ratings please let me know via email. If possible, we would like to have all responses completed by the end of April.

If you are having any issues with the instructions, the software, or will not be able to meet this deadline but are still interested in participating, or are no longer able to participate in this project, please do not hesitate to reach out via email or phone (361-249-1911).

We appreciate your time and expertise in helping with this important project!

Thank you,
Christina Villalon
Doctoral Candidate

Kristen Dieffenbach, PhD, CMPC
Primary Investigator

Round 2 - 2nd Reminder

Good morning,

This is just a reminder to please submit your responses for Round 2 of the modified Delphi research project regarding youth sport coach developers' roles and responsibilities to your personalized Google Sheets document:

Your perspective as a panelist is critical to the success of this project and will greatly contribute to sharing the realities of the youth sport coach developer as well as having the potential to help start a broader conversation about the role not just in the United States, but globally.

If you are having any issues with the software or have questions about the instructions, please do not hesitate to contact me via email or phone (361-249-1911).

I recognize that this can be a busy time of year so if you are still interested in participating please share by what date you hope to have your responses completed. However, on the other hand, if you are no longer interested or able to participate in this project, please let me know.

Thank you,
Christina Villalon
Doctoral Candidate

Kristen Dieffenbach, PhD, CMPC
Primary Investigator

Appendix O

Extended Literature Review

Professionalization of the Coach Developer in the Youth Sports Realm in the United States

Although the role of sport in society has evolved over the years, the current environment values and champions the critical role of sport. Sport has the potential to impact health and human development physically, socially, and psychologically (see DHHS, 2019; Vealey & Chase, 2016, p. 26). Sport is promoted as a way to improve physical literacy and physical fitness and increase bone density while fighting against health concerns like obesity and diabetes (see Gould, 2019). Sport is also touted to improve grades and self-esteem and teach teamwork, leadership, and other life skills. It can play a role in positive youth development (Fraser-Thomas et al., 2005), increase social bonds and capital (Delaney & Keaney, 2005), foster strong communities (Morgan & Bush, 2016), and impact social justice and social change (e.g., Laureus). However, just the concept of sport alone does not do this, and simply participating in sport does not guarantee benefits or positive developmental outcomes, rather that is part of the 'Great Sports Myth' (Coakley, 2011, 2015).

Instead, athlete outcomes are impacted by individual characteristics, significant others, and the environment (Gould, 2019). They require specific, intentional targeting and must be taught to athletes (Fraser-Thomas et al., 2005; Petitpas et al., 2005). The youth sports coach is in the best position to teach and promote these positive benefits due to their intended role as a teacher (Jones, 2006) and care-giver (Cronin & Armour, 2018), and their direct contact with athletes (Chalip & Hutchinson, 2017). Therefore, the youth sports coach plays a significant role, if not an essential part, in positively impacting individuals' development, determining the quality of the sporting experience delivered, and serving as a transformational leader (Erdal, 2018; Lara-

Bercial & McKenna, 2017; Morgan & Bush, 2016).

Yet, youth sport coaches are generally under-prepared and under-supported, drastically limiting their ability to support athletes appropriately (Bergeron et al., 2015; Erdal, 2018; Kerr & Stirling, 2015). This lack of knowledge, skill, and support means that most youth sports athletes are underdeveloped due to a youth sports system that does not truly value development for athletes or coaches (Fawver et al., 2020). Although some coach development systems have been in place in the past, these are usually haphazard, inconsistent, or unsystematic (Dieffenbach, 2019b). Therefore, support for coach developer-specific roles to help in such systems has grown internationally, especially over the last decade (ICCE, 2014). Formalizing the position of a coach developer in a youth sports system can help to improve youth sports coaching by helping to better support these coaches in their roles; better coaching leads to better athlete experiences and outcomes (USCCE, 2021).

However, most of the current research focuses on the coach developer in high-performance contexts, not within the youth sports system. In that case, more information is needed about the actual role and responsibilities of the coach developer in the youth sports system. One approach to better understanding the role and responsibilities of a coach developer in a youth sports system is a job task analysis. A job task analysis of the coach developer in a youth sports system would help to identify the objectives of the coach developer so that these can then: a) inform practical application to other community programs as ‘to a model of what this role can look like in other systems,’ b) inform administrators in charge of hiring for such positions of what the necessary skills for the individual looking to take on that role are, c) inform how academic programs can best prepare students for those positions in the workforce, and d) start to be evaluated both in professionals themselves and in education and training programs.

However, before discussing the roles and responsibilities of the coach developer, a discussion of the youth sport context and the youth sports coach context in the United States itself is necessary due to its uniqueness (Vealey & Chase, 2016).

The Youth Sport Context

The youth sport system is "the set of interdependent persons (i.e., parents, siblings, peers, and coaches) and contexts (i.e., organizations, communities, and societies) that have the potential to influence or be influenced by an athlete's behaviors, attitudes, experiences, and outcomes in youth sport" (Dorsch et al., 2020, p. 2; see Dorsch et al., 2020 for heuristic model of the youth sport system). Youth sport is generally defined as the collective of school-based and non-school organizations and "programs that provide adult-supervised sport skill development sessions and competitive contests to children" through 18 years of age (Vealey & Chase, 2016, p. 5). More specifically, school-based sports include a) interscholastic competition, b) intramural games and sports competition, c) physical education, and d) sports camps. Non-school sports include: a) local service club teams or leagues, b) national youth sport organization teams or leagues, c) national youth development organization programs, d) community recreation department programs, e) national, f) state and g) local programs for Olympic national governing bodies, h) club sports, i) sports academies, and j) sports camps. However, each of these categories can be further broken up into additional contexts (see Vealey & Chase, 2016 for a more detailed description of each of those types of specific youth sports opportunities and organizations).

Furthermore, how these youth sports organizations and programs are structured can vary by "focus, objectives, and inclusion criteria" (Vealey & Chase, 2016). MacPhail and colleagues (2003) discussed the goals of such organizations as having either a) educational goals, b) public health goals, or c) elite development goals. Collins and colleagues (2012) also suggested three

classifications of type of athlete participation: a) elite referenced excellence, b) personally referenced excellence, and c) participation for personal well-being. The ICCE considers two broad foci as athlete experiences being either participation or performance-focused (2013) while Côté and Hancock (2016) add a third focus, personal development, to that list.

Programs may be non-profit or for-profit, focused on sport-only, sport-plus, or plus-sport (see Cunningham, 2019) with a specific sport focus or encompassing multiple sports, and either have an inclusive focus or not ("National Sport Census," in progress). Programs can also vary by "length of competitive seasons, expected participation and training in the off-season, the qualifications of coaches and officials, and the amount of money required [to participate]" (Vealey & Chase, 2016, p. 4).

As seen throughout the history of youth sports in the United States, numerous factors impact and influence the opportunities in which children participate, how they participate, and who supervises or coaches them. Additionally, several types of barriers can affect youth sports opportunities for kids, such as demographic information (like a) gender, b) race and ethnicity, c) family factors, d) disabilities, e) type of community, and f) income level or cost), developmental factors (like a) physical literacy and b) maturational status and critical period skill development), personal factors (like psychological and personality factors), and social and environmental factors (like a) cultural stereotypes, b) adult leaders, c) knowledge of opportunities, and d) time) (Aspen Institute, 2021; DHHS, 2019; Vealey & Chase, 2016).

It should also be noted that the United States does not have a centralized sports ministry as most countries do. As such, the youth sport context in the United States is often referred to as "the wild west" (Kelley & Carchia, 2013), as there are no regulations from the federal government or oversight authority to follow from a systematic perspective (Harvey et al., 2021);

everyone is pretty much on their own (Chroni & Dieffenbach, 2020; Gilbert & Trudel, 2004), and just about anything goes. However, perhaps this is not the most effective way of developing a nation of high-quality athletes or a healthy active population.

Despite some organizations pushing for change and improvement in the United States (e.g., Aspen Institute, Changing the Game, US Department of Health and Human Services), the needle does not appear to be moving much on the national scale. Yet, a collaborative and collective effort must be supported across a system to make changes (CoachForce21, 2021). One way to begin to understand how these systems work together is a socio-ecological model.

Socio-ecological Model of the Youth Sport Athlete

The socio-ecological model (Bronfenbrenner, 1977, 2005; Bronfenbrenner & Morris, 1998) is a perspective that allows for a way to study human development while considering the dynamics between individuals and systems. Therefore, the model is based on individual characteristics, proximal process, contextual variables, and the person-process-context time model (see Bronfenbrenner, 1977, 2005; Bronfenbrenner & Morris, 1998 for a full review of the model and its evolution)

The model itself consists of nesting circles that demonstrate the interrelated levels of systems that impact an individual. The individual is placed in the center circle in the model and surrounded by additional levels of systems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. When viewed through a systems-lens, it is clear that youth athlete development is impacted by many factors. In narrowing towards the youth sport athlete, these systems will be discussed, starting with the outermost circle. The National Youth Sport Strategy (DHHS, 2019) also recently used this concept to describe the youth sports system.

The outermost level is the chronosystem. The chronosystem highlights the role that time,

historical context, and policies play. In this piece, the chronosystem will be addressed relative to youth sports history in the United States (for a full account of sports in American history see Gems et al., 2017).

The next level, the macrosystem, focuses on the overarching institutional systems. However, since the United States lacks a centralized sports ministry, there is no singular overarching system, and some areas in youth sport have no oversight. Those systems that do have some oversight, like the United States Olympic and Paralympic Committee (USOPC), or are trying to be a guiding institution in this space, like the United States Department of Health and Human Services (DHHS), will be addressed in this section.

The next level, the exosystem, considers the formal and informal local community-based systematic structures. These vary widely due to numerous factors. For this discussion, the impact of the societal structures and perspectives on youth sport development and participation will be discussed.

The mesosystem is the interactions between the individual's various microsystems. For youth sport, this is represented mainly by organizational aspects. Since adults run these organizations, this section will focus on the role of adult involvement in youth sport.

Then, the first level of the system, the microsystem, contains the strongest influences between an individual (the youth sports athlete) and their immediate environment or setting. In the youth sports setting, aspects of this level are primarily interpersonal relationships with peers, parents, and coaches. Finally, we will discuss the individual and the best practices for their development specifically as they relate to models and concepts like free and deliberate play, physical literacy, and athlete development models.

It is the combination of these systems and their interrelationships that impact each other

and the individual. Therefore, even though these systems are discussed relative to specific levels, it is essential to understand none of these systems exist in isolation. This concept of 'systems thinking' also aligns with broader industry recommendations (Whitley et al., 2021). However, given the nature and purpose of this discussion, all the complexities and dynamics may not be discussed. Therefore, additional references and resources will be provided as available and necessary.

Chronosystem: History of Organized Youth Sport in the United States

While children have participated in informal play, recreation, and sport throughout history, organized sport opportunities were initially for the upper class and almost exclusively for boys. However, *Youthful Recreations* (1810) instead "promoted exercise and physical play and argued for poor children's rights to play as well" (Vealey & Chase, 2016, p. 28). So, while this began to expand some of the opportunities to all children, not just those born into the upper class, it was only after the Civil War that the emergence and growth of adult-organized youth sport occurred in the United States (Wiggins, 2013).

Then, in response to the industrialization, urbanization, and immigration associated with the Industrial Revolution, the evangelical Protestants-led Muscular Christianity movement encouraged young boys to play sports to develop body, mind, and spirit, instill patriotism (Albrecht & Strand, 2010), develop leadership (Coakley, 2014), as well as to keep them out of trouble (Wiggins, 2013). Similarly, supposedly keeping young boys occupied in the winter was why basketball was invented (Gems et al., 2008). Around the same time, high school boys began organizing their baseball and football competitions with other schools without school sponsorship, oversight, or supervision. However, it was not long before Chicago high school teachers would begin governing such competitions. Thus, adults commenced controlling high

school athletics in 1898 (Gems et al., 2008), and the idea continued to spread to other parts of the nation. For example, we see Muscular Christianity by introducing the Public School Athletic League (PSAL) in the New York City school system in 1903, which would feature interscholastic opportunities for boys. However, when the girl's division was created a couple of years later, no interscholastic sports competitions were organized; instead, only dancing and cooperative games were offered (Vealey & Chase, 2016). Additionally, the Catholic Youth Organization's youth sports leagues which began in the 1930s, would be considered a present-day continuation of the Muscular Christianity influence in sport (Vealey & Chase, 2016). See *Playing with God: Religion and Modern Sport* (Baker, 2009) for more discussion on the role and impact of religion on American sport.

Passage of child labor laws like the Fair Labor Standards Act in 1938 meant fewer children were working. So, although slow at first, highly structured adult-organized activities began replacing unstructured, informal supervised play in the 1920s (Gaster, 1991), flourished in the 1930s (Vealey & Chase, 2016), and continued growing (see Adler & Adler, 1998). Mainly led by private businessmen, these sport-specific organizations' primary interests were built on a winner-take-all foundation and focused on competition and winning rather than teaching values (Farrey, 2008). The emphasis of the consumer-driven culture appropriated sport as a means to an end (Denison et al., 2013; Wiggins, 2013), and sport participation was important in developing capitalism-aligning ideals (see Mangan, 1981). This culture has since continued for nearly a century, aligning with the broader societal consumerism movement. However, not everyone was supportive of these developments.

In the 1930s, health and physical education educators claimed competitive scholastic sport took away from academics (Hyman, 2009). The competitive nature and early specialization

in sport could be detrimental to a child's physical and emotional development (Mitchell, 1932). Scholastic-based sports opportunities for children under 12 were ceased or limited in response (Koester, 2002). Furthermore, national physical education leadership organizations followed by publishing position statements (see Libman, 1998) condemning the "overspecialization, overemphasis on winning, overtraining, commercialization, media exposure, physical and emotional injuries, overzealous parents, and inadequate coaching" in organized youth sport (Wiggins, 2013, p. 65). However, these position statements had little impact in slowing the privatization of youth sports opportunities or improving children's developmentally appropriate experiences in youth sports programs. Parents still supported the consumerism-driven organized youth sports programs (Wiggins, 2013). Therefore, elementary sports opportunities became disconnected from schools.

With this disconnect from schools and the education network, these nonschool programs, run by community organizations, became responsible for young boys' sporting development and sports competition (Vealey & Chase, 2016). Without school support, these community organizations had to rely on parents and other adult volunteers to fulfill roles previously held by sport and physical activity professionals (Vealey & Chase, 2016). The shift at the pre-adolescent level from scholastic-based programming to local community-based programming, both by parks and recreation centers and local leagues, further perpetuated the uncoupling of education from sport at all levels (Libman, 1998).

As this community programming grew in popularity, there was a push to mirror or mimic professional sports, starting with adults dressing Little League athletes like their adult professional athlete counterparts after World War II (Farrey, 2008). Youth sports were growing, getting more media attention, and becoming more professionalized. In the case of Little League

Baseball, whose original intent was to only compete locally (Hyman, 2009), broadcasts of the Little League World Series championship game would begin in 1962 on ABC Television, further professionalizing the youth program (Vealey & Chase, 2016). This broadcast has since evolved into coverage of the entire World Series tournament, aligning with the broader commercialization of sports and media.

1970s & 1980s. The subsequent significant changes to the youth sports landscape began with the civil rights movements and the 2nd wave of feminism. These movements led to the eventual passage of the Civil Rights Act of 1964 and Title IX in 1972. Up to that point, male participation, predominantly white male participation, informed youth sports organization development as it had done since Gullick's work in the early 1900s. Although play is generally pretty similar for young girls and boys early on, girls tended to age out of opportunities (Vealey & Chase, 2016). After Title IX, increases in girls' sports participation at all levels of sport followed (Vealey & Chase, 2016). For example, the creation of the Association for Intercollegiate Athletics for Women, the governing body for women's collegiate athletics, in 1971, combined with Title IX, increased opportunities for women at higher competitive levels. This also influenced the perceived value of the game and perpetuated additional growth in youth sport. However, the passage of these laws did not lead to instantaneous change. Even today, there are numerous examples beyond the scope of this literature review of the continuing discrimination and discrepancies when sports participants do not match the able-bodied, white male status quo.

The 1970s also saw a reemergence of a sport-based emphasis in academia, especially youth sport (Vealey & Chase, 2016). Scholars wrote books, organizations hosted national conferences, and national youth sport advocacy organizations such as the National Council of

Youth Sports and the Institute for the Study of Youth Sports at Michigan State were created. The broader movement in the advancement of sport sciences and the developing specializations in kinesiology that were emerging at this same time (Solmon, 2021) aligned with the promotion of a more scientifically-driven (rather than theologically-driven) world (Denison et al., 2013).

Also, at the national level, in 1978, Congress passed the Amateur Sports Act (1978), which among other things, gave sport and athlete development rights and oversight responsibilities to the United States Olympic Committee, now known as the United States Olympic and Paralympic Committee (USOPC). Yet, without specific funding by Congress, the USOPC generally directs focus and funding to elite athlete development that leads most directly to Olympic medals instead of grassroots youth sports development (Sparvero et al., 2008; Vealey & Chase, 2016). While not the intention of the Act (Vealey & Chase, 2016), social class barriers to sport participation (Sparvero et al., 2008) appear to be a result. So, while some types of organized youth sports activities increased, others decreased. For example, the 1980s under President Reagan saw funding cut from social programs like parks and recreation (Coakley, 2010; Farrey, 2008). These actions were largely driven by broader societal and political ideology based in neoliberalism that "(1) the sole foundation of social order was personal responsibility, (2) the most effective source of economic growth was unregulated self-interest, and (3) the basis of personal motivation was competition and observable inequalities of income and wealth" (Coakley, 2010, p. 17). The funding cuts from parks and recreation allowed a larger opening for the privatization of youth sport creating viable paying careers in youth sports for some adults (Coakley, 2010), and furthered the gap in access to sport between the haves (those who can afford it) and the have nots (those who cannot afford it).

The definition of being a 'good parent' also changed around 1980 (Coakley, 2010),

evolving from one that focused on raising normal children to raising 'special' children (Farrey, 2008). Therefore, to be a good parent, one needed to plan and fill the child's schedule with various formal supervised activities and know where they were at all times (Fass, 2010; Vealey & Chase, 2016). This parental approach was in stark contrast to the parents of the prior era when it was common for children to roam the neighborhood without any formal supervision, and it also seems to have influenced some significant evolutions in youth sport (Vealey & Chase, 2016).

However, raising 'special' children was not the only reason; women began playing a more prominent role in the workforce (Fass, 2010). Without as many mothers at home to oversee the neighborhood children, there was much less informal supervision. Additionally, the publicity of child abductions in the 1970s and 1980s stoked fear in parents nationwide. Parents became less willing to allow their children to play outside unsupervised or in informal ways as they had in the 1960s and 1970s (Farrey, 2008; Fass, 2010). So, instead, the sports coach became a suitable supervisory replacement (Fass, 2010), serving as incredibly inexpensive child care since most coaches were volunteers. Like earlier in the century, it continued to align with a deficit perspective of youth development in that it promoted development of children because it prevented children, particularly boys, from getting into trouble around the neighborhood (Coakley, 2006; Damon, 2004; Vealey & Chase, 2016). Thus, "active free play [was] largely replaced by organized sports programs" (Neely & Holt, 2014, p. 255).

The need to schedule every minute of a child's life while incorporating a variety of different supervised activities also led to youth starting in youth sport at younger and younger ages, partly contributing to higher participation numbers (Vealey & Chase, 2016). Furthermore, how successful one's child was became the direct measure of parent's worth; thus the need to

raise 'special' kids also likely led to early sport specialization in attempts to obtain future elite sport status (Coakley, 2006, 2010). As a result, within a generation, youth sports were transformed as everyone tried to "[keep] up with the Jones's kids" (Coakley, 2010, p. 17).

So even though the result is an exacerbated shift from youth sport as a fun, pleasurable game-like leisure activity to intense resume and social status builder (Vealey & Chase, 2016), thus increasing the demands and expectations of the athletes, there was not a parallel demand for educated or trained coaches or even organized athlete development systems within sport. Although, this may have in part been due to parents making inaccurate assumptions about coach preparation and qualifications (Dieffenbach & Makara, 2009). In fact, it was not until the early 2000s that shedding the previously mentioned youth development deficit model for positive youth development models took hold (Hamilton et al., 2004; Lerner et al., 2005) and substantial acknowledgment for better athlete development or coach preparation began to be raised due to the rising expectations, especially those being placed upon youth sport coaches (see Davis, 2003). Although, this still tends to be a minority view.

The 1990s - 2010s. The youth sports evolution continued gaining speed in the 21st Century. With the growth of youth club/travel/select teams in the 1990s, organized youth sports programs evolved to include educational institutions, recreational and club sports organizations, and various personal training programs and facilities (Difiori, 2002). While this started as a way for those with financial means to continue competing and enhancing their skills in the off-season, by the early 2000s youth club/travel/select sports teams had created a major industry that featured year-round training and competitions, private instruction and training, cross-country travel to tournaments, and college showcases (Vealey & Chase, 2016). Heavy competition schedules and "a win-at-all-costs mentality" became a driving factor for many youth sport

programs, including those at the lowest developmental levels (Fawver et al., 2020, p. 239).

However, around the same time as the increase in the club/travel/select team system, we also see a decrease in the multi-sport athlete. Arguably, this can be due to the cost and time commitment that the club/select/travel teams require and the evolution of youth sport from simply a fun extracurricular to a training regime intending to prepare individuals for a high-performance sport career (Vealey & Chase, 2016). Yet, there is also a growing concern associated with the financial motivation of coaches and programs who "[sell] specialization" (Coakley, 2010, p. 17) by limiting athletes to only playing a single sport for a single coach, program, or organization, thus essentially implementing models of ownership and 'talent' hoarding. This thereby pushes athletes to focus on and specialize in one sport or risk 'getting left behind,' not being taken seriously, bullied, or otherwise discriminated against (Chalip & Hutchinson, 2017; Coakley, 2010).

The growth of internationally successful female sports, like the US Women's Soccer national team and the US Women's Softball national team in the early 2000s and collegiate athletic opportunities and scholarships have also driven the push towards elite development pathways and away from local parks and recreation opportunities, which are perceived as lower-tier relative to performance quality (Chalip & Hutchinson, 2017). This movement away from local community-based opportunities was further exacerbated by the additional cuts to parks and recreation departments in response to the 2008 recession (HBO, 2018). Yet, the youth sports industry, specifically "elite" youth sport programs were ready to step in and "simply [fill] the gap left by a lack of public funding for sport" for those who could afford to play (Fawver et al., 2020, p. 240), further increasing the movement away from local recreation programs and towards the 'pay to play' model at both high school and younger youth sport levels (Vealey & Chase,

2016). Broadly, youth sport has grown to a multi-billion-dollar industry. The sector reported growth from 5-billion in 2010 (Wagner et al., 2010), to 15-billion in 2017 (Gregory, 2017), to 19.2-billion in 2019 (GlobalNewswire, 2019). Yet, a third of youth sport participants drop out every year (Eitzen & Sage, 2009).

The 2020s. The COVID-19 pandemic will likely also have long-term impacts on sport with 13% of community-based youth sports providers closing (Aspen Institute, 2021) and many coaches retiring or leaving the field (Longman, 2020). There also appears to be increased pressure and expectation for coaches to be able to support athletes' mental well-being and teaching social and emotional skills (Aspen Institute, 2021) in addition to their other expanding roles and responsibilities (discussed later in this paper). This worldwide pandemic, and other events during this time, also appeared to highlight the major cracks in the foundation of sports, especially youth sports, as they related to inequities and poor youth sport practices (Whitley et al., 2021).

Furthermore, youth sports exposure on both traditional sports media and the growth of social media has grown drastically, further playing into the business of youth sport. Although the long-term impact of the Name, Image, and Likeness culture remains unknown, the further commercialization and commodification of youth sports athletes are expected in the future. Still, despite the massive youth sport industry, there is no centralized system or supervisory institution (Smolianov et al., 2015), and in many cases no or limited requirements for youth sport coaches (Nash & Taylor, 2021). Therefore, in its current state, with the lack of a structured approach, an individual's development in youth sport is more about "survival of the fittest" than proper development or being active for life (Fawver et al., 2020, p. 248).

Macrosystem: Lack of Centralized System of Youth Sport Governance

The macrosystem level generally focuses on overarching institutional systems. Unlike other countries, the youth sport development programs in the United States lack an interconnected system or systematic national-level governance (Dieffenbach, 2019a; Smolianov et al., 2015; Whitley et al., 2021). Instead, the US government has taken more of a hands-off approach with the 1973 Ted Stevens and Amateur Sports Act (1978) and the revision in 1998 as "the only meaningful sport development legislation" passed (Book et al., 2021, p. 3). However, as mentioned previously, the Amateur Sports Act, while giving authority to the USOPC to oversee youth sport in the United States, does not fund this initiative. So, while the USOPC is tasked with overseeing their network of associated national governing bodies, where grassroots programs and initiatives are supposed to be occurring, their primary focus is on elite programs, not grassroots ones. So, the perception that anyone is overseeing the youth sport system in the United States is basically an illusion.

Despite the lack of a structured sports development system, the United States is globally known for its professional sports leagues and leading total Olympic medal counts. However, its success depends on massive youth sport participation by an enormous population (Bowers et al., 2011) and its affluence and financial resources, rather than its sports governance system (Green & Bowers, 2013). In fact, there are 58 other countries where an athlete is more likely to be an Olympic medalist than in the United States when considering medals won per capita (medalspercapita.com, 2021). So, despite the promotion of talent identification, performance talent development, and obsession with winning that drives the professionalization of youth sports, the systems and the actual outcomes do not appear to align (Cote & Abernethy, 2012; MacNamara & Collins, 2011; Vaeyens et al., 2009). Therefore, "the question becomes whether leaving potentially millions of youth behind is worth the price of filtering the best athletes to the

top of their sport?" (Fawver et al., 2020, p. 248).

Not only is the system haphazardly producing successful athletes (Bowers et al., 2011), but it appears to poorly develop or retain active individuals for life (Balyi et al., 2013). This is particularly evident given the obesity epidemic with 22% of children in the United States currently obese (Lange et al., 2021). While lack of physical activity is arguably not the only cause of obesity, only 24% of school-aged youth are currently physically active for 60 minutes per day, a decrease of 6% from the prior decade (Aspen Institute, 2021). Therefore, it does not appear that emphasizing talent development and winning is best for creating world-class athletes or general societal well-being. These concerns seem to have caught the attention of the United States Department of Health and Human Services.

In 2018 an executive order was signed by the President of the United States to create a National Youth Sport Strategy with a goal to:

> a) increase awareness of the benefits of participation in sports and regular physical activity, as well as the importance of good nutrition, b) promote private- and public-sector strategies to increase participation in sports, encourage regular physical activity, and improve nutrition, c) develop metrics that gauge youth sports participation and physical activity to inform efforts that will improve participation in sports and regular physical activity among young Americans, and d) establish a national and local strategy to recruit volunteers who will encourage and support youth participation in sports and regular physical activity, through coaching, mentoring, teaching, or administering athletic and nutritional programs (DHHS, 2019, p. 12)

In 2019 the United States Department of Health and Human Services published the National Youth Sport Strategy. This report aimed to get a better understanding of the needs and issues in

the youth sports landscape. Findings highlighted the need for quality sports experiences to support positive benefits, especially the role of the coach in impacting these experiences.

However, given the current structure of youth sport in the United States, without a central youth sport governing body or national sports ministry as exists in other countries, implementation of "national youth sport policy development, systematic [developmentally appropriate practice] participation guidelines and strategies, a national coaching education and certification requirement for youth coaches, and funding and resources for grassroots youth sport development" (Vealey & Chase, 2016, p. 14) are nearly impossible. Thus, begging the question, perhaps our social structures and perspectives focus on the wrong aspects of youth sport development?

Exosystem: Impact of Societal Structures and Perspectives on Youth Sport Development and Participation

The exosystem considers both formal and informal local community-based systematic structures. Unfortunately, most research regarding youth development tends to focus on individual outcomes rather than social elements impacting and influencing that process (Coakley, 2011). Yet, systematically, it is important to note that there is a narrowing of types of opportunities for kids to participate in sport.

Things like changing neighborhood infrastructure (Erdal, 2018) and budget cuts to education and parks and recreation departments (HBO, 2018) have resulted in decreased opportunities for deliberate play and developmental youth sports at the local and recreational level, especially for those with less athletic skills and less competitive interest (Farias et al., 2017; Farrey, 2008; Malina, 2009). Additionally, with decreased physical education resources in schools usually due to the broader push in education to emphasize science, technology,

engineering, and math careers and improve scores on standardized tests (Kohl III & Cook, 2013), and free play opportunities (Gray, 2011) many children may find themselves opting out of the sport due to low physical literacy (Balyi et al., 2013). Furthermore, the growing emphasis on competition and outcome-based talent development (Gould, 2019) and family, rather than neighborhood or community, as youth sport sponsors (Coakley, 2010) perpetuates the narrowing of these community-based systems and thus the narrowing of types of sport opportunities available. Those in lower-income households tend to get hit the hardest (Armentrout & Kamphoff, 2011; Aspen Institute, 2021; Chalip & Hutchinson, 2017). In fact, 70% of youth athletes drop out of sport by age 13 (Engh, 2002).

Youth Sport Attrition. There are multiple factors associated with youth sport attrition (see Balish et al., 2014). Part of youth sport attrition may be due to individual factors (like decreased perceptions of competence, lack of enjoyment or poor coaching, social pressures, competing priorities, and physical factors; Balyi et al., 2013; Crane & Temple, 2015), broader societal influences (like parents overscheduling of children, and the multitude of electronic entertainment; (like parents overscheduling of children, and the multitude of electronic entertainment; Vealey & Chase, 2016), or societal structures (like community and scholastic sport system structures; Farrey, 2008). For example, sport attrition at age 13 also aligns with the point at which middle school sports tend to start and the age at which community sports organizations no longer offer youth sports opportunities. Additionally, at the high school level, other societal structures like cost of college, location, access to training and competitions, social class, culture, and size of school can also impact sport attrition or dropout rates (Farrey, 2008). Socially, there is also a devaluation of participating in a sport for fun or recreational purposes rather than for performance purposes and chasing college athletic scholarships. Yet, only 2% of

high school athletes will receive a full or partial athletic scholarship (Malina, 2010) and only 3 - 13% of male athletes and 4 - 26% of female athletes still competing in high school will compete at an NCAA institution (NCAA, 2020).

This devaluation is not limited to scholastic levels though, there is also a narrowing of broader societal ideology towards the importance of 'winning'. This pushes the purpose of youth sport towards being more competitive. When parents are willing to drive their children to wherever they perceive the best coaches, training, and competition to be, the concept of the local community-based sport organization becomes irrelevant (Coakley, 2010). Furthermore, when this ideology is the guiding perspective, it makes it nearly impossible for a coach to come in and work counter to that system in attempts to try and make any meaningful changes in promotion of best practices for youth development (see Gano-Overway, Thompson, et al., 2020). However, it is not the athletes promoting this ideology; it is the societal perspective, organizational culture, and increasing involvement of adults in youth sport, without oversight, who tend to be only informed by individual experiences. Yet, without these adults, organized youth sports would likely not be possible.

Mesosystem: Adult Involvement in Youth Sport Organizations

The mesosystem is the level that includes the interactions of the various microsystems. Many times in youth sport, this is represented by organizational aspects. Most notable perhaps is the increase in adult involvement in youth sports organizations.

As adult involvement in youth sport has increased, the athletes' environment has become increasingly privatized, professionalized (Gould, 2019; Gregory, 2017), commercialized (Coakley, 2010), and adulterated (Erdal, 2018), as coaches, administrators, and parents fail to embrace the necessity of developmentally appropriate practice (Vealey & Chase, 2016). This

adult- and media-centered environment created and structured by adults (Bergeron et al., 2015; Brenner, 2016) has “[replaced] children’s goals and needs with adult goals and needs” and “stripped children’s sport settings of their freedom, choices, and experimentation” (Erdal, 2018, p. ix), to win meaningless championships, gain local prestige, pad pocketbooks, and work to secure athletic scholarships, professional contracts, and Olympic bids (Vealey & Chase, 2016).

While a support system of adults is important in a child becoming successful (Bloom, 1985), coaches and parents still model and encourage inappropriate, unethical, and dangerous behaviors (see Vealey & Chase, 2016). Therefore, there is still a question as to who is responsible for driving the youth sport culture. Youth sports coaches claim that they just give the parents what they want (Callary et al., 2012) and in contrast, the parents report feeling pressured by coaches and administrators to accept the current sports system without a choice or say (Watchman & Spencer-Cavaliere, 2017). Yet, kids' wants do not appear to be central to the conversation (Strean & Holt, 2001; Visek et al., 2015).

Microsystem: Youth Sport Athletes Interpersonal Relationships

The microsystem is the level that has the strongest influences on the individual. In youth sports, these are primarily determined by interpersonal relationships. Relationships with peers (see Brown & Larson, 2009; Rubin et al., 2005), parents (see Dorsch et al., 2021), and coaches (see Jowett & Poczwardowski, 2007) play a prominent role here (Chu & Zhang, 2019; Sheridan et al., 2014).

Motivations of Parents and Guardians of Youth Sport Athletes. As one of children’s main socialization influences (see Maccoby, 1994), parents directly and indirectly determine how a child spends their free time (Hutchinson et al., 2003). Hence, parents are generally the ones to introduce their children to organized sport and physical activity (Brustad, 1996; Green &

Chalip, 1998; Horn & Horn, 2007; Howard & Madrigal, 1990). This begins with the registration process and continues as providers of experiences, interpreters of those experiences, and role models (Fredricks & Eccles, 2004). Parents provide transportation, financial support, and general support and encouragement (Wuerth et al., 2004). Their satisfaction also predicts children's continued participation in the program (Brustad, 1993). As the child mainly relies on their parents' feedback, support, and encouragement during initial sport experiences to evaluate themselves (Fredricks & Eccles, 2004), the parent, therefore, influences their child's motivation, behavior, and psychological growth (Bronfenbrenner & Morris, 1998) as well as enjoyment, performance, and self-esteem (Leff & Hoyle, 1995). They are "seen as [the] architects of a child's success" (Coakley, 2010, p. 18).

Differences in youth sports programs can also be confusing (Vealey & Chase, 2016). Although youth sports parents and guardians may have the best of intentions, they receive virtually no education on child development through sport or how to help their child develop or have a positive, organized sports experience (Gould et al., 2006; Koester, 2002). As a result, despite likely sincerely believing they are acting in the best interest of their child, they may not be following best practices or evidence-based recommendations when it comes to their own child's development. In fact, about a third of junior tennis players' parents were perceived as hindering their child's development (Gould et al., 2006). Furthermore, youth sports parents and guardians may disagree with child development specialists on the benefits of unsupervised free play, critical for early development, or struggle with the practicality of offering such opportunities (see Erdal, 2018). They are also likely to believe that their child learns more from participating in youth sports activities than from their physical education classes at school (Na, 2015).

Hence, parents and guardians may be overly trusting as novice and relatively naive consumers. Parents can easily fall into the trap of signing up their children for early sports opportunities because the program is available, their friends or their child's friends are participating, or they are relying on the sport experience as essentially a very cheap childcare service convenient for work schedules or providing them with more child-free free time (Kurnik et al., 2013). Parents report putting their children in organized youth sports "to learn [the] sport and have fun" (Dorsch et al., 2015, p. 19). However, within the first 15 months, many parents reported their goals for their children changing due to "child outcomes and their evolving perceptions of the youth sport context" (Dorsch et al., 2015, p. 19).

These evolving perceptions may be informed by other parents or individuals perceived as experts who share their opinions regarding when, how often, and at what intensity their child should be playing and training. For example, parents (and the media) like to promote and point to athletes like Tiger Woods, Venus and Serena Williams, Andre Agassi, and Andy Roddick (or the German and Soviet athletes for the previous generation; Coakley, 2010; Malina, 2010), who specialized in their sports at extremely young ages and then experienced the highest level of success later. Yet, it is less common to feature the majority who followed the typical pathway.

On the other hand, if they do believe in the role of development, misinterpretation of the 10-year (Chase & Simon, 1973) or 10,000-hour rule (Ericsson et al., 1993) to obtain expertise has led parents to perceive that the key to success is early specialization. This is despite the research showing youth multi-sport practice to be more beneficial (Güllich et al., 2021). Sport specialization can have numerous potential adverse effects (see Waldron et al., 2020 for additional discussion on the pros and cons of early sport specialization), and only 3,000 of the 10,000 hours of deliberate practice need to be sport-specific to attain elite status (Côté et al.,

2007). A recent study in the UK demonstrated that encouragement of year-round training and early sport specialization was more likely to be encouraged by parents than by coaches (Kearney et al., 2020). Yet, at the youth level, many coaches are parent-coaches (Barber et al., 1999; Weiss & Sisley, 1984).

For those youth sport coaches who are not parent-coaches, year-round participation in their youth sports programs likely drive their income, and competitive success of athletes in the program makes future recruitment easier (Coakley, 2010). Therefore, the encouragement of early specialization and year-round training and playing is income-based (Coakley, 2010). Additionally, given the lack of standards as to who can coach, it is more likely than not that these perceived experts do not have appropriate competencies as recommended by the National Standards for Sport Coaches (NSSC; 3rd Edition) to make informed recommendations.

At the same time, there appears to be a perception that parents can purchase a specific sporting experience to provide for their children (Fredricks & Eccles, 2004). Therefore, some parents may end up trying to live vicariously through their children (Balyi et al., 2013), who may have access to more opportunities than they had. They may also perceive that these additional opportunities and structure will increase the likelihood of their child receiving an athletic scholarship or getting paid to play professionally, fueling many misguided parents to push for child sport achievement from a very early age (Bean et al., 2016). However, only about 300 children of the 4 million born in the United States in any given year will be able to financially support themselves with their professional career as an athlete (Farrey, 2008). Yet, this fantasy obsession drives a plethora of decisions about youth sport and helps sustain the massive industry that has grown up around it. Thus, many decisions made by parents throughout the youth sports experience, including sideline behaviors (Dorsch et al., 2015), are made from the perspective of

essentially trying to make sure they are getting an appropriate return on their investment, specifically their investment of time, money, and emotional energy (Bloom, 1985; Preston et al., 2021). This consumer perspective not only gives parents a heightened sense of their right to their involvement and opinion (Green & Chalip, 1998), but "often [creates] stress, uncertainty, psychological problems, and a lack of motivation" in athletes (Gould et al., 2006, p. 30) and has led to "redefined expectations of coaches to primarily produce successful athletes and winning teams" (Fawver et al., 2020, p. 239).

Some parents may inevitably use youth sport for their own entertainment and competition or find themselves becoming attached emotionally "to their children's sport participation and to the youth sport setting itself" (Dorsch et al., 2009). This may result in them acting uncharacteristically (Wiersma & Fifer, 2008). Although this runs the gamut, one might see youth sports betting and hostile environments in more severe cases (Schlitz, 2021). In less severe cases, not only are their child's friends on their team, but the parents' social circle becomes other youth sports parents as they build a sense of community (Dorsch et al., 2009; Lally & Kerr, 2008; Na, 2015). Their entire identity can become wrapped up in what it means to be a youth sport parent (Coakley, 2010) or the fact that simply having their child participate on a travel or club team is a status symbol (Chalip & Hutchinson, 2017).

When these types of things occur in promotion of "serious leisure", the positive potential of youth sport is compromised (see Siegenthaler & Gonzalez, 1997). It is no longer about the kids; it is about the adults. However, kids are not simply "miniature adults or commodities" (Malina, 2009, p. S8). Thus, it also adds additional pressure to win on the coaches and the athletes, distracting from what should be the main focus of what is best for the kids, like enjoyment, acquisition of sports skills, enhanced relationships and social interactions, the

teaching of values like citizenship and sportspersonship, the promotion of healthy habits, and development of health and fitness (Malina, 2009). Instead, youth sports programming should be informed by physical literacy and positive youth development to have the most beneficial impact on the development of each youth sports athlete; these youth sports athletes should be products of their systems, not simply survivors (Donnelly, 1993).

Individual: Best Practices for the Youth Sport Athlete

Although the sandlot days are gone, kids need time to be kids and engage in free or 'deliberate play' (Côté, 1999) not just organized youth sports activities (Vealey & Chase, 2016). Free or deliberate play is an essential part of child development and important for both developing expertise and remaining in sport (Ginsburg, 2007). Deliberate play refers to the child-led activities, as opposed to adult-led activities, like a game of street hockey or pick-up basketball. However, if children are not getting these opportunities outside of sports to build their physical literacy, these opportunities and experiences need to be incorporated into the youth sports setting (Vealey & Chase, 2016).

Physical Literacy. Physical literacy is "the ability to identify, understand, interpret, create, respond effectively and communicate, using the embodied human dimension, within a wide range of situations and contexts" (Whitehead, 2013, p. 25) "wherein the individual has: the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for maintaining purposeful physical pursuits/activities throughout the lifecourse" (p. 28). It "involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society" (p. 28). Initially introduced in the academic literature in the 1930s, before being reintroduced in the 1990s physical literacy is rooted in philosophy with a holistic emphasis

(Roetert et al., 2018; Whitehead, 2013). It is not a state or goal to reach but rather a cradle-to-grave journey of physical activity across one's life (Whitehead, 2013). Such activity is also not limited to simply the fundamental movement skills but encompasses the motivation, confidence, competence, knowledge, and understanding to perform those skills, thus involving affective, physical, cognitive, and behavioral domains (SportForLife, 2019).

The value of physical literacy is beneficial as a foundation for elite athlete development and for all participants as it can positively impact physical, mental, and social health (Cairney et al., 2019). It is the foundation for youth physical development and athlete development frameworks. As physical education teachers are the most qualified in this area (Whitehead, 2013), the decrease of physical education in schools within the current system (Kohl III & Cook, 2013) means students lack proper instruction of fundamental movement and sport skills (Balyi et al., 2013). This thereby results in children losing potential physical activity and sport opportunities (Balyi et al., 2013). Yet, the responsibility belongs to not just physical education teachers but to "all significant others who are in a position to influence attitudes to, and competence in, physical activity" (Whitehead, 2013, p. 32). This includes the sports system. One framework contributing to this is the Long-Term Development in Sport and Physical Activity (LTDSPA; Sport For Life, 2019).

Long-term Development in Sport and Physical Activity. This evidence-based framework promotes the "development of every child, youth, and adult to enable optimal participation in sport and physical activity [by taking] into account growth, maturation and development, trainability, and sport system alignment" (Sport For Life, 2019, p. 6). Initially published in 2013 as Long-term Athlete Development (LTAD; Balyi et al., 2013), the updated version of the model is referred to as Long-term Development in Sport and Physical Activity

(LTDSPA) thus moving away from the ‘athlete’ distinction (2019). This updated framework has seven stages and two pre-stages. Pre-stages include a) Awareness and b) First Involvement. The seven stages include: a) Active Start, b) FUNdamentals, c) Learn to Train, d) Train to Train, e) Train to Compete, f) Train to Win, g) Active for Life, which includes Competitive for Life and Fit for Life. Yet, development is an individualized, continuous process with ranges of development as opposed to specific deadlines, the stages are imperfect; therefore, overlap will exist (Balyi et al., 2013). For specific information regarding these stages, see Long-Term Development in Sport and Physical Activity 3.0 (Sport For Life, 2019).

A number of National Governing Bodies (e.g. USA Hockey, US Lacrosse, US Soccer) in the United States have begun implementing such developmental models as a foundational component of their programs over the past decade (see Martel, 2015). Thus, one’s ability to understand and implement an LTAD- or LTDSPA-aligned curriculum is crucial to improving how children in the United States sport system are developed. Therefore, the coach is the linchpin to implementing a developmental framework and preventing athlete attrition (Erdal, 2018).

Socio-ecological Model of Youth Sport Coach

The coach is arguably the most influential person in the sports environment (Raakman et al., 2010). Coaches can not only promote or hinder athlete development but also social, psychological, and moral development (see Aspen Institute, 2021; DHHS, 2019; Erdal, 2018). Yet, the preparation needed is poorly understood and thereby, as a result, undervalued. It is only within the past few decades has the coach been considered a performer in their own right (Gould et al., 2002). However, the criteria for a successful coach are unclear at the youth sport level and expectations are generally outcome-based. Informed by the socio-ecological model of the youth

sports athlete discussed previously, the socio-ecological model of the youth sports coach puts the coach in the individual's position rather than the youth sports athlete. These levels, as they relate to the youth sports coach, will be discussed beginning with the microsystem and working out to the chronosystem.

The microsystem consists primarily of interpersonal relationships. In the case of the youth sports coach, those exist mainly with the athletes, administrators, and other coaches. Although the coach-athlete relationship is considered the most important in the sports environment, learning from other coaches is generally the most preferred learning option (though not necessarily best practice for professional preparation).

The mesosystem considers the interactions of the youth sport coaches' microsystems, consisting mainly of organizational aspects. With the job expectations so high and volunteer coaches busy and overwhelmed, the discussion here focuses on how organizations implement coach education and development within their systems since we know that coaches' learning preferences are not best practice. Various types of programs are discussed.

The exosystem level focuses on the formal and informal community-based systematic structures. This section considers the theories and practices guiding coach education and development. Learning situations, learning contexts, and assessment of learning outcomes as well as best practices are featured.

The macrosystem involves broad institutional systems. As was mentioned in the socio-ecological model of the youth sports athlete, the United States lacks a centralized sports ministry. As a result, an even broader institutional system is highlighted here, that of a profession. Relationships between coaching and other professions' evolutions along with explanations of the professional process are included.

The chronosystem is the last level in the socio-ecological model. In the case of the youth sports coach, this will include a discussion of the evolution of coach education and development. This section will bring us to the present-day inclusion of the coach developer.

The underlying theme throughout the section focused on the socio-ecological model of the youth sport coach is a recognition that improving coaching behaviors is critical to support athlete development (Da Silva et al., 2020). So, what is known about the coaches that are saddled with this massive responsibility of "[playing] a pivotal role in determining whether sport systems provide opportunities for peak athlete performance, promote lifelong participation and shape personal development" (Bergeron et al., 2015, p. 849)? Furthermore, how can their socio-ecological systems do a better job supporting them and their development?

Individual: Characteristics of Youth Sports Coaches in the 21st Century

Due to lack of regulation and oversight over youth sport coaching, the current number of youth sport coaches in the United States is unknown (Vealey & Chase, 2016). However, the complexity in understanding this population does not stop there. Youth sports coaches may hold titles like assistant coach, head coach, or advanced/senior coach (ICCE, 2013), and they work across several different school-based and non-school-based contexts. Côté & Gilbert (2009) broadly categorize these coaching contexts relative to participation or performance environments and athlete's age. A more specific categorization would match a coaching context with each youth sport context outlined by Vealey and Chase (2016).

These youth sport coaches work primarily in isolation with short tenures. However, recruitment and retention rates can vary. In some organizations, the 'burn and churn' rate for coaches is about 75% after two years (personal conversation, 2021). Such rates for the volunteer coach can vary due to self-perceived confidence and usefulness, enjoyment of coaching,

winning, improvement by team or players, and type and amount of support from stakeholders (Guzmán et al., 2015; Rundle-Thiele & Auld, 2009).

The youth sports coach is generally male (Chafetz & Kotarba, 2005; Coakley, 2006). Although, this is not necessarily specific to the youth sport context as female head coaches in the United States (Machida-Kosuga et al., 2017), especially since the implementation of Title IX (Acosta & Carpenter, 2014), and women in sport leadership positions globally (LaVoi, 2016) have been underrepresented. This is in part due to the societal perception of associating competition and dominance with masculinity (Carson et al., 2021), the fact that those serving as gatekeepers were males who tended to hire men (Burton, 2015), and other general hegemonic masculinity influences on the work-life interface (see Bruening et al., 2013). These coaches are also likely white and heterosexual, given the history of excluding and discriminating against those that do not fit the status quo in sport (see Kamphoff & Gill, 2013).

Youth sports coaches may be full-time paid coaches, part-time paid coaches, or volunteer coaches (ICCE, 2013). The population of paid coaches in the youth sport sector has rapidly grown over the last couple of decades. This is due primarily to the growth of the select/club/travel teams on a pay-to-play model, private training facilities, for-profit leagues, and private sports schools with the intention to create college and professional athletes (Fawver et al., 2020). Despite those examples, most youth sport coaching roles are filled by volunteers or as part-time jobs (Chalip & Hutchinson, 2017; Trudel & Gilbert, 2006). However, the majority are volunteers with few resources (Fawver et al., 2020).

Many of these “walk-on” volunteer youth sport coaches have no to minimal experience or qualifications other than their own athletic experience and this is seen as acceptable (Nash & Taylor, 2021). They end up filling these roles due to their child playing or because no one else

did or could (McCallister et al., 2000), rather than their expertise (Nash & Taylor, 2021). Yet, the organizations for which they volunteer tend to be “void of rigorous, research-based coach training” (Fawver et al., 2020, p. 240), and this is generally considered acceptable due to the belief that ‘anyone can coach’ (McCallister et al., 2000; Vealey & Chase, 2016). This belief appears to be driven by the tradition that past athletic experiences qualifies one not only to coach kids but also makes one a good coach (Vealey & Chase, 2016). Therefore, most youth sports coaches lack training and are uncertified by any coach education program (Nelson et al., 2006; Vealey & Chase, 2016).

Without formal education, coaches tend to rely on feelings, intuitions, and either reproducing or avoiding coaching behaviors, models, and approaches they had experienced (Cushion et al., 2003; Cushion et al., 2006; Fraser-Thomas et al., 2005; Lauer & Dieffenbach, 2013; Werthner & Trudel, 2006) including perpetuating and normalizing abusive coaching practices (McMahon et al., 2020). This is especially common for the novice coach. Hence, when considering the youth sports coach, it is also important to consider their stage of professional development.

Stages of Coach Professional Development. The concept of professional stages of development is not new in other professions (see Berliner, 1994; Dreyfus & Dreyfus, 1986) or even in coaching. Multiple individuals have looked to describe the stages of coach development. Those most notable include Salmela (1995), Schinke, Bloom, & Salmela (1995), Schempp and colleagues (2006), and Trudel, Gilbert, & Rodrigue (2016). Salmela (1995) recognized three stages associated with the experiences of the expert-coach development: a) early involvement with sport, b) early career coaching, and c) mature career coaching. Schinke, Bloom, & Salmela (1995) extended on Salmela (1995), outlining seven stages of development: a) early sport

participation, b) national elite sport, c) international elite sport, c) novice coaching, d) developmental coaching, e) national elite coaching, and f) international elite coaching. According to Schempp and colleagues (2006), the Coach Formation Process has four stages: a) beginner, b) competent, c) proficient, and d) expert, while Trudel, Gilbert, & Rodrigue (2016) present a four-stage model of a) newcomer, b) competent, c) super competent, and d) innovator. Building on critical parts from each of these previous models, the following discusses an update to understanding the stages of coach professional development. This five-stage model includes a) preservice, b) beginner, c) competent, d) proficient, and e) innovator.

Pre-service. Much like those looking to become teachers and physical education teachers and their experiences as students, those new to coaching roles have likely already spent thousands of hours engaging with coaches while they were an athlete (Gilbert, Lichtenwaldt, et al., 2009; Lemyre et al., 2007). This early socialization and involvement with sport, or acculturation socialization (see occupational socialization), tend to be the first stage of a coach's development (Sage, 1989; Salmela, 1995). These socialization perspectives and outcomes can change depending on their interactions (Jarvis, 2006). Socialization plays a significant role in the coaches' perceptions of what coaching is and how to do it. Still, one's experience as an athlete generally does not introduce one to all the responsibilities and challenges that new coaches face (Dieffenbach et al., 2010). Therefore, after pre-service, we move into the beginner stage.

Beginner stage. The beginner stage generally consists of survival and discovery (Feiman-Nemser & Remillard, 1996) and consists of those in about the first three years of their career (Rolls & Plauborg, 2009). Coaches will generally try to model or replicate behaviors from their coaches (Fraser-Thomas et al., 2005), using the same drills from their playing days (Schinke et al., 1995). In many cases, beginner coaches do not know what they do not know (Dieffenbach et

al., 2010; Vargas-Tonsing, 2007). Yet, they want to learn in experiential ways because they feel that real-world experience is more important than anything they could learn in a classroom (Berliner, 1994). In general, novices or beginners tend to follow explicit rules (Dreyfus & Dreyfus, 1986). Therefore, they are rational, relatively inflexible, and tend to conform to the rules and procedures they were told to follow (Berliner, 1994). Beginner coaches tend to be more concerned with behavior management than whether the athletes are learning something (Schempp et al., 2006). They also do not tend to take responsibility for their actions (Berliner, 1994). More externally focused rather than internally focused (Cothran et al., 2005), they can struggle with the concept that their coaching philosophy will evolve to adapt to different contexts (Cassidy, Jones, et al., 2008).

Competent stage. In the competent stage, coaches use their previous experiences to solve a new problem (Schempp et al., 2006). Competent professionals generally choose a plan, set goals, and decide on priorities (Berliner, 1994; Dreyfus & Dreyfus, 1986). They also make conscious decisions about what to do and develop strategies for applying the rules they were taught (Dreyfus & Dreyfus, 1986). Successes and failures are more memorable, and they accept personal responsibility for their quality of instruction (Berliner, 1994). They are more open to learning from more senior or mentor coaches (Sage, 1989; Schempp et al., 2006; Schinke et al., 1995) and also tend to be more open to using personal reflection as a way to look back on their coaching (Schempp et al., 2006; Schinke et al., 1995)

Proficient stage. In the proficient stage, coaches can distinguish important issues from unimportant issues (Schempp et al., 2006) and predict events more aptly and precisely. They likely experiment and consolidate their knowledge (Feiman-Nemser & Remillard, 1996). However, their ways of knowing are still analytical and deliberative in deciding what to do.

Experts tend to behave more intuitively, acting effortlessly in decision-making as long as things are going well (Berliner, 1994; Dreyfus & Dreyfus, 1986). These proficient coaches also felt strong personal responsibility for the success and failures of their athletes (Schempp et al., 2006). Coaches in this stage design out their training protocols and try out new ideas in their coaching (Schempp et al., 2006).

Innovator stage. Perhaps the stage of coaches that has received the most attention in the research so far is expert coaches. While this is a common approach as an emerging discipline tries to understand the knowledge required for the role (Walsh & Carson, 2019), how expert coaches have been distinguished and defined in that research has varied. Furthermore, the approach to finding these supposed expert coaches tends to be only relative to athlete outcomes (Nash, 2019; Nash et al., 2012). Therefore, this stage will use Trudel and colleagues (2016) 'innovator' phrase to describe this phase so as to not conflate the description of this stage with how the literature has sometimes described expert coaches.

Expert coaches have arguably reached mastery and stabilization (Feiman-Nemser & Remillard, 1996). In alignment with Ericsson and colleagues' work on expertise (1993), coaches in the expert stage tend to rely much more on intuition and automaticity in their decision-making (Schempp et al., 2006). In contrast, coaches in the other stages tend to be much more rational and cerebral. Experts may have a "critical eye" (Chase & Simon, 1973) and a more complex understanding of why they do things (Abraham et al., 1997). They also tend to use in-depth reflection to design practices and have an improved capacity for self-criticism (Schempp et al., 2006), and began to mentor athletes and younger coaches (Bloom et al., 1998). Yet, it is also important to note that just because a coach is an expert coach in one context does not make them an expert in another coaching context (Nash, 2019).

Since most youth sport coaches are volunteer parent-coaches who exist in the lower stages of development, it is unlikely that "these coaches possess the minimal competencies needed to facilitate safe, fun, and developmentally appropriate sport experiences" (Fawver et al., 2020, p. 240). This lack of competence is concerning given the power afforded by the role of a coach (Jowett & Wachsmuth, 2020; Vealey & Chase, 2016). While not every coach will become an expert, everyone can become a better coach (Schempp et al., 2006). Therefore, an understanding and preparation of the reality of these roles and responsibilities are needed (Nash & Taylor, 2021).

Microsystem: Understanding the Roles and Responsibilities of the Youth Sport Coach

The coaching process is evolving (Salmela, 1995). The necessary skills to coach have become more complex, relational, and contextual (Côté & Gilbert, 2009; Cushion et al., 2003; Jowett, 2017; Standal & Hemmestad, 2010), growing concern over the last few decades as "the term sport coaching may be overgeneralized" (Gano-Overway, Van Mullem, et al., 2020). Several models of sports coaching have been developed over the last few decades (see (see Eime et al., 2013; Holt et al., 2017; Jones et al., 2017). However, no one recipe or universal solution will serve every athlete in every context (Bailey et al., 2010; Nash & Taylor, 2021). Sports coaching is complex and dynamic as a result of biological, psychological, and social interactions (Bailey et al., 2010; Bowes & Jones, 2006; Jones, 2006; North, 2017).

Traditionally, coaching was seen as the act of transferring technical knowledge, and winning was assumed only to be due to techniques and physicality (Denison, 2010). The International Sport Coaching Framework (2013) expanded this concept to specify six primary functions as a coach: a) set the vision and strategy, b) shape the environment, c) build relationships, d) conduct practices and prepare for and manage competitions, e) read and react to

the field, and f) learn and reflect. In 2019, SHAPE America updated its NSSC to seven core responsibilities: a) set vision, goals, and standards for sport program, b) engage in and support ethical practices, c) build relationships, d) develop a safe sport environment, e) create a positive and inclusive sport environment, f) conduct practices and prepare for competition, and g) strive for continuous improvement. Within those seven core responsibilities, there are a total of 42 standards (see Gano-Overway, Thompson, et al., 2020 for more detailed information on these standards). Multiple others have also identified coaches' tasks, skills, knowledge, behaviors, standards, and competencies that identify areas beyond just techniques and physicality (Demers et al., 2006; Hedlund et al., 2018; McCleery et al., 2021; Rynne & Mallett, 2012). Becker (2013) takes a slightly different approach and instead highlights the general qualities that make some coaching behaviors more effective than others (positive, supportive, individualized, fair, appropriate, clear, and consistent). While these are good places to start to identify objectives of the coaching profession, in actuality, the job is even more complex.

The harsher reality is that coaches also must navigate micro-political workings (e.g., Thompson et al., 2015), social, cultural, political, and economic factors (Cushion et al., 2021), and "respond to athletes, participants, employers, international structures and shifting market demands" (Taylor & Garratt, 2013, p. 32), as well as incorporate multiple pedagogical approaches (Mees et al., 2020) to aid development for athletes pursuing higher levels of the performance pathway and for the majority of those who do not (Williams & MacNamara, 2021) all the while considering both individual and team needs (Hague et al., 2021). Then, to top it off, coaches also need to cope with adversity and stress (Kellmann et al., 2015), which otherwise can lead to emotional exhaustion, fatigue, low self-esteem (Olusoga et al., 2010), and even coaching burnout (see Olusoga et al., 2019). Trying to account for these different aspects has led to the

coaches' expected professional, interpersonal, and intrapersonal knowledge increasing at all levels and contexts (Bergeron et al., 2015; CoachForce21, 2021).

Furthermore, supporting athletes is one of the key roles of a coach (Stebbings et al., 2016). Some researchers would consider the coach-athlete relationship the most crucial relationship in the sports context (Côté & Gilbert, 2009). Coaching behaviors, practices, and the environment that the coach creates influence the quality of a youth athlete's sports participation experience (Gano-Overway, Thompson, et al., 2020; Rottensteiner et al., 2015). So, coaches require depth and breadth of knowledge regarding human development in order to provide an appropriate developmental experience to their athletes (Nash & Taylor, 2021).

Youth Sport Coach-athlete Relationship. Given the quantity (Conroy & Coatsworth, 2006; Donnelly, 1993) and quality (Stirling & Kerr, 2013) of coach interactions with athletes, it is not surprising that coaching behaviors impact a child's youth sports experience (Blom et al., 2013). Coaching behaviors can impact athletes' confidence, attitudes, relationships, skill development, motivation, well-being, level of enjoyment and engagement, attendance and intentions to continue participating, sport attrition, and healthy lifelong habits (Conroy et al., 2006; Petitpas et al., 2005; Scanlan & Lewthwaite, 1986; Smith & Smoll, 2017; Vella et al., 2011; Visek et al., 2015). In fact, in one study, every young swimmer reported liking the coaches as a reason they participated in the sport (as cited in Erdal, 2018). Another study showed that youth athletes tended to rank coaches as the most positive influence in their life (USADA, 2011, as cited in Lauer & Dieffenbach, 2013).

Coaching behaviors can also impact a team's ethical behaviors, cohesion, and collective efficacy (Bolter & Kipp, 2018; Høigaard et al., 2015; McLaren et al., 2015). Athletes' psychosocial skills, team chemistry, and coach-athlete relationships are further improved when

coaches are trained (Allan & Côté, 2016; Erickson & Côté, 2016; LaForge et al., 2012; Vella et al., 2011; Vierimaa et al., 2012). However, most youth coaches lack formal training in coaching (Koester, 2002), physical education (Schoenstedt et al., 2016), child development (Fraser-Thomas et al., 2005; Koester, 2002), strength and conditioning principles (Merkel, 2013), physical, psychological, and social needs of children (DeKnop & DeMartelaer, 2001, as cited in Erdal, 2018), techniques for motivating children (Curran et al., 2014), and how to teach life skills (Camiré, 2014; Chalip & Hutchinson, 2017). Instead, coaches are generally just left to figure it out independently, especially if they go straight into a head coach role.

Poor coaching behaviors and negative rapport can lead to increased levels of anxiety, difficulties concentrating, and worry (Baker et al., 2000) and athlete dropout (Witt & Dangi, 2018). Athletes "deserve educated coaches that create positive, mastery climates and can develop athletes skill and character" (Lauer & Dieffenbach, 2013, p. 460), and a number of national organizations agree (e.g., Aspen Institute, Susan Crown Exchange, National Youth Sport Strategy; President's Council on Sports, Fitness, & Nutrition Science Board). In addition to the damaging experience of the young athlete, the potential damages resulting from the coach's lack of qualifications and preparedness expose sport organizations and coaches themselves to increased liability risks.

Liability of the Youth Sport Coach. Injury (Merkel, 2013; Normand et al., 2017), sexual harassment and abuse (see Fasting, 2013), emotional abuse (Kavanagh et al., 2017; Kerr et al., 2019, 2020; McMahon et al., 2020; Stirling & Kerr, 2008a, 2008b), relational abuse (Kerr, 2010), hazing (Kirby & Wintrup, 2002), overtraining (Lloyd et al., 2014), medical mismanagement (Tscholl et al., 2009), athlete burnout, athlete dropout, unrealized talent potential (Fraser-Thomas et al., 2008), eating disorders and other various mental health issues,

and death are just some of the outcomes from coaches who provide inappropriate guidance or fail to create safe environments for physical activity and training (Bergeron et al., 2015). However, it has long been noted that there is "a legal and moral responsibility to provide qualified individuals to coach young people" (Conn & Razor, 1989, p. 161). So, what can be done?

Without a standard to compare coaches' knowledge, preparedness, or competency to (Trudel et al., 2013a), there is "little to no guarantee" that most youth sport coaches have the necessary knowledge to develop athletes in a safe, healthy, and beneficial way (Kerr & Stirling, 2015, p. 30). For example, if only considering basic health safety courses, which currently tends to be the most common requirement for coaches (Kerr & Stirling, 2015; "National Coaching Report," in progress), only 19% of youth coaches surveyed were formally trained in basic first aid, and only 46% held cardiopulmonary resuscitation certifications (Albrecht & Strand, 2010). Another study showed that 85% of youth sport coaches do not have adequate basic first aid or safety knowledge (McLeod et al., 2008). When considering high school coaches, nearly 25% did not even know if their school had an Emergency Action Plan (EAP), and only 7.2% had adopted all of the recommended EAP components (Dierickx et al., 2021). Thus, those responsible for supporting athletes and ensuring that sport plays a critical role in youth development are typically un- or underqualified (Poucher et al., 2020).

Fortunately, education helps facilitate policy change (Casa et al., 2013). Coach education increases sport-related injury prevention and response knowledge relative to concussions (Covassin et al., 2012) and asthma and cardiac arrest (Strand et al., 2019). It also helps to decrease injuries. For example, injuries decreased by 50% over three years on teams where coaches had more formal education, training, and qualifications (Schulz et al., 2004). Similarly,

when American Youth Football League coaches participated in their educational program, practices had fewer injuries (Kerr, Yeargin, Valovich Mcleod, Nittoli, et al., 2015; Kerr, Yeargin, Valovich Mcleod, Mensch, et al., 2015).

Although basic health safety knowledge is not the only competency coaches should possess, developing this and other competencies should be a priority given the apparent benefits of coach education (Aspen Institute, 2021; Bergeron et al., 2015) especially since coaches are not guaranteed to progress in their professional development (Schempp et al., 2006). Vealey & Chase (2016) recommend a required minimal age group-specific certification for every youth sports coach. Similarly, both Chalip & Hutchinson (2017) and the Aspen Institute's Project Play recommend the need to 'Train All Coaches' (2021). However, implementing a common coaching core is challenging in the United States (Van Mullem & Mathias, 2021).

Mesosystem: Understanding how Organizations Prepare Youth Sport Coaches

"The United States is the only major nation in the world without a national coaching education and certification system" (Read, 2003, p. 37). Since there are no universal or standardized requirements to coach (Bodey et al., 2008), it is up to governing bodies and sport organizations to determine needs and requirements (Dawson & Phillips, 2013). Therefore, the variance in coaching education ranges from zero requirements to a multi-level system of coach development. Coaching requirements vary by athlete and coaching context, sport, organization, and state (Fawver et al., 2020; "National Coaching Report," in progress).

While it could be easy to blame coaches, it is essential to acknowledge that the sports system has historically not valued or invested in coach education or development, much less high-quality coach education programs (Eather et al., 2021). Furthermore, the broader sport industry has not historically valued sports coaching education when it comes to things like hiring

considerations. Therefore, a cultural shift in society's perception and expectations of sports coaches is needed (Vealey & Chase, 2016).

Rather than educate, train, or develop individuals for coaching roles, organizations instead seem to target prior athletes to be coaches (Blackett et al., 2018; Chroni et al., 2021; Rynne & Mallett, 2012). One's athlete experience, especially in an elite context, often tends to be considered like an apprenticeship (Sage, 1989), with the assumption that one's athletic experience doubles as coach development (Blackett et al., 2018; Cushion et al., 2003; Lara-Bercial & Mallett, 2016; Rynne, 2014). While coaches will have spent thousands of hours as an athlete socialized to coaching through their own coaches (Gilbert, Lichtenwaldt, et al., 2009; Lemyre et al., 2007) and view personal athletic experiences as central to their own coach development (Fawver et al., 2020; Rynne & Mallett, 2012; Wright et al., 2007), the importance of these experiences declines as their career progresses (Crickard et al., 2020) once they realize that "the athlete experience rarely provides a complete or accurate picture of the responsibilities and challenges that coaches face" (Dieffenbach et al., 2010, p. 86).

Yet, many organizations will still help such athletes get "fast-tracked" through coach education programs and formal accreditations without a solid coaching foundation (Blackett et al., 2017; Crickard et al., 2020; Rynne, 2014) despite needing professional support (Chroni & Dieffenbach, 2020). Even though athlete experience was not necessary for high-performance coaches (Erickson et al., 2007; Schempp et al., 2010), one's athlete pedigree still seems to exist as a key factor in the hiring of head coaches (Carter & Bloom, 2009). In contrast, the physical education perspective would argue that it is the teaching experience, not the athlete experience, that is most important (Solmon, 2021).

Unfortunately, historically, many coach education programs have not focused on the

coach as a teacher. Within these programs there is little focus on pedagogy (Cassidy, Mallett, et al., 2008), learning (e.g., Cassidy et al., 2006), the learner and their stage of coach development (Walsh & Carson, 2019), or integration of reflective practice (e.g., Knowles et al., 2006). Instead, many sport organizations offer watered-down or overly simplified guidelines and recommendations that seem to advocate for a singular coaching formula that is decontextualized and disconnected from practice and real-world complexities (Cronin & Lowes, 2016; Cushion et al., 2010). These programs are typically delivered over short periods or in one session through a 'one-size-fits-all' or 'top down' approach (Gilbert, Gallimore, et al., 2009; Vargas-Tonsing, 2007). This approach is basically useless for those looking to impact long-term development (Nash & Taylor, 2021), and a one-time clinic is not enough to prepare new coaches (Côté & Gilbert, 2009; Wiersma & Sherman, 2005). There are also issues with courses not being delivered as designed or the effectiveness of the course entirely dependent on the individual delivering the content (Walsh & Carson, 2019).

While others have argued that despite such limitations, formal coach education helps stimulate future learning (Callary et al., 2012), sporting organizations still need to provide appropriate support (Nash & Taylor, 2021). Coaching excellence is developed over time, not overnight (Nelson et al., 2006; Werthner & Trudel, 2006). While excellence takes time, the role of coach development is "to accelerate the learning process" (Lyle, 2010, p. 37).

Although formal learning opportunities are not the only way to learn, developing continuing learning and professional development opportunities to support youth sport coaches is important in coach retention and success (Eather et al., 2021; Pelikhova, 2014). Yet, coaches spend very little, if any time, in formal continuing education (Gilbert et al., 2006; Gilbert, Lichtenwaldt, et al., 2009). The coach education systems, when they do exist, do not tend to be

educationally grounded, and generally they are not staffed with individuals who understand the learner or the context. Although there is room for improvement to the systems, it helps to first understand the types of programs and the perceptions of the coach as they currently stand.

Types of Program Offerings. Within the United States, the National Committee for Accreditation of Coaching Education (NCACE) "grants accreditation to educational programs that meet or exceed the requirements outlined in the NCACE Guidelines for Accreditation of Coaching Education" (NCACE, 2021). Currently, these requirements consider the program's mission, goals, and learning outcomes, the instructors or developers, the systematic management of the program, the program's instructional design and content, and how the program evaluates its effectiveness (NCACE, 2021). Relative to content, it also looks to ensure that the curriculum aligns with the National Standards for Sport Coaches (Gano-Overway, Thompson, et al., 2020) and assesses competency in all 42 standards. Unfortunately, there are very few programs that have been accredited. Although only a couple dozen programs are accredited, hundreds of programs, trainings, and courses exist for coaches in the United States that are not accredited.

While many pieces of coach education are universal, some are contextual. However, thus far, there really hasn't been a strong taxonomy to try and understand the variety of programs available across all aspects (Driska, 2019). According to Lefebvre and colleagues (2016), coach development programs can be classified by: a) domain of focus, b) coaching context, c) organizational context, and d) mode of delivery.

Domain of Focus. Domain of focus refers to the "coaching knowledge, competency, or behavior targeted" (Lefebvre et al., 2016, p. 892). Despite the work by NCACE, since there is no national coaching certification, topics that should be addressed as part of coach education and development have been up for debate. One broad way to consider this is the program's

relationship to sources of coaching knowledge (i.e., professional, interpersonal, and intrapersonal; Côté & Gilbert, 2009).

Professional knowledge describes the sport-specific and sport science content knowledge, pedagogical knowledge, and pedagogical content knowledge needed by coaches (Abraham et al., 2006). Professional knowledge, specifically sport-specific content knowledge, has generally been the area of emphasis for most coach education programs (Trudel & Gilbert, 2006). Yet, by itself is insufficient in creating coaching effectiveness; without context or reflection, professional knowledge lacks relevance (Côté & Gilbert, 2009). So, it appears that coach development programs that also focus on interpersonal and intrapersonal knowledge are increasing in number (Da Silva et al., 2020; Evans et al., 2015). Interpersonal knowledge is the knowledge needed by coaches for effective interpersonal communication and relationships with various stakeholders and intrapersonal knowledge refers to the coaches ability to understand themself, and is largely based in their ability to reflect, review, and make changes to their future coaching practices (Côté & Gilbert, 2009).

Coaching Context. Based on the categorization work by Lefebvre and colleagues (2016), the coaching context would be considered relative to participation versus performance coaches and the athlete's age. When considering that matrix, a few specific contexts emerge: a) participation coach for children, b) participation coach for adolescents and adults, c) performance coach for young adolescents, and d) performance coach for older adolescents. In participation-based sport, the emphasis is more on fun, physical literacy, and long-term participation, while performance-based sport is more about competition (Gano-Overway, Van Mullem, et al., 2020).

One area of interest to note is that the coach's level of professional development is not considered or accounted for in these coaching context categorizations. Yet, coaches also develop

at different rates, depending on their interest in learning and relative to the appropriateness of learning opportunities available. So, it is suggested that to be most effective, professional development opportunities should be explicitly designed for the individual's professional career stage (Ha et al., 2008).

Organizational Context. Organizational context can be divided into formal and nonformal programs (Lefebvre et al., 2016). Formal programs include those associated with an educational institution or national accreditation from a sport governing body. Nonformal programs include those offered as part of a research, community, or private initiative.

Educational Curriculum. At last count, 308 higher education institutes (HEIs) offered coach education programs, most were for minors in coaching. Of these programs, only 4% were NCACE accredited, only 45% were aligned with the National Standards of Sport Coaches, and only 9% were aligned with the International Sport Coaching Framework (Gano-Overway & Dieffenbach, 2019). Furthermore, despite the NCACE's work towards standardization, variability remains high across collegiate curricula (Fawver et al., 2020). This includes the differing curricula and degrees being housed in different colleges, departments, and programs, with variations in course offerings and the number of courses and types of course requirements. For example, Brigham Young University only requires three coaching courses, whereas West Virginia University requires ten courses (Fawver et al., 2020). Interestingly, about a third of the programs did not offer a practicum (Fawver et al., 2020). This is concerning given that so much of coaching success relies on one's ability to apply knowledge (Dieffenbach et al., 2011). Hence, to be relevant and practical, HEIs need to pursue partnerships with local scholastic and community sport organizations in order to offer more hands-on training and practical application where students can connect research to practice (Gould, 2016; Van Mullem & Mathias, 2021).

National Governing Bodies. Within the United States, nearly each governing body has their own coach education program. These programs are offered in a variety of modalities, require different amounts of time to complete, and have different continuing education requirements. Some of these programs have been formally evaluated (e.g., Driska, 2018) but the majority have not. Driska (2019) began some work in this area and the forthcoming National Coaching Report (in progress) hopes to shine additional light on this organizational context.

Research Initiative. In terms of coach education and development programs associated with research initiatives, these most commonly seem to be associated with positive youth development and sport psychology-based coaching interventions and workshops (e.g., Barnett et al., 1992; Zakrajsek & Zizzi, 2008). However, the concern with these types of initiatives is generally that they are typically singular in-person workshops. Yet, as previously mentioned coach development occurs over time.

Community Sport Organizations. Despite attempts by the National Sport Census (in progress) and National Coaching Report (in progress) projects, it is currently unknown how many community sport organizations are offering their own coach education. For a number of national organizations, such as Girls on the Run and Up to Us, it is a requirement. According to the website for the National Alliance for Youth Sports Coach Training and Mentorship program (previously the National Youth Sports Coaches Association), NAYS offers either online or in-person training at 3,000 different community locations (2021). NAYS partners tend to include community organizations like local parks and recreation departments, Police Athletic Leagues, Boys and Girls Clubs, and YMCAs. Thus, this type of training and education seems to be more common for the recreational context.

Others, like Human Kinetics (formerly ASEP) and the National Federation of High

Schools (NFHS), which are used by most state high school associations, tend to rely on online-only modules with a multiple-choice test at the end. Yet, there are no published evaluations of effectiveness (Lauer & Dieffenbach, 2013). While Human Kinetics and the NFHS offers most of the training to scholastic-based coaches, some states have developed and created their own training programs.

Scholastic-based. States like New York, Texas, and West Virginia require coaches to complete coach education training programs specific to their state ("National Coaching Report," in progress). Yet, there are also no published studies or evaluations of program outcomes or effectiveness that are publicly available for these programs. Michigan uses a slightly different set-up in which they partner with the Institute for the Study of Youth Sports at Michigan State University who runs some of their training (ISYS, 2021).

Private Providers. The private coach education and development business model has also grown recently. Providers of these opportunities range from a single individual to an entire business model, and the products are offered directly to coaches as essentially stand-alone products (Stoszkowski et al., 2021). Yet, due to the lack of regulations related to coaching, in the coach education industry, much like in the youth sports industry, it is not uncommon for marketing departments to mislead consumers (Pennycook et al., 2015) as the company seeks simply to turn a profit. However, this approach of using coach education as a revenue stream has not solely been limited to private providers. Many types of programs may often rely on that approach instead of creating a quality program guided by appropriate learning theories and teaching practices that make a meaningful difference. This approach has not helped to raise the quality of coach education or the standards of the profession.

Mode of Coach Education Delivery. Mode of delivery has also evolved, especially

recently due to the need to pivot during the COVID-19 pandemic. Lefebvre and colleagues (2016) conceptualized these categories as divided into three different areas: a) online, b) individualized, and c) collective. Online and individualized types were conducted in one-on-one settings, while the collective category was conducted in a group setting. However, some programs will use a blended or hybrid mode of delivery in which multiple delivery modalities are used. Furthermore, Driska (2019) noted the additional inclusion of correspondence or exam courses. Thus, it may make more sense to consider modality by three different aspects: modality (online, in-person, hybrid, or correspondence/exam), group size (individual, group, or hybrid), and synchronization (synchronous or asynchronous). Regardless of the delivery approach, it is difficult, if not impossible, to try and provide a course that all coaches will find pleasing and useful (Trudel et al., 2010).

Coaches' Perceptions of Coach Education. Like athletes, coach learners are not one size fits all (Van Woezik et al., 2021). Different coaches will interpret situations differently depending on how they have been socialized to sport and coaching (Cushion et al., 2003; Stodter & Cushion, 2014, 2017). As a result, the information delivered is often perceived as neither relevant nor practical (Armour et al., 2016; Nelson & Cushion, 2006). However, this is also not surprising given the fact that is generally the perception of the beginner coach for which most coach education and training programs are typically directed.

In general, coaches tend to prefer informal, self-directed learning (Gilbert, Lichtenwaldt, et al., 2009; Leeder et al., 2021; Stoszkowski & Collins, 2016) that is specific, personal, and engaging. They enjoy learning with others (Cushion et al., 2003; Irwin et al., 2004; Reade et al., 2008; Wright et al., 2007), like interacting with coaches, observing others, and having a mentor (Nelson et al., 2013; Van Woezik et al., 2021), and experiential learning (Van Woezik et al.,

2021). This is not particularly surprising, given that many of these findings align with the principles from adult learning theories. They also tended to rely on prior athletic and coaching experiences (Lemyre et al., 2007) and did not prioritize formal coach education opportunities if they felt they could get enough information another way (Van Woezik et al., 2021). Although, it is also important to note that one's learning style or preferences do not necessarily represent the only or best way to prepare them for the coaching role.

However, additional contextual considerations to note include that traditional formal coach education has ranged from toxic and disrespectful to unwelcoming for female coaches (Carson et al., 2021; Lewis et al., 2017; Lewis et al., 2018; Lewis et al., 2020; Norman et al., 2018). The specific sport itself may also impact the number of opportunities available to participate in formal education. For example, many more basketball coaching clinics are available than cross-country coaching clinics (Gilbert, Lichtenwaldt, et al., 2009), and in general, the development of coaches of less popular sports, especially those in the Paralympic or adaptive sport categories is limited (Cregan et al., 2007; Duarte et al., 2020; Fairhurst et al., 2017; Tawse et al., 2012). Furthermore, reported barriers to coach learning and certification tend to be cost, time commitment, inaccessible evaluators, the tediousness or complexity and confusion of the process (Callary et al., 2011a; Gurgis et al., 2020; Winchester et al., 2013), and a lack of collegiality (Lemyre et al., 2007; North, 2010).

However, some studies considering perceptions of coach education demonstrate support for formal learning in coach education (Cushion et al., 2010; Erickson et al., 2008) and coach education requirements. According to Bolter, Petranek, & Dorsch (2018), the majority of coaches, parents, and administrators agreed that coaching education should be required, with coaches "overwhelmingly [supporting] coaching education" (Wiersma & Sherman, 2005, p.

336). Of the youth sport coaches surveyed, 97% felt continuing education was important, and 87% supported that continuing education should be mandatory (Vargas-Tonsing, 2007). Additionally, coaches trained by a coaching education program had significantly higher efficacy scores than control coaches (Malete & Feltz, 2000); similar results were reported by coaches who claimed to have more training in sport psychology or exposure to a sport psychology consultant (Villalon & Martin, 2020). Upon completion, coaches reported feeling a sense of pride, accomplishment, and as though the program improved their knowledge (Misener & Danylchuk, 2009). Coaches also perceived formal coach education as important in the first few years of coaching (Stone et al., 2020; Walker et al., 2018). Therefore, the stage of development and coaching context should be considered in order to meet coaches' individual needs (Rodrigue et al., 2016; Schempp et al., 2006).

However, coach needs and aspirations are usually neglected in course design (Nash & Collins, 2006). This approach is strange considering that coach education would not exist without the coaching field. If the learner's needs are being neglected, what are the aspects guiding coach education and development?

Exosystem: Understanding the Theories and Practices Guiding Coach Education and Development

To start, it is essential to highlight that just because something is taught does not necessarily mean that is what is learned (Moon, 2007). Coaches' learning is complex (Paquette & Trudel, 2018), occurring over a lifetime (McCleery et al., 2021), and the current coach education system is not optimal to support that (Fawver et al., 2020). Historically, formal coach education has failed to incorporate research-informed youth sport coaching practices (De Bosscher et al., 2009) and does not appear to impact coaches future learning or coaching

practices meaningfully (e.g., Piggott, 2012; Stodter & Cushion, 2017).

However, at the same time, it is important to note that much of the research on coaches, coaching, and coaching science has been researcher-centered (North et al., 2020). While it generally concludes that coaching practices are poor (North et al., 2020), these may not necessarily be fair assessments given the real-world complexities of coaching (North, 2017). Due to the evolution of the coaching role and coaching processes, additional attention has been given to considering how coaches learn (Cushion et al., 2010; Stodter & Cushion, 2017). While learning theories are not a new concept, they are relatively new when considering the coaching discipline (e.g., Callary et al., 2011b, 2012; Cushion et al., 2003; Gearity et al., 2013; Werthner & Trudel, 2009). Concerningly, Lyle (2006) reported that many coach educators were naive to coaching frameworks.

Learning can occur in many ways (see Côté, 2006; Jarvis, 2006; Moon, 2013). Coaches have reported multiple sources from which they learn (Erickson et al., 2008; Van Woezik et al., 2021), and these vary by individual (Lemyre et al., 2007; Werthner & Trudel, 2006). While coaches' learning preferences were discussed previously, not all learning is educational (Jarvis, 2004), and unfortunately, when left to their own devices, many times coaches have been more like "magpies," ineffectively attempting to copy others' "shiny" methods and successful practices without understanding how it relates to their own context (Abraham et al., 2006, p. 562). Given this disconnect, it may be helpful to consider the differences between surface learning and deep learning (see Trudel et al., 2013b).

Furthermore, Gilbert and Trudel (2006) posed two possibilities of how coaches learn; the industry has been more critical of one (Cope et al., 2021; Leeder et al., 2021) and more accepting of the other. The one which has become more commonly accepted rejects the concept of coaches

as 'empty vessels' to be filled (Chesterfield et al., 2010). Instead, it acknowledges the prior socialization and learning experiences of coaches as a "lens through which new [coaching] knowledge is viewed" (Cushion et al., 2010, p. 69). Furthermore, while the term 'coach education' can be seen as limiting in some instances, coach development can be considered a bit more inclusive, as coach development accounts for the learning across various learning situations (Trudel et al., 2010).

Learning Situations. A learning situation is the "learner's perception of the context and unique to the learner" (Moon, 2001, p. 48 as cited in Trudel et al., 2013). Learning situations can be categorized as informal, nonformal, and formal, where most learning occurs in informal situations (Brookfield, 1986), or mediated, unmediated, and internal situations (Moon, 2004). In a mediated learning situation, "the learner does not select the material to be taught" (Trudel et al., 2013b, p. 380). This is typically the learning situation that is thought of when one thinks of traditional coach education. On the other hand, there are unmediated and internal situations. In unmediated learning situations coaches can learn the sport subculture or seek out information to solve their own questions (Trudel et al., 2013b). Internal learning situations are informed by one's earlier socialization, experiences in other settings, and the learner's perspective of knowledge and learning (Moon, 2004). Moon (2006) also refers to this as "cognitive housekeeping" (p. 27). Reflection plays a huge role in the learning and development process here (Knowles et al., 2006) and is one of the notable differences between competent and proficient coaches (Schempp et al., 2006).

When considering these learning situations it is important to note the large role occupational socialization plays in the coaches' learning process (see Occupational Socialization Theory; Lawson, 1986). In fact, acculturation socialization tends to be one of the most difficult

subjective warrants to break when it comes to understanding the coaching role. Furthermore, organizational socialization tends to be one of the biggest hindrances to changing the current non-developmentally focused, competition-driven youth sport culture (personal communication, 2021).

Learning Contexts. Learning contexts are the "setting in which the learning occurs" (Moon, 2001, p. 48, as cited in Trudel et al., 2013). This includes things like the learning environment, peers, and the learning facilitator if there is one. The facilitator especially can influence whether the coach has a positive or negative experience (Paquette & Trudel, 2018).

Assessment of Learning Outcomes. Assessment tends to be another area of contention. Although assessment is considered an essential part of the professionalization of coaching argument, there appears to be room for improvement in the coach education space (Chesterfield et al., 2010; Jones et al., 2016; Nelson et al., 2013). Additional issues involve the standards of assessment usually failing to test competency or knowledge retention (Reade, 2010) or only assessing procedural knowledge but not declarative knowledge or vis-versa (Abraham & Collins, 1998; Abraham et al., 1997). Programs should also undergo systematic program evaluations (Turnnidge & Côté, 2017).

Best Practices. Given the increasing knowledge relative to coach learning and coaching processes and the increases in coaches' expected roles and responsibilities, coach development programs are evolving. This evolution is an attempt to improve programming and thus improve coaching behaviors and practices (Lefebvre et al., 2016; Turnnidge & Côté, 2017), especially since instructor-centered approaches have been ineffective in coach education programs (Cassidy et al., 2006; Chesterfield et al., 2010; Ciampolini et al., 2020; Cushion et al., 2003; Nelson et al., 2013; Trudel & Gilbert, 2006).

To better account for coaching complexities, these programs have been moving towards more constructivist approaches (Bertram et al., 2017; Culver, Kraft, et al., 2019; Jones & Turner, 2006; Paquette & Trudel, 2018). Therefore, best practices for designing mediated coach learning opportunities currently include making sure those opportunities are specific to coaching contexts, based in theory, and incorporate more than just professional knowledge (Turnnidge & Côté, 2017). From a professional development perspective, they should also be social, based in professional practices, and spread out over time (Desimone, 2011).

Additionally, in recent years there has also been a recommended push towards adult learning-informed programs that have an increased focus on the "how-to" coaching skills rather than the "what to" coaching skills which is the approach that has been used historically (Cushion et al., 2010). Although some (Cushion et al., 2021; Williams & Bush, 2019) would argue that shifting focus to these aspects as the panacea to formal coach education issues likely oversimplifies the coach learning process, it is important to note that while each learning theory "adds a little bit more to our understanding of human life and learning… we do not and cannot know everything about it" (Jarvis, 2006, p. 199).

Furthermore, considerations regarding the amount of material to cover, the format of assessment, creating clear connections in the provided material, ensuring coaches at differing levels of professional development are grouped by developmentally appropriate coaching context, and that the opportunity is led by an appropriate messenger or facilitator should be taken into account (Trudel et al., 2013a). A 'train the trainer' model is also recommended (Whitley et al., 2021). If these practices are in fact implemented across coach development systems, it starts to make a much stronger case for the professionalization of sport coaching.

Macrosystem: Professionalization of Sport Coaching

Coaching, especially in youth sports, is a growing industry (Stoszkowski et al., 2021). Increasingly, there is a recognition around the world that a professional workforce of coaches is needed to assist in providing beneficial health and social outcomes for athletes (Trudel et al., 2020). Although coaches advocate that coaching is already a profession (Villalon et al., in progress), there are substantial weaknesses in coaching education, development, and quality and standardization of coaching practices (Fawver et al., 2020; Kerr & Stirling, 2015). However, both domestic and international organizations have worked hard to develop coaching standards and guidelines for the evolved coaching role (see International Council for Coaching Excellence, the Association of Summer Olympic Federations, SHAPE America, and United States Olympic Committee). Furthermore, in the United States, various leadership organizations such as Project Play, International Council for Coaching Excellence, the Knight Commission, National Collegiate Athletic Association, and the United States Center for Coaching Excellence are leading the professionalization push by advocating for improved athlete development, safer sports experiences, and protecting the public interest.

Broadly, disciplines looking to professionalize fall into three categories: structural-functional, process, and power approaches (see Lawson, 1984). More specific to coaching, the professionalizing of the coaching movement is due to a) increased financial resources towards sports and physical activities and due to national sporting success/failure and rising health costs being of concern, and politicians want to ensure the funding is legitimate, b) higher education institutes capitalizing on the consumer-driven nature of sport, exercise, and physical activity by adding an additional component to kinesiology and physical education curriculum, c) the overall commercialization of sport, and d) the broadening sense of how ‘coaching’ is being used in society outside the world of sport (Malcolm et al., 2014). As other professions have experienced,

coaching also faces resistance to professionalization and change (Taylor & Garratt, 2010). However, the discipline is further complicated by the fact that coaching differs from most other professional contexts (Lyle, 2018), especially when considering the “volunteer army” workforce, one exception being volunteer firefighters (Dieffenbach, 2019a). Unlike many other sports industry disciplines working towards professionalization, like athletic training (see Diakogeorgiou et al., 2021), sport psychology (see Portenga et al., 2017; Silva, 1989; Winter & Collins, 2016), and strength & conditioning coaches (see Shurley et al., 2019), sport coaching lags (Duffy et al., 2011; North et al., 2018). So, what exactly is a profession, and how does a discipline become a profession?

Greenwood (1957) described a profession as “an organized group which is constantly interacting with the society that forms its matrix, which performs its social functions through a network of formal and informal relationships, and which creates its own subculture requiring adjustments to it as a prerequisite for career success” (p. 45). According to Kerr & Stirling (2015), to be considered a profession, a discipline must undergo the professionalizing process, which would require a) entry-to-practice requirements, (b) defined scope of practice, (c) expected conduct, and (d) professional development requirements. Although there is no specific speed, or standardized or linear pathway for the professionalization of a discipline (CoachForce21, 2021), Hargreaves (2000) outlines four phases that the professionalizing of teaching has followed in most countries. This model is used due to the similarities between coaching and teaching, and the role of coach as teacher (Jones, 2006). These phases include the pre-professional age, the age of the autonomous professional, the age of the collegial professional, and the post-professional (Hargreaves, 2000).

The pre-professional age is when “teaching was seen as managerially demanding but

technically simple, its principles and parameters were treated as unquestioned commonsense" (p. 156). Teachers learned through an apprenticeship; yet, most of that apprenticeship occurred through the time one spent observing one's teachers as a student (Lortie, 1975). This was then coupled with a teaching practice period or practicum as part of a broader teacher preparation program (Hargreaves, 1994). As the teacher preparation and education programs gained status and acceptance, stronger philosophical and theoretical foundations were developed and made available (Hargreaves, 2000). However, novice teachers claimed that only the practicum and hands-on experience was valuable (Hanson & Herrington, 1976). After completing their training, teachers were very isolated and had complete autonomy. Therefore, any changes to teaching practices came by trial and error as feedback evaluations by peers or supervisors were no longer received as they had been during apprenticeship or preparation programs (Hargreaves, 2000). This confined teachers to "restricted professionalism" (Hoyle, 1974, as cited in Hargreaves, 2000).

However, such singular autonomy in the curriculum and pedagogy is challenged in the age of the autonomous professional (Hargreaves, 2000). Apprenticeships were replaced by formal training, becoming part of university degree and accreditation programs (Hargreaves, 2000) due to the associated theory base gaining value and importance within the discipline and society (Greenwood, 1957). Innovation in curricular approaches and pedagogical theories meant "how teachers taught was no longer beyond question" (Hargreaves, 2000, p. 159). Although workshops and courses for teachers were developed and delivered by experts to update those already in the teaching profession, upon leaving the workshops, those teachers remained isolated, unable to implement the practices they had learned, and with no one to help support their efforts or development (Little, 1993). As a result, few changes were made, and those interested in

making adjustments felt frustrated and unsupported.

The age of the collegial professional is primarily brought about due to rapidly expanding roles and responsibilities (see Hargreaves, 2000). Therefore, the isolation of the prior two stages decreased as teachers began pooling their resources and building collaborative professional networks to try and manage teaching's role expansion and diffusion, making the teacher's scope of practice confusing (Hargreaves, 2000). However, if such collegiality feels exacted or required from a top-down approach, teachers will resist it (Grimmett & Crehan, 1992; Hargreaves, 1994). Therefore, collaborative discussion- and action-based professional development supported by administration and embedded within the teachers' professional learning community, rather than delivered by an outside expert, tends to be most effective (Little, 1993). However, if such professional development returns to the individualistic nature of the pre-professional phase without ties back to theory, "this strategy will de-professionalize the knowledge base of teaching and dull the profession's critical edge" (Hargreaves, 2000, p. 166).

While the teaching profession is still evolving, the fourth stage is considered the post-professional stage. This stage breeds uncertainty (Hargreaves, 2000). Although the post-professional stage is more flexible and inclusive than prior stages, the result of this and other postmodern developments have been "assaults on professionalism" across numerous disciplines (Hargreaves, 2000, p. 168). Public institutions have instead become a business driven by market principles, and teachers are perceived as an obstacle to the commercialization process (Hargreaves, 2000). As a result, the curriculum has been centralized and standardized for testing regimens, largely removing teacher's autonomy, and evaluating them based on student performance (Hargreaves, 2000). While the illusion of effectiveness may comfort decision-makers micromanaging teachers and removing their autonomy is contrary to the concept of

professionalism (Hargreaves, 2000). As a result, the effect is returning to the amateur apprenticeship system (Hargreaves, 2000).

Keeping this professionalization system of teaching in mind, many similarities can be made to the evolution of sports coaching as it is an "emerging profession" in the United States (Dieffenbach, 2019b, p. 152). Yet, at a minimum, to qualify as a profession, formal education and continuing professional development would be required (Kerr & Stirling, 2015), which most coaching positions lack. Given the phases of professionalization as described by Hargreaves (2000), arguably, coaching is teetering between the pre-professional stage and the stage of the autonomous professional. So, unless fundamental changes occur to coaches' education, training, and development, sports coaching will not continue along the professionalization process, "and instead the old system where coaches succeed through luck will continue" (Nash & Collins, 2006, p. 474).

Progress in this area requires long-term coordination and planning of step-by-step, systems-view-informed processes (Lara-Bercial et al., 2020). Furthermore, there has to be additional support in this process if there is any progress on this front. Other professions have seen this support evolve into additional support roles in the form of coaching roles (see executive and teacher coaching). Yet when we are talking about coaches themselves, who coaches the coaches? The following section discusses the evolution of coaching education and development and how that support role for coaches has changed over time.

Chronosystem: Evolution of Coaching Education and Development

Compared to sport which has been around for thousands of years, systematic coaching only became established in the early 1800s (Day, 2013). Perceived as a craft that was made up of trade secrets and tacit knowledge, coaching knowledge stemmed from that which an individual

learned over their time as an athlete or from information passed down from their coach, family, or as part of an apprenticeship model (Taylor & Garratt, 2013; Walsh & Carson, 2019). While this apprenticeship model remains widespread, and coaching is still largely unregulated and coaching education unstandardized when considering the formal education perspective, the histories of educating coaches and physical education teachers in the United States are intertwined.

In 1861, medical professionals and educators taught the first physical education teacher trainees some basic science, teaching, and gymnastics courses over 10 weeks at the Institute for Physical Education (Newman & Miller, 1990). A few decades later, the American Association for the Advancement of Physical Education, the precursor to the professional organization now known as SHAPE, was born. The first state school began their physical education teacher education (PETE) program in 1890 (Hackensmith, 1966, as cited in Newman & Miller, 1990) and were followed by numerous other universities who would develop four-year programs in the following years. However, much like coaching programs in the present day, there was no consistency or standardization across these PETE programs and the professional organization lacked authority (Newman & Miller, 1990).

Nevertheless, an alumnus of one of these programs, Luther Gullick, would go on to declare physical education a new profession and implement his ideas while leading the YMCA Training School, the physical education department for New York City Schools, and the Playground Association of America in the early 1900s (Wiggins, 2013). With the popularity of sport growing, many of these PETE programs began requiring students to take sports classes (Newman & Miller, 1990). Additionally, given the need for teacher-coaches, the University of Illinois, Nebraska, Washington, and Wisconsin introduced four-year athletic coaching degrees

(Hackensmith, 1966, as cited in Newman & Miller, 1990). However, this decision was considered to have negative consequences on the professionalism of physical education, especially since male physical educators were drawn to athletic programs before being fully prepared (Newman & Miller, 1990). However, tensions between coaching and physical education can be traced back to the early 1900s (Fraleigh, 1985, as cited in Greendorfer, 1987). Furthermore, with The Veterans Rehabilitation Act and the Servicemen's Readjustment Act of the 1940s, male physical education teachers increased from 495 in 1945 to 7,548 by 1950 (Newman & Miller, 1990). Additionally, at this same time, the physical education accreditation organization reported that their programs were too coaching-focused (Hackensmith, 1966, as cited in Newman & Miller, 1990) continuing the tension between the disciplines.

It was not until 1960 that there was some standardization in PETE programs, but enrollment in PETE programs had already declined (Solmon, 2021). In attempts to diversify their programs in order for their departments to survive, the 1970s also saw many PETE programs trying to implement coaching programs (Newman & Miller, 1990). However, the coaching landscape had changed, and scholastic sports coaches were no longer required to have physical educator qualifications (Newman & Miller, 1990). So, although there was some formal training relative to coaching in academic settings, the focus was not on training youth sports coaches. Even when individuals were looking for training for scholastic coaching jobs through physical education teacher education departments, coaches trained through such programs reported that their PETE programs did not adequately prepare them to coach (Schoenstedt et al., 2016, as cited in Dieffenbach, 2019).

Marten's founding of the American Coaching Effectiveness Program in 1981 represented the first organized national coaching-specific course to become available in the United States

that was not associated with a college or university. Also, in 1981, the YMCA Youth Sports Training Programs and the National Youth Sports Coaches Association were developed to improve youth sports coaching guidelines and standards through training and certification. Presently, the role of the NSSC falls to SHAPE America. First published in 1995 and revised in 2006 and 2019 (Gano-Overway, Van Mullem, et al., 2020), the standards look to align the "latest scientific research and practical work in coaching" (Dieffenbach & Thompson, 2019, p. 368) and best practices for coach education (Gano-Overway, Thompson, et al., 2020). While highly supported, these standards are arguably underutilized (Van Mullem & Mathias, 2021).

The mid-1990s continued to see a lot of advocacies in the coaching and coach education realm domestically and internationally. The US Coaching Coalition was created with leaders from USOPC, National Collegiate Athletic Association (NCAA), National Federation of State High School Associations (NFHS), SHAPE America, and the National Strength and Conditioning Association (NSCA) to discuss coaching and coach education in the United States and host the National Coaching Conference (NCC) (USCCE, 2021). In 1997 the International Council of Coaching Excellence (ICCE) was created (ICCE, 2021). Initially representing 15 countries, the organization has grown to have a presence in over 50 countries. A few decades later, the United States Center for Coaching Excellence (USCCE) was launched in 2016. The USCCE has since taken on the responsibilities of the National Council for the Accreditation of Coaching Education (NCACE) and hosting the North American Coach Development Summit (USCCE, 2021). The yearly summit offers a professional organization for those working in the coach education and development space, whether as an academic, pracademic, or practitioner.

Present Day - 2020's. Although the role, responsibilities, and expectations of the coaches of today have evolved, the associated amateurism of early coaching history remains

(Taylor & Garratt, 2013). Despite a global evolution regarding the recognition of the specialized knowledge and needs of coaches, the only country which recognizes coaching as a profession by requiring an undergraduate degree is Brazil (Brazil, 1998). Thus, major outstanding questions in the field still include: a) what are best practices, b) what does the research support, c) what should be the standards, and d) who should provide the guidance? (Dieffenbach, 2019a).

Furthermore, with the broader evolution of physical education, and its on-again, off-again focus on sport, to kinesiology with a focus on health, wellness, and physical activity (Anderson & van Emmerik, 2021), while sport and exercise sciences have thrived, educational aspects tend to get overlooked, perceived as having less value than hard science disciplines (Kirk et al., 2006; Solmon, 2021). For example, although the strength and conditioning discipline has already begun down this path of professionalization due to the National Strength and Conditioning Association's leadership (see NSCA, 2021), strength and conditioning degree programs generally emphasize the professional knowledge associated with the foundational and applied sciences but lack other areas like sport pedagogy or holistic athlete development (Côté & Gilbert, 2009; Dieffenbach & Wayda, 2010). Therefore, despite the growing acceptance of the necessity of a strength and conditioning certification within the industry, they still miss a piece of the coaching puzzle.

Yet perhaps this shortfall will be short-lived moving forward. One area that has grown drastically internationally in the last decade to fill this gap is the role of the coach developer (Callary & Gearity, 2019a, 2019b; ICCE, 2013, 2014). A coach developer seeks to assist in coaches' preparation, support, and challenging (ICCE, 2014; McQuade & Nash, 2015) and can be crucial in legitimizing the coaching profession (Stodter & Cushion, 2019). While the United States has been slower to jump on this bandwagon than some other countries (e.g. the United

Kingdom), multiple national governing bodies in the US are now beginning to change how they educate, develop, and support coaches. So, not only is there a need for qualified coaches, but there is also a need for knowledgeable and professional coach educators and developers (ICCE, 2014; McCullick et al., 2005; USCCE, 2021).

Yet, much in the way that the sports system has taken coaches for granted in their ability to develop athletes, little attention has previously been paid to the coach developer as a performer or professional in their own right. The previously published work considering coach developers tends to focus more on those individuals working in high-performance or elite sporting contexts, with little to no regard for the youth sport context. Therefore, given the broader understanding of the youth sports system from both the perspective of the athlete and the coach as previously discussed, and the need to identify and educate coach developers (Newman et al., 2020)**,** it is time to turn the attention to the future of coach education and development. The role of the coach developer has the potential to heavily impact this future.

Socio-ecological Models Summary

The value of an ecological systems approach helps to consider the broader systems at play. While these discussions of the youth sports athlete and the youth sports coach are by no means exhaustive and generally fail to "produce definitive answers," they do help to provide accounts of the complexities that exist (Bronfenbrenner, 2005, p. 119), especially when considering the youth sports environment. This complexity can also be extended to coach development (Edwards et al., 2020).

By thinking about coach development and education more broadly and examining key meso- and macro-structures, it is really about a lack of coach support. All stakeholders need to support coach development for it to be successful. Simply throwing another educational module

at coaches to complete will not address a systematic issue or overcome societal perception or occupational socialization. While coaches' knowledge and expertise are important, there are also broader concerns that influence their roles (Duffy et al., 2013; North et al., 2018; North et al., 2020), and to improve coaching, they all should be addressed (North et al., 2020). According to Fawver and colleagues (2020),

> the U.S. sport industry needs to adopt a conceptualization of coach education as a tool to facilitate the actualization of each athlete's diverse potential in sport and as citizens (e.g., being healthy and physically fit, providing community programs and outreach). More specifically, models such as the Long-Term Athlete Development Model provide specific guidelines for coaches to improve sport experience at all ages, reduce the risk of burnout and injury, and ensure athletes' long-term health and psychological well-being... A long-term development approach would necessitate standardizing a higher minimum of coach education at all levels and shift the focus of U.S. sport culture away from a win-first mentality to lifelong sport participation. Changing the way we teach, evaluate, and value coaching in the United States, as well as increased formalization of the profession, is required to help catalyze such an ideological shift. (p. 245)

Those in a position to take on this enormous task in order to assist in creating such meaningful changes are coach developers (Glen & Lavallee, 2019).

The Coach Developer

'Coach developer' is a relatively new formalized term within the lexicon of sport (ICCE, 2014); at the same time, their roles and responsibilities are not necessarily new. Put simply, coach developers 'coach the coaches' across their coach development journey (Ciampolini et al., 2020; LEADERS, 2019). Aspects of this job have been previously embedded within many other

positions with different titles in different ways (e.g., coach educators, athletic directors, head coaches, etc.), many of which were unformalized.

The formalization and widespread use of the term ‘coach developer’ has primarily been due to the publication of the ICDF (ICCE, 2014) and the programming of the Nippon Sport Science University Coach Developer Academy (Bales et al., 2019). Additional coach developer-termed jobs and roles have been created around the world as a result. Though, there is still great variety in the tasks that one does within such a role.

In the original ICDF, a coach developer is “trained to develop, support and challenge coaches to go on honing and improving their knowledge and skills to provide positive and effective sports experiences for all participants” (ICCE, 2014, p. 8). As coaching and coach education have evolved, the emphasis has also shifted from ‘knowledge transfer’ to ‘learning facilitation’ (Bales et al., 2019). Given the evolution, conversations have been revisiting the coach developer’s definition, roles, and responsibilities (Bales et al., 2019; LEADERS, 2019; USCCE, 2021). The revised role of the coach developer is considered to be “to engage, facilitate, educate and support coaches’ learning and behavioural change through a range of opportunities, and many include leading organisational change in coach education programmes and coaching systems” (Bales et al., 2019, p. xix).

Despite organizations recognizing the evolution of the responsibilities of the coach developer role, not all have decided to adopt the coach developer-specific titles and phrasing within their organizations (see US Soccer who has chosen to retain the term ‘coach educator’). Consequently, job tasks, titles, and descriptions can vary immensely by context and the organization. They also may or may not align with the ICCE’s definition (Bales et al., 2019) or the ICDF (ICCE, 2014). So, with the newness of the coach developer role being defined (ICCE,

2014), continuing to evolve (Bales et al., 2019; LEADERS, 2019; USCCE, 2021), and the lack of standardization across the industry, the objectives of the coach developer are also relatively fluid. The missing foundation makes it difficult to develop training and other learning opportunities, evaluate the position and those fulfilling those roles, and grow the profession across the industry. Hence, there is still much room for progress in coach developers' training, education, and development.

At present, the system that engages the coach developer, much less the youth sports coach developer, is not well understood. Still, the subset of coaching research considering the coach educator and coach developer roles is growing (Callary, 2021b), partly due to the need to help fill the knowledge gap but also because of the increase in third-generation professionals, or professionals explicitly trained in sports coaching or coach development (see Dieffenbach & Wayda, 2010 for further discussion of generations of professionals in academic disciplines). However, the current work focuses on tasks and behaviors for the role and content rather than delivery or qualities for effective coach development (Garner et al., 2021). This appears to mirror much of the coaching research initially done on and about athletes, with the coach as a by-product (Callary, 2021b; Sheehy et al., 2018). To date, the coach development workforce has rarely been perceived as performers worthy of being studied (Watts et al., 2021). Hence, more research is needed to understand the specific roles and objectives of those roles and the training necessary for these individuals to meet those objectives effectively.

Coach Developer Training

The ICDF recommends potential coach developers should have “significant and successful coaching experience” with any additional skills or knowledge being “desirable” (ICCE, 2014, p. 27). So, historically, many coach educators and developers have been promoted

to coach developer positions from coaching roles (ICCE, 2014). However, despite coaching being argued as a teaching role by both academics (Jones, 2006) and coaches themselves (Villalon et al., in progress), many coaches in the United States do not have a background in education ("National Coaching Report," in progress). As a result, coach developers promoted from coaching roles also tend not to have a formal education background ("National Coaching Report," in progress). Instead, they are drawn to the coach developer field due to positive experiences in sport and coaching and a desire to support others (Brasil et al., 2018; ICCE, 2014).

Nevertheless, good intentions can only go so far. Given the influence coach developers have on coaches, coach education, and coach development (much like the influence that teachers have on students and coaches have on athletes), their training is not only important to consider (Culver et al., 2019; Dohme et al., 2019), but also must be appropriate (Glen & Lavallee, 2019). Still, most have not had formal training in how to fulfill their role before doing so (Van Mullem & Mathias, 2021).

Not only is formal training rare, but the content that should be included and how it should be taught are also areas for growth (see ICCE, 2014). For example, relative to content, despite Allen & Shaw's (2009) recommendation for an interdisciplinary perspective that includes education, management, sport science, sociology, and psychology, those fulfilling coach developer roles may be working from a specific disciplinary lens rather than a multidisciplinary one (Callary, 2021a). In terms of how it should be taught, broadly, professional development programs should be purposeful with specific objectives (Guskey, 2002) and grounded in adult learning theories (McCarthy et al., 2021). However, designing and implementing programming to connect theory with practice for adult learners tasked with teaching others to teach has been a

struggle across multiple professions (Darling-Hammond et al., 2005; Kavanagh & Danielson, 2019). Even within the teacher education literature, studies rarely relate findings to teacher learning theories (see Lampert et al., 2013). Thus, the fact that the professional development needs of coach developers have only been explored in a limited fashion (Abraham, 2016) is not particularly surprising when considered within the broader setting. As such, this is still an area for improvement (Callary & Gearity, 2019a).

Abraham (2016) highlights necessary foundational understanding in six areas for the FAYCE: a) context, strategy, and politics, b) the coach (who), c) adult learning and development (how), d) coach curriculum development (what), e) process and practice of coach development, and f) self. Yet, when considering Bloom's Taxonomy (Bloom, 1956), simply understanding may not be enough for coach developers to effectively carry out their roles in supporting quality coaching as knowledge alone does not translate to applied skills, efficacy, or impact. Individuals in this position likely also need to know how to apply, evaluate, and create. Outside of Abraham's (2016) list, what should or should not be included in training for coach developers is 'undefined' and 'underexplored' (Stodter & Cushion, 2019). It is also not known whether any currently offered programs in coach development are effective (Stodter & Cushion, 2019).

Much like coaching education, while some training programs exist (e.g., Nippon Coach Developer Academy and USCCE Coach Developer Academy), systems for educating coach developers are lacking, despite being needed (Newman et al., 2020). This means there is "a major deficiency in the training of coach developers [as] very few (if any) of our academic institutions equip graduates with coach developer skills" (Horgan & Daly, 2015, p. 354). Nonetheless, it is not simply about the deficit in higher education institutions; the industry and consumers (except for a few organizations) have also failed to recognize the need or value in this

area. Yet, the value in training others to help support coaches' needs is critical to promoting coaches' and athletes' success (Rocchi & Pelletier, 2017).

In most organizations, coach education and coach development have not been built upon a foundation of educational or learning theories. Instead, the continuation of the 'I played so I can coach' perspective seen in sports coaches is perpetuated with the 'I played, and I coached so I can coach develop' assumption (Brasil et al., 2018; Cushion et al., 2019). These approaches undervalue the role of the coach developer (Lara-Bercial, 2021) and essentially leave the ongoing development of the professional to chance (Darling-Hammond et al., 2005). Thus, the individual may develop slowly over time or not at all (Witherspoon et al., 2021).

That being the case, sports organizations need to do more to help support training and continuing professional development opportunities for coach developers (Ciampolini et al., 2020). Based on the feedback of an international coach developer training program, noted recommendations for areas of improvement in such programs included a) unstructured informal social time, b) opportunities for practical application with feedback, c) tailoring the program to coach developers state of professional development and their specific role, and d) on-going support when integrating to their environment (Campbell et al., 2021). In recent years, some programs, especially in the UK (Redgate et al., 2020), have been making strides in developing more structured coach developer training programs as they and other European countries embed doctoral students within their sport national governing bodies. However, the skills and opportunities for similar academic coach developer programs in the United States have not grown in the same way.

Like coaches and physical education teachers, coach developers are also influenced by their subjective warrant and prior experiences when it comes to their skills and practices (Culver

et al., 2019; Cushion et al., 2019; Dewar & Lawson, 1984; Leeder et al., 2019; Paquette et al., 2019; Schoenstedt et al., 2016). The familiarity with what they already know or feel comfortable with can impact how they practice (Cushion et al., 2019). Furthermore, several organizations are beginning to realize the value of the educated coach developer and the importance that person-organization fit and onboarding individuals into their organization play when filling these positions (Kiosoglous et al., 2021). Hence, more research is needed to evolve this role and best practices. It is also important to remember that this role is complex, and some coach developers may take on multiple roles.

Roles of the Coach Developer

Coach developers can serve in various roles (Abraham et al., 2013; Bales et al., 2019; Dohme et al., 2019; Horgan & Daly, 2015; McQuade & Nash, 2015; North, 2010). The roles the coach developer will fulfill may depend on the needs of the organization, the skills of the coach developer, and the coaching system and culture of the organization (Bales et al., 2019). Furthermore, the title (e.g., coach developer, coach educator, coach mentor, coaching or athletic director, and coach manager) can look very different depending on what context an individual is working in (Watts et al., 2021).

Within the industry, the various types of coach developers have been described in several different ways, mainly using a top-down approach. The ICDF breaks down levels of coach developers (coach developer, senior coach developer, master coach developer, and national trainer) relative to the organizational or policy level at which these individuals oversee the development of other coaches (ICCE, 2014). Horgan and Daly (2015) instead differentiate between those coach developers who are involved in program development (designers) and those coach developers who are concerned with program implementation (facilitators and evaluators).

Others argue that there are broadly two types of coach developers, the generalist and the specialist. The generalist coach developer has broad knowledge across many different topic areas and reaches out to subject matter experts when needing more in-depth knowledge. In contrast, the specialist understands adult learning theory and a specific content knowledge area relative to coaching or athlete development. The reality of how these types of coach developers function within the broader industry or specific organizations on a day-to-day basis is unknown and warrants further exploration.

Given the variation in the roles, it is likely easiest to break them into more specific areas to discuss. Thus, the roles of the coach developer as they are currently understood could include: a) supporting and mentoring coaches (Bales et al., 2019; Ben-Peretz et al., 2010; Dohme et al., 2019), b) establishing positive and lasting relationships among program attendees (Dohme et al., 2019) and creating somewhat personal relationships with coaches (North, 2010; Rodrigue & Trudel, 2020; Sheehy et al., 2019), c) facilitating learning in formal coach education programs and modeling effective and appropriate coaching approaches in their delivery (Abraham et al., 2013; Bales et al., 2019; McCullick et al., 2005), d) designing, monitoring, and evaluating programs (Bales et al., 2019), e) observing and assessing coaches (Bales et al., 2019), f) providing leadership to the coaching system (Bales et al., 2019), and g) engaging in continuing professional development (Abraham et al., 2013; ICCE, 2014). Much like doctors have certain specialty areas in which they practice, not every coach developer will fulfill every role across the continuum. Each of these areas also requires specific knowledge in specific areas of study to be most effective. Given the little information on the coach developer specifically, the work regarding the medical educator, teacher educator, and specifically the physical education teacher educator (see McEvoy et al., 2015), as well as the newer emergence of teacher coaching

positions in schools and executive coaching within the business world, can help to guide this field (McCullick et al., 2009). Broadly understanding adult learners and adult learning theories will also come into play (ICCE, 2014).

Supporting and Mentoring Coaches. There are numerous ways coach developers can support coaches. Coach developers might take on the role of a one-on-one consultant providing instructional coaching or individualized sessions (e.g., Rodrigue et al., 2019), overseeing a team of coach educators (ICCE, 2014), or providing ongoing support beyond any formal education programs (Newman et al., 2020), such as through sport psychology services (Allen & Shaw, 2009; Sheehy et al., 2019). This may also be referred to as having a coach consultant in some contexts (Lauer et al., 2016).

Coach developers can also work to foster a culture of lifelong learning where coaches support each other's learning during, outside, and after formal programs and sessions (Dohme et al., 2019). How this functions may depend on the hierarchy level within the coach developer system. Thus, this culture facilitation may be limited to within one's organizational context or be much broader and include influencing and impacting a national or international context (see later discussion in 'Providing Leadership').

Despite the history of research that has considered coaches' learning preferences (e.g., Dieffenbach, 2008; Erickson et al., 2008; Van Woezik et al., 2021), this vein of the literature tends to ignore what the coach needs in order to be an effective coach. Thus, when it comes to the coach developer's role in supporting and mentoring coaches, things like facilitating the set-up and organization of a continuing professional development culture within an organization or scheduling opportunities like communities of practice can help enhance and improve the coaches' occupational socialization and learning skills. While athletic directors or other athletic

administrators could fill the coach developer role in this way, most are not or are not doing so effectively (Van Mullem & Mathias, 2021). Many, even if they wanted to do more in coach development, simply do not have the time or resources to do so (personal communication, 2021).

In a slightly different manner, coach developers may also find themselves taking on the role of mentor. For head, master, or senior coaches looking to develop their assistant coaches, this is likely the perspective and approach that they would take. Yet, this is not an easy task as such coach developers in mentorship roles coach while also supporting other coaches' development (Ben-Peretz et al., 2010). Mentors can also exist outside of the head-assistant coach relationship and even in a one-to-one scenario (see Gillham & Van Mullem, 2020).

Building Relationships. With 50% of employee skills outdated in three to five years (Shank & Sitze, 2004), lack of time and money tends to be the most cited reasons for not participating in adult education (Valentine & Darkenwald, 1990). According to Houle (1961), there are three different types of motivation for adult learners: a) those who are extrinsically motivated to achieve a concrete goal or obtain a qualification, b) those who interact socially with a group of other learners, and c) those who are intrinsically motivated due to interest in the subject matter. Since adult learners are more accustomed to making their own decisions, they tend to be more proactive and prefer determining the pace and style of their learning (Housel, 2020). They tend to see themselves as a customer and, as a result, are picky about the opportunities they choose to partake in (Hadfield, 2003). As such, coach developers need to be able to create a safe and inviting learning environment and build relationships with coaches where they establish rapport, connection, and trust (Knowles, 1980). Such an environment should be learner-centered, engaged, application-based, and incorporate reflection and new

knowledge that helps to stretch the learner to grow (see LEARNS framework, Walters et al., 2020). This should occur both inside the classroom and out.

Facilitating Formal Learning Opportunities. Effectively facilitating learning opportunities for coaches is complicated and messy (Walsh & Carson, 2019). Additionally, having coaching content knowledge is different from having pedagogical or andragogical content knowledge, or understanding how to teach it. Therefore, coach developers should have expertise in, and understanding of, learning and learners, professional, interpersonal, and intrapersonal knowledge, and how to develop and manipulate learning environments to achieve learning outcomes (Abraham et al., 2013; Cassidy et al., 2006; ICCE, 2014; Paquette et al., 2019). Some of this may include facilitating working through realistic, contextual coaching challenges and all of the messiness and complexities that entails (Ciampolini et al., 2020). They should also be able to provide and facilitate a range of formal and non-formal learning opportunities across a coach's career, not just in the initial training of coaches, to continue to educate, support, and nurture as part of an ongoing professional development framework for coaches (ICCE, 2014). The book edited by Callary & Gearity (2019b) highlights numerous instructional strategies that coach developers can utilize with students in higher education and organizations and specific ways to be more inclusive in coach development.

The adult learner's experience can promote further learning or turn these adult learners off and away from what is perceived and supposed to be high-quality education. Hence, understanding the adult learner and adult learning theories is critical due to the coach developer's role in facilitating these professional development experiences. When considering the adult learner, it is important to note that there are multiple adult learning theories. However, these

theories tend to "complement and often support each other" (Snyman & van den Berg, 2018, p. 27).

In addition, various models of different stages of learners have been developed over the years to explain adult learning development and stages of professional development (e.g., Schempp et al., 2006). Yet, successfully and effectively impacting learners in a way that leads to paradigm shifts for long-term impact can be challenging (see Occupational Socialization Theory, Lawson, 1986). This is especially true when considering professional development programs where the effective application of concepts by program participants after returning to their contexts tend to fail (Harris & Sass, 2011; Jacob & Lefgren, 2004). Coach education and development do not differ from other disciplines in this regard. Without having adult learning theories as a guide, the coach developer can get lost in their decision-making and theoretical foundation for designing programs.

Although the criticisms of coach education are often also associated with coach educators (Chesterfield et al., 2010; Nash & Sproule, 2012), it is also important to note that sometimes the issues may be out of the coach developer's control (Lyle, 2002; Watts et al., 2021). Instead, there may be more of an issue with the broader coach education or organizational system (Watts, 2020). There could also be an issue of organizational or role fit (Watts, 2020).

Designing, Monitoring, and Evaluating Programs. When designing for adult learners, it is recommended to a) focus on learners and their needs, b) advocate for continuous learning for work and life, c) build learning on and within a real-life context, d) share power in order to empower people and communities, and e) acknowledge that there are many roles to learning (Sanguinetti et al., 2005). It is also essential to consider the teacher, the teaching, the curriculum, and the place in which the learning will occur (Sanguinetti et al., 2005). These designs should

also align with the program's athlete development model and coach needs. Thus, declarative content knowledge relative to sport science, sport-specific techniques, coaches' professional, interpersonal, and intrapersonal knowledge, learning theories, facilitation techniques, curricular and instructional design, assessment, and evaluation, as well as procedural application knowledge is crucial for a position relative to this role (Redgate et al., 2020). Additional specialized coach developer roles include curriculum developers, instructional designers, program assessors, and program evaluators. Unfortunately, there is virtually no information in the literature related to these roles for the coach developer.

Even when extending the concept of program evaluators to research studying coach development programs, these programs may not target specific coaches' contexts (Campbell & Waller, 2020). In addition, historically, they have tended to be very one-sided, with evaluations of the programs stemming largely from coach participants' accounts and disregarding other related stakeholders (Campbell & Waller, 2020). This is an underutilized and perhaps often overlooked part of coach education systems. With many coach education systems created as a revenue stream, evaluating the program for effectiveness is viewed as less of a concern by the organization. As such, coach developers are likely not funded or empowered to evaluate their programs once completed. Yet, given the value of observation and assessment in contributing to behavioral change, this is a crucial area for the field to grow.

Observing and Assessing Coaches. For coach development programs, successful completion of a program may be based on a single assessment, if one is required at all (McCarthy et al., 2021). This assessment may be based on a coaching observation or some type of multiple-choice or written exam (Vangrunderbeek & Ponnet, 2020). These typically occur at the end of a course.

Unlike schoolteachers who tend to be observed by principals, it is much less common that coaches get observed by any supervisor (e.g., coach developer, coaching director, or athletic director) unless they work within an organization that features a coach development system. The role of assessment both within coach education programs and within organizational programs as continuing professional development is arguably an area that has largely been overlooked within the field of coach education and development (McCarthy et al., 2021) with few exceptions (e.g., Coach Behavior Assessment System; Smith et al., 1977). This is a concern from a quality control perspective and an adult learning perspective, given that adults prefer to have clarity of progress towards their goals (Knowles, 1980).

According to McCarthy and colleagues (2021), assessments should be integrated into teaching and learning activities (rather than serving as an end-point), contribute to metacognitive skill development, and be authentic, practical, clear, transparent, challenge-congruent, and collaborative. It is also important that the coach developers be trained to facilitate and conduct the assessments (McCarthy et al., 2021). Coach developers fulfilling roles in observing and assessing coaches first need to know how to do a meaningful observation and make sense of what is learned. Then, they need to know what they need to observe or assess, or what standards or objectives need to be considered. This means they should know what tools are available and appropriate for the context in which they are functioning, how to use them and what they mean. They should also be skilled in discussing the assessment with the coach, providing meaningful and effective feedback, and facilitating conversations about growth, next steps forward, and professional development plans. All of which can also help inform their ability to provide leadership within the organization.

Providing Leadership. One newly discussed role area that has recently seen growth is the role of the coach developer as an agent for change. Often coach developers and educators are forced to engage in micropolitics within organizations (Redgate et al., 2020). One should lead the development of organizational culture and practice what they preach through professional socialization. Furthermore, their ability to provide leadership can help to provide direction and messaging consistency across the organization, and to serve as a conduit from higher tiers of administrators to boots-on-the-ground coaches.

Engaging in Continuing Professional Development. As is hopefully evident, the field of coach education and development is continually evolving. Thus, like other fields and professions, coach developers need to be lifelong learners open to updated information (Ciampolini et al., 2020) and in general, keep up with the field. Without a professional certification or professional board, there are no specifications as to what requirements would be relevant here or accountability if they are not completed, so beyond these basic recommendations, little else is known about the continuing professional development needs of the coach developer (Callary et al., 2020). It appears that there has only been one such article regarding a community of practice approach (Callary et al., 2020) and one article that touches on the benefit of coach developers engaging in group work exercises at a national meeting (Redgate et al., 2020). However, continuing professional development is also usually not known for being the most effective or beneficial. This is not only something that the coach developer field struggles with; calls for increased research and understanding of professional educators in other fields are also common (e.g., MacPhail et al., 2019).

The Reality of Coach Developer Roles

Given the lack of coach developer-specific research, most of what we know is from the coaching research or other train-the-trainer models and is generally from a top-down perspective. Thus, we know relatively little from a bottom-up perspective, or that which involves the coach developers at the ground level. Additionally, historically coach developer-specific research has generally focused on those individuals working in high-performance settings. This can potentially skew the reality of what coach developers do daily, especially at the youth sports level, when they are working to help support volunteer youth sport coaches.

While these roles may seem compartmentalized, as described previously, coach developers may be taking on multiple roles, and sometimes it can get messy. For example, they may find themselves splitting their time amongst multiple jobs rather than solely focused on their coach education and development position. So, not only is the field in evolution, but the lines at which one role starts and the other stops relative to job titles lack clarity (Garner et al., 2021; Watts et al., 2021). It should also be noted that "the [COVID-19] pandemic has changed [coach developers] jobs" (Callary et al., 2020, p. 577). Transitioning to entirely online platforms, focusing on providing care and support for the well-being of coaches and athletes, partnering and helping to support other systems, and putting a greater emphasis on their own professional development are some of the ways the coach developer job has evolved during the pandemic (Callary et al., 2020).

Despite interest in the coach developer profession increasing worldwide ("International Council for Coaching Excellence (ICCE) 13th Global Coach Conference," 2021), the growth has been slower in the United States than in other countries. Presently, full-time coach developer-devoted roles are rare in the United States. Unfortunately, we do not know how many individuals

are currently fulfilling coach developer roles within soccer in the United States due to the lack of prior research in this area and the chaos of the US youth sport structure. However, these positions exist in several organizations, and the field is also growing as there are calls for the coach developer role to be professionalized (Redgate et al., 2020). Although the ICDF (ICCE, 2014) provided a great starting point, as a profession evolves there is a need to reexamine the roles and responsibilities that make up the professional's reality, especially when it comes to specific contexts.

References

Abraham, A. (2016). Task analysis of coach developers: Applications to the FA youth coach educator role. In *Advances in coach education and development* (pp. 73-85). Routledge.

Abraham, A., & Collins, D. (1998). Examining and extending research in coach development. *Quest*, *50*, 59-79. https://doi.org/10.1080/00336297.1998.10484264

Abraham, A., & Collins, D. (2011). Taking the next step: Ways forward for coaching science. *Quest*, *63*(4), 366-384. https://doi.org/10.1080/00336297.2011.10483687

Abraham, A., Collins, D., & Martindale, R. (2006). The coaching schematic: Validation through expert coach consensus. *Journal of sports sciences*, *24*(6), 549-564. https://doi.org/10.1080/02640410500189173

Abraham, A., Collins, D., Smethurst, C., & Collins, C. (1997). The use of coach behavioural assessment and associated problems. *Journal of Sport Sciences*, *15*, 70.

Abraham, A., Morgan, G., North, J., Muir, b., Duffy, P., Allison, W., Cale, A., & Hodgson, R. (2013). *Task analysis of coach developers: Applications to the FA Youth Coach Educator role* International Conference on Naturalistic Decision Making, Marseille, France.

Acosta, R. V., & Carpenter, L. J. (2014). Woman in intercollegiate sport: A longitudinal, national study. Thirty-seven year update, 1977-2014. *Acosta-Carpenter*.

Adler, P. A., & Adler, P. (1998). *Peer power: Preadolescent culture and identity*. Rutgers University Press.

Albrecht, J., & Strand, B. (2010). A review of organized youth sport in the United States. *YouthFirst: The Journal of Youth Sports*, *5*, 16-20.

Albrecht, J. M., & Strand, B. N. (2010). Basic first aid qualifications and knowledge among youth sport coaches. *Journal of Coaching Education*, *3*(3), 3-18. https://doi.org/10.1123/jce.3.3.3

Allan, V., & Côté, J. (2016). A cross-sectional analysis of coaches' observed emotion-behavior profiles and adolescent athletes' self-reported developmental outcomes. *Journal of Applied Sport Psychology*, *28*(3), 321-337. https://doi.org/10.1080/10413200.2016.1162220

Allanson, A., Potrac, P., & Nelson, L. (2021). The career experiences of football association coach educators: Lessons in micropolitical literacy and action. *Qualitative Research in Sport, Exercise and Health*, *13*(2), 360-374.

Anderson, D. I., & van Emmerik, R. E. A. (2021). Perspectives on the academic discipline of kinesiology. *Kinesiology Review*, *10*(3), 225-227. https://doi.org/10.1123/kr.2021-0029

Armentrout, S. M., & Kamphoff, C. S. (2011). Organizational barriers and factors that contribute to youth hockey attrition. *Journal of Sport Behavior*, *34*(2).

Armour, K., Griffiths, M., & De Lyon, A. (2016). CPD provision for the football coaching workforce. *Advances in Coach Education and Development: From Research to Practice*, 30.

AspenInstitute. (2021). *Project Play*. https://www.aspenprojectplay.org/

Bailey, R., Collins, D., Ford, P., MacNamara, Á., Toms, M., & Pearce, G. (2010). *Participant Development in Sport: An Academic Review*.

Baker, J., Côté, J., & Hawes, R. (2000). The relationship between coaching behaviours and sport anxiety in athletes. *Journal of Science and Medicine in Sport*, *3*(2), 110-119. https://doi.org/10.1016/s1440-2440(00)80073-0

Baker, W. J. (2009). *Playing with God*. Harvard University Press.

Bales, J. D., Crisfield, P. M., Ito, M., & Alder, J. P. (2019). Foreword. In B. Callary & B. T. Gearity (Eds.), *Coach education and development in sport: Instructional strategies* (pp. xvii-xix). Routledge.

Balish, S. M., McLaren, C., Rainham, D., & Blanchard, C. (2014). Correlates of youth sport attrition: A review and future directions. *Psychology of Sport and Exercise*, *15*(4), 429-439. https://doi.org/10.1016/j.psychsport.2014.04.003

Balyi, I., Way, R., & Higgs, C. (2013). *Long-term athlete development*. Human Kinetics.

Barber, H., Sukhi, H., & White, S. A. (1999). The influence of parent-coaches on participant motivation and competitive anxiety in youth sport participants. *Journal of Sport Behavior*, *22*(2), 162-180.

Barnett, N. P., Smoll, F. L., & Smith, R. E. (1992). Effects of enhancing coach-athlete relationships on youth sport attrition. *The Sport Psychologist*, *6*(2), 111-127. https://doi.org/10.1123/tsp.6.2.111

Bean, C., Forneris, T., & Brunet, J. (2016). Investigating discrepancies in program quality related to youth volleyball athletes' needs support. *Psychology of Sport and Exercise*, *26*, 154-163. https://doi.org/10.1016/j.psychsport.2016.07.001

Becker, A. (2013). Quality coaching behaviours. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 184-195). Routledge.

Ben-Peretz, M., Kleeman, S., Reichenberg, R., & Shimoni, S. (2010). Educators of educators: their goals, perceptions and practices. *Professional development in education*, *36*(1-2), 111-129.

Bergeron, M. F., Mountjoy, M., Armstrong, N., Chia, M., Cote, J., Emery, C. A., Faigenbaum, A., Hall, G., Jr., Kriemler, S., Leglise, M., Malina, R. M., Pensgaard, A. M., Sanchez, A., Soligard, T., Sundgot-Borgen, J., van Mechelen, W., Weissensteiner, J. R., & Engebretsen, L. (2015). International Olympic Committee consensus statement on youth athletic development. *Br J Sports Med*, *49*(13), 843-851. https://doi.org/10.1136/bjsports-2015-094962

Berliner, D. C. (1994). Expertise: The wonders of exemplary performance. In J. N. Mangieri & C. C. Block (Eds.), *Creating powerful thinking in teachers and students* (pp. 141-186). Holt, Rinehart and Winston.

Bertram, R., Culver, D. M., & Gilbert, W. (2017). A university sport coach community of practice: Using a value creation framework to explore learning and social interactions. *International Journal of Sports Science & Coaching*, *12*(3), 287-302. https://doi.org/10.1177/1747954117710503

Blackett, A. D., Evans, A., & Piggott, D. (2017). Why 'the best way of learning to coach the game is playing the game': Conceptualising 'fast-tracked' high-performance coaching pathways. *Sport, Education and Society*, *22*(6), 744-758. https://doi.org/10.1080/13573322.2015.1075494

Blackett, A. D., Evans, A. B., & Piggott, D. (2018). "They have to toe the line": A Foucauldian analysis of the socialisation of former elite athletes into academy coaching roles. *Sports Coaching Review*, *8*, 83-102. https://doi.org/10.1080/21640629.2018.1436502

Blom, L. C., Visek, A. J., & Harris, B. S. (2013). Triangulation in youth sport: Healthy partnerships among parents, coaches, and practitioners. *Journal of Sport Psychology in Action*, *4*(2), 86-96. https://doi.org/10.1080/21520704.2012.763078

Bloom, B. (Ed.). (1985). *Developing talent in young people*. Ballantine Books.

Bloom, G. A., Durand-Bush, N., Schinke, R. J., & Salmela, J. H. (1998). The importance of mentoring in the development of coaches and athletes. *International Journal of Sport Psychology*, *29*, 267-281.

Bodey, K. J., Brylinsky, J., & Kuhlman, J. (2008). Advocacy with NCR: Tips & techniques: Advocating for coaching education with the new national coaching report. *Strategies*, *22*(1), 34-36.

Bolter, N. D., & Kipp, L. E. (2018). Sportspersonship coaching behaviours, relatedness need satisfaction, and early adolescent athletes' prosocial and antisocial behaviour. *International Journal of Sport and Exercise Psychology*, *16*, 20-35. https://doi.org/10.1080/1612197x.2016.1142461

Bolter, N. D., Petranek, L. J., & Dorsch, T. E. (2018). Coach, parent, and administrator perspectives on required coaching education in organized youth sport. *International Journal of Sports Science & Coaching*, *13*(3), 362-372. https://doi.org/10.1177/1747954117735718

Book, R. T., Henriksen, K., Stambulova, N., & Storm, L. K. (2021). "All they have seen is a model for failure:" Stakeholder's perspectives on athletic talent development in American underserved communities. *Journal of Applied Sport Psychology*, 1-21. https://doi.org/10.1080/10413200.2021.1958953

Bowers, M. T., Chalip, L., & Green, B. C. (2011). United States of America. In M. Nicholson, R. Hoye, & B. Houlihan (Eds.), *Participation in sport: International policy perspectives.* (pp. 254–267). Routledge.

Bowes, I., & Jones, R. L. (2006). Working at the edge of chaos understanding coaching as a complex interpersonal system. *The Sport Psychologist*, *20*, 235-245.

Brasil, V. Z., Ramos, V., Milistetd, M., Culver, D. M., & do Nascimento, J. V. (2018). The learning pathways of Brazilian surf coach developers. *International Journal of Sports Science & Coaching*, *13*(3), 349-361. https://doi.org/10.1177/1747954117739717

Brenner, J. S. (2016). Sports specialization and intensive training in young athletes. *Pediatrics*, *138*(3), e20162148-e20162016. https://doi.org/10.1542/peds.2016-2148

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American psychologist*, *32*(7), 513.

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Sage.

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes.

Brookfield, S. (1986). *Understanding and facilitating adult learning: A comprehensive analysis of principles and effective practices*. Open University Press.

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Contextual influences on adolescent development* (pp. 74-103). John Wiley & Sons, Inc. https://doi.org/10.1002/9780470479193.adlpsy002004

Bruening, J. E., Dixon, M. A., Burton, L. J., & Madsen, R. (2013). Women in coaching: The work-life interface. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 411-423). Routledge.

Brustad, R. J. (1993). Who will go out and play? Parental and psychological influences on children's attraction to physical activity. *Pediatric Exercise Science*, *5*(3), 210-223.

Brustad, R. J. (1996). Attraction to physical activity in urban schoolchildren: Parental socialization and gender influences. *Research Quarterly for Exercise and Sport*, *67*(3), 316.

Burton, L. J. (2015). Underrepresentation of women in sport leadership: A review of research. *Sport Management Review*, *18*(2), 155-165. https://doi.org/10.1016/j.smr.2014.02.004

Cairney, J., Dudley, D., Kwan, M., Bulten, R., & Kriellaars, D. (2019). Physical literacy, physical activity and health: Toward an evidence-informed conceptual model. *Sports Medicine*, *49*(3), 371-383.

Callary, B. (2021). Practical advances in sport coaching research in International Sport Coaching Journal. *International Sport Coaching Journal*, *8*(3), 281-282. https://doi.org/10.1123/iscj.2021-0044

Callary, B., Brady, A., Kiosoglous, C., Clewer, P., Resende, R., Mehrtens, T., Wilkie, M., & Horvath, R. (2020). Making sense of coach development worldwide during the COVID-19 pandemic. *International Journal of Sport Communication*, *13*(3), 575-585. https://doi.org/10.1123/ijsc.2020-0221

Callary, B., & Gearity, B. (2019a). Coach developer special issue: Global perspectives in coach education for the coach developer. *International Sport Coaching Journal*, *6*(3), 261-262. https://doi.org/10.1123/iscj.2019-0067

Callary, B., & Gearity, B. (2019b). *Coach education and development in sport: Instructional strategies*. Routledge.

Callary, B., & Gearity, B. (2019c). Voices from the field: Q&A with coach developers around the world. *International Sport Coaching Journal*, *6*(3), 366-369. https://doi.org/10.1123/iscj.2019-0070

Callary, B., Werthner, P., & Trudel, P. (2011a). A brief online survey to help a sport organization continue to develop its coach education program. *International Journal of Coaching Science*, *5*(2).

Callary, B., Werthner, P., & Trudel, P. (2011b). Shaping the way five women coaches develop: Their primary and secondary socialization. *Journal of Coaching Education*.

Callary, B., Werthner, P., & Trudel, P. (2012). How meaningful episodic experiences influence the process of becoming an experienced coach. *Qualitative Research in Sport, Exercise and Health*, *4*(3), 420-438. https://doi.org/10.1080/2159676x.2012.712985

Camiré, M. (2014). Youth development in North American high school sport: Review and recommendations. *Quest*, *66*(4), 495-511. https://doi.org/10.1080/00336297.2014.952448

Carson, F., McCormack, C., McGovern, P., Ralston, S., & Walsh, J. (2021). Coach like a woman: Learnings from a pilot coach education program. *Women in Sport and Physical Activity Journal*, *29*, 68-73. https://doi.org/10.1123/wspaj.2020-0047

Carter, A. D., & Bloom, G. A. (2009). Coaching knowledge and success: Going beyond athletic experiences. *Journal of Sport Behavior*, *32*(4).

Casa, D. J., Almquist, J., Anderson, S. A., Baker, L., Bergeron, M. F., Biagioli, B., Boden, B., Brenner, J. S., Carroll, M., Colgate, B., Cooper, L., Courson, R., Csillan, D., Demartini, J. K., Drezner, J. A., Erickson, T., Ferrara, M. S., Fleck, S. J., Franks, R., Guskiewicz, K. M., Holcomb, W. R., Huggins, R. A., Lopez, R. M., Mayer, T., McHenry, P., Mihalik, J. P., O'Connor, F. G., Pagnotta, K. D., Pryor, R. R., Reynolds, J., Stearns, R. L., & Valentine, V. (2013). The inter-association task force for preventing sudden death in secondary school athletics programs: Best-practices recommendations. *Journal of Athletic Training*, *48*(4), 546-553. https://doi.org/10.4085/1062-6050-48.4.12

Cassidy, T., Jones, R. L., & Potrac, P. (2008). *Understanding sports coaching*. https://doi.org/10.4324/9780203892923

Cassidy, T., Mallett, C., & Tinning, R. (2008). Considering conceptual orientations of coach education research: A tentative mapping. *International Journal of Coaching Science*, *2*(2), 43-58.

Cassidy, T., Potrac, P., & McKenzie, A. (2006). Evaluating and reflecting upon a coach education initiative: the CoDe of rugby. *The Sport Psychologist*, *20*, 145-161.

Chafetz, J. S., & Kotarba, J. A. (2005). Little League mothers and the reproduction of gender. In *Inside sports* (pp. 57-64). Routledge.

Chalip, L., & Hutchinson, R. (2017). Reinventing youth sport: Formative findings from a state-level action research project. *Sport in Society*, *20*(1), 30-46.

Chase, W. G., & Simon, H. A. (1973). Perception in chess. *Cognitive Psychology*, *4*, 55-81. https://doi.org/https://doi.org/10.1016/0010-0285(73)90004-2

Chesterfield, G., Potrac, P., & Jones, R. (2010). 'Studentship' and 'impression management' in an advanced soccer coach education award. *Sport, Education and Society*, *15*(3), 299-314. https://doi.org/10.1080/13573322.2010.493311

Chroni, S. A., & Dieffenbach, K. (2020). Facilitating and supporting the elite athlete-to-coach transition: Lessons learned from Norwegian coaches and federations. *Journal of Sport Psychology in Action*, 1-13.

Chroni, S. A., Dieffenbach, K., & Pettersen, S. (2021). An exploration of recruitment of elite athletes to coaching within federations. *International Sport Coaching Journal*, *8*(3), 315-327. https://doi.org/10.1123/iscj.2020-0056

Chu, T. L., & Zhang, T. (2019). The roles of coaches, peers, and parents in athletes' basic psychological needs: A mixed-studies review. *International Journal of Sports Science & Coaching*, *14*(4), 569-588. https://doi.org/10.1177/1747954119858458

Ciampolini, V., Tozetto, A. V. B., Milan, F. J., Camiré, M., & Milistetd, M. (2020). Lifelong learning pathway of a coach developer operating in a national sport federation. *International Journal of Sports Science & Coaching*, *15*(3), 428-438. https://doi.org/10.1177/1747954120912384

CoachForce21. (2021). *Professionalisation as a process of continuous improvement for sport coaching in Europe*.

Coakley, J. (2006). The good father: Parental expectations and youth sports. *Leisure Studies*, *25*(2), 153-163. https://doi.org/10.1080/02614360500467735

Coakley, J. (2010). The “logic” of specialization. *Journal of Physical Education, Recreation & Dance*, *81*(8), 16-25. https://doi.org/10.1080/07303084.2010.10598520

Coakley, J. (2011). Youth sports: What counts as “Positive development?”. *Journal of Sport and Social Issues*, *35*(3), 306-324. https://doi.org/10.1177/0193723511417311

Coakley, J. (2014). *Sport in society: Issues and controversies* (11th ed.). McGraw-Hill.

Coakley, J. (2015). Assessing the sociology of sport: On cultural sensibilities and the great sport myth. *International Review for the Sociology of Sport*, *50*(4-5), 402-406.

Collins, D., Bailey, R., Ford, P. A., Macnamara, Á., Toms, M., & Pearce, G. (2012). Three worlds: New directions in participant development in sport and physical activity. *Sport, Education and Society*, *17*(2), 225-243. https://doi.org/10.1080/13573322.2011.607951

Conn, J., & Razor, J. (1989). Certification of coaches-a legal and moral responsibility. *Physical Educator*, *46*(3), 161.

Conroy, D. E., & Coatsworth, J. D. (2006). Assessing autonomy-supportive coaching strategies in youth sport. *Psychology of Sport and Exercise*, *8*(5), 671-684.

Conroy, D. E., Kaye, M. P., & Coatsworth, J. D. (2006). Coaching climates and the destructive effects of mastery-avoidance achievement goals on situation motivation. *Journal of Sport & Exercise Psychology*, *28*, 69-92.

Cope, E., Cushion, C. J., Harvey, S., & Partington, M. (2021). Investigating the impact of a Freirean informed coach education programme. *Physical Education and Sport Pedagogy*, *26*(1), 65-78.

Côté, J. (1999). The influence of the family in the development of talent in sport. *The Sport Psychologist*, *13*(4), 395-417. https://doi.org/10.1123/tsp.13.4.395

Côté, J. (2006). The development of coaching knowledge. *International Journal of Sports Science & Coaching*, *1*(3), 217-222. https://doi.org/10.1260/174795406778604609

Cote, J., & Abernethy, B. (2012). A developmental approach to sport expertise. In *The Oxford Handbook for sport and performance psychology* (pp. 435-447).

Côté, J., Baker, J., & Abernethy, B. (2007). Practice and play in the development of sport expertise. In G. Tenebaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (Third ed., pp. 184-202). Wiley.

Côté, J., & Gilbert, W. (2009). An Integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science & Coaching*, *4*(3), 307-323. https://doi.org/10.1260/174795409789623892

Côté, J., & Hancock, D. J. (2016). Evidence-based policies for youth sport programmes. *International Journal of Sport Policy and Politics*, *8*(1), 51-65. https://doi.org/10.1080/19406940.2014.919338

Cothran, D. J., Kulinna, P. H., Banville, D., Choi, E., Amade-Escot, C., Macphail, A., Macdonald, D., Richard, J.-F., Sarmento, P., & Kirk, D. (2005). A cross-cultural investigation of the use of teaching styles. *Research Quarterly for Exercise and Sport*, *76*(2), 193-201. https://doi.org/10.1080/02701367.2005.10599280

Covassin, T., Elbin, R., & Sarmiento, K. (2012). Educating coaches about concussion in sports: evaluation of the CDC's "Heads Up: Concussion in Youth Sports" initiative. *Journal of School Health*, *82*(5), 233-238.

Crane, J., & Temple, V. (2015). A systematic review of dropout from organized sport among children and youth. *European Physical Education Review*, *21*, 114-131. https://doi.org/10.1177/1356336x14555294

Cregan, K., Bloom, G. A., & Reid, G. (2007). Career evolution and knowledge of elite coaches of swimmers with a physical disability. *Research Quarterly for Exercise and Sport*, *78*(4), 339-350. https://doi.org/10.1080/02701367.2007.10599431

Crickard, T., Culver, D. M., & Seguin, C. M. (2020). From center stage to the sidelines: What role might previous athletic experience play in coach development? *International Sport Coaching Journal*, *7*(2), 261-267. https://doi.org/10.1123/iscj.2019-0091

Cronin, C., & Armour, K. (2018). *Care in sport coaching: Pedagogical cases*. Routledge.

Cronin, C. J., & Lowes, J. (2016). Embedding experiential learning in HE sport coaching courses: An action research study. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *18*, 1-8. https://doi.org/10.1016/j.jhlste.2016.02.001

Culver, D. M., Kraft, E., & Duarte, T. (2019). Social learning in communities and networks as a strategy for ongoing coach development. In *Coach Education and Development in Sport* (pp. 115-128). Routledge.

Culver, D. M., Werthner, P., & Trudel, P. (2019). Coach developers as ‘facilitators of learning’ in a large-scale coach education programme: One actor in a complex system. *International Sport Coaching Journal*, *6*(3), 296-306. https://doi.org/10.1123/iscj.2018-0081

Cunningham, G. B. (2019). *Diversity and inclusion in sport organizations*. https://doi.org/10.4324/9780429504310

Curran, T., Hill, A. P., Hall, H. K., & Jowett, G. E. (2014). Perceived coach behaviors and athletes’ engagement and disaffection in youth sport: The mediating role of the psychological needs. *International Journal of Sport Psychology*, *45*. https://doi.org/10.7352/IJSP

Cushion, C., Nelson, L., Armour, K., Lyle, J., Jones, R., Sandford, R., & O’Callaghan, C. (2010). *Coach learning & development: A review of literature*.

Cushion, C. J., Armour, K. M., & Jones, R. L. (2003). Coach Education and Continuing Professional Development: Experience and Learning to Coach. *Quest*, *55*(3), 215-230. https://doi.org/10.1080/00336297.2003.10491800

Cushion, C. J., Armour, K. M., & Jones, R. L. (2006). Locating the coaching process in practice: Models ‘for’ and ‘of’ coaching. *Physical Education and Sport Pedagogy*, *11*, 83-99.

Cushion, C. J., Griffiths, M., & Armour, K. (2019). Professional coach educators in-situ: A social analysis of practice. *Sport, Education and Society*, *24*(5), 533-546. https://doi.org/10.1080/13573322.2017.1411795

Cushion, C. J., Stodter, A., & Clarke, N. J. (2021). ‘It’s an experiential thing’: The discursive construction of learning in high-performance coach education. *Sport, Education and Society*, 1-18. https://doi.org/10.1080/13573322.2021.1924143

Da Silva, E. J., Evans, M. B., Lefebvre, J. S., Allan, V., Côté, J., & Palmeira, A. (2020). A systematic review of intrapersonal coach development programs: Examining the development and evaluation of programs to elicit coach reflection. *International Journal of Sports Science & Coaching*, *15*(5-6), 818-837. https://doi.org/10.1177/1747954120943508

Damon, W. (2004). What is Positive Youth Development? *The ANNALS of the American Academy of Political and Social Science*, *591*(1), 13-24. https://doi.org/10.1177/0002716203260092

Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. (2005). The design of teacher education programs. *Preparing teachers for a changing world: What teachers should learn and be able to do*, 390-441.

Davis, P. (2003). Why coaches education? *Olympic Coach*, *18*(4), 16-17.

Dawson, A., & Phillips, P. (2013). Coach career development: Who is responsible? *Sport Management Review*, *16*(4), 477-487.

Day, D. (2013). Historical perspectives on coaching. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 5-15).

De Bosscher, V., De Knop, P., van Bottenburg, M., Shibli, S., & Bingham, J. (2009). Explaining international sporting success: An international comparison of elite sport systems and policies in six countries. *Sport Management Review*, *12*(3), 113-136. https://doi.org/https://doi.org/10.1016/j.smr.2009.01.001

DeKnop, P., & DeMartelaer, K. (2001). Quantitative and qualitative evaluation of youth sport in Flanders and the Netherlands: A case study. *Sport, Education and Society*, *6*, 35-51.

Delaney, L., & Keaney, E. (2005). Sport and social capital in the United Kingdom: Statistical evidence from national and international survey data. *Dublin: Economic and Social Research Institute and Institute for Public Policy Research*, *32*, 1-32.

Demers, G., Woodburn, A. J., & Savard, C. (2006). The development of an undergraduate competency-based coach education program. *The Sport Psychologist*, *20*, 162-173.

Denison, J. (2010). Planning, practice and performance: The discursive formation of coaches' knowledge. *Sport, Education and Society*, *15*(4), 461-478.

Denison, J., Mills, J., & Jones, L. (2013). Effective coaching as a modernist formation: A Foucauldian critique. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 388-399). Routledge.

Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappan*, *92*(6), 68-71. https://doi.org/10.1177/003172171109200616

DHHS. (2019). *The National Youth Sports Strategy*.

Diakogeorgiou, E., Ray, R. R., Brown, S., Hertel, J., & Casa, D. J. (2021). The evolution of the athletic training profession. *Kinesiology Review*, *10*(3), 308-318. https://doi.org/10.1123/kr.2021-0027

Dieffenbach, K. (2019a). *Examining coaching and coach education in the US* [YouTube Video]. https://youtu.be/3qYqkv6GpTg

Dieffenbach, K. (2019b). Frameworks for coach education. In K. Dieffenbach & M. Thompson (Eds.), *Coaching education essentials* (pp. 3-16). Human Kinetics.

Dieffenbach, K., & Makara, M. (2009). *Parental knowledge and expectations regarding coach reputation and certification: A pilot study.* NCACE.

Dieffenbach, K., Murray, M. A., & Zakrajsek, R. (2011). The coach education internship experience: An exploratory study. *International Journal of Coaching Science*.

Dieffenbach, K., & Thompson, M. (2019). *Coach education essentials*. Human Kinetics Publishers.

Dieffenbach, K., & Wayda, V. (2010). Critical review of American academic coaching education. *Journal of Coaching Education, 3*(2), 21-39. https://doi.org/10.1123/jce.3.2.21

Dieffenbach, K. D., Lauer, L., & Johnson, D. A. (2010). One step at a time: Building coach ethics from the ground up. *Journal of Coaching Education*, *3*(2), 84-95.

Dierickx, E. E., Scarneo-Miller, S. E., & Casa, D. J. (2021). High school coaches' knowledge and behaviors for emergency preparedness. *International Sport Coaching Journal*, 1-11. https://doi.org/10.1123/iscj.2020-0110

Difiori, J. P. (2002). Overuse injuries in young athletes: An overview. *Athletic Therapy Today*, *7*(6), 25-29. https://doi.org/10.1123/att.7.6.25

Dohme, L.-C., Rankin-Wright, A. J., & Lara-Bercial, S. (2019). Beyond knowledge transfer: The role of coach developers as motivators for lifelong learning. *International Sport Coaching Journal*, *6*(3), 317-328. https://doi.org/10.1123/iscj.2019-0034

Donnelly, P. (1993). Problems associated with youth involvement in high-performance sport. In *Intensive participation in children's sports* (pp. 95-126).

Dorsch, T. E., Smith, Wilson, & McDonough. (2015). Parent goals and verbal sideline behavior in organized youth sport. https://doi.org/10.1037/spy0000025

Dorsch, T. E., Smith, A. L., Blazo, J. A., Coakley, J., Côté, J., Wagstaff, C. R. D., Warner, S., & King, M. Q. (2020). Toward an integrated understanding of the youth sport system.

Research Quarterly for Exercise and Sport, 1-15. https://doi.org/10.1080/02701367.2020.1810847

Dorsch, T. E., Smith, A. L., & McDonough, M. H. (2009). Parents perceptions of child-to-parent socialization in organized youth sports. *Journal of Sport & Exercise Psychology*, *31*, 444-468.

Dorsch, T. E., Wright, E., Eckardt, V. C., Elliott, S., Thrower, S. N., & Knight, C. J. (2021). A history of parent involvement in organized youth sport: A scoping review. *Sport, Exercise, and Performance Psychology*. https://doi.org/10.1037/spy0000266

Dreyfus, H., & Dreyfus, S. (1986). *Mind over machine: The power of human intuition and expertise in the era of the computer*. Blackwell Publishers.

Driska, A. (2019). *We need a taxonomy of coach development programs in the United States* [YouTube Video]. https://youtu.be/tj71oMnS_34

Driska, A. P. (2018). A formative, utilization-focused evaluation of USA Swimming's nationwide online coach education program. *International Sport Coaching Journal*, *5*(3), 261-272. https://doi.org/10.1123/iscj.2017-0096

Duarte, T., Culver, D. M., & Paquette, K. (2020). Mapping Canadian wheelchair curling coaches' development: A landscape metaphor for a systems approach. *International Sport Coaching Journal*, *7*(2), 117-126. https://doi.org/10.1123/iscj.2018-0099

Duffy, P., Hartley, H., Bales, J., Crespo, M., Dick, F., Vardhan, D., Nordmann, L., & Curado, J. (2011). Sport coaching as a 'profession': Challenges and future directions. *International Journal of Coaching Science*, *5*(2), 93-123.

Duffy, P., North, J., & Muir, B. (2013). Understanding the impact of sport coaching on legacy. *International Journal of Sport Policy and Politics*, *5*(2), 165-182.

Eather, N., Miller, A., Jones, B., & Morgan, P. J. (2021). Evaluating the impact of a coach development intervention for improving coaching practices and player outcomes in netball: The MASTER coaching randomized control trial. *International Journal of Sports Science & Coaching*, *16*(3), 439-455. https://doi.org/10.1177/1747954120976966

Edwards, J., Culver, D., Leadbetter, R., Kloos, K., & Potwarka, L. (2020). "One piece of a big puzzle": Understanding the roles of coach developers through interorganizational relationships in Canada's coach education system. *International Sport Coaching Journal*, *7*, 102-108. https://doi.org/10.1123/iscj.2019-0014

Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, *10*, 98. https://doi.org/10.1186/1479-5868-10-98

Eitzen, D. S., & Sage, G. H. (2009). *Sociology of North American Sport*. Paradigm Publishers.

Engh. (2002). *Why Johnny Hates Sports*. Square One Publishers.

Erdal, K. (2018). *The adulteration of children's sports: Waning health and well-being in the age of organized play*. Rowman & Littlefield.

Erickson, K., Bruner, M. W., MacDonald, D. J., & Cote, J. (2008). Gaining insight into actual and preferred sources of coaching knowledge. *International Journal of Sports Science & Coaching*, *3*(4), 527-538.

Erickson, K., & Côté, J. (2016). A season-long examination of the intervention tone of coach–athlete interactions and athlete development in youth sport. *Psychology of Sport and Exercise*, *22*, 264-272. https://doi.org/10.1016/j.psychsport.2015.08.006

Erickson, K., Côté, J., & Fraser-Thomas, J. (2007). Sport experiences, milestones, and educational activities associated with high-performance coaches' development. *The Sport Psychologist*, *21*(3), 302-316. https://doi.org/10.1123/tsp.21.3.302

Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, *100*(3), 363.

Evans, M. B., McGuckin, M., Gainforth, H. L., Bruner, M. W., & Côté, J. (2015). Coach development programmes to improve interpersonal coach behaviours: A systematic review using the re-aim framework. *British Journal of Sports Medicine*, *49*(13), 871-877. https://doi.org/10.1136/bjsports-2015-094634

Fairhurst, K. E., Bloom, G. A., & Harvey, W. J. (2017). The learning and mentoring experiences of Paralympic coaches. *Disability and Health Journal*, *10*(2), 240-246. https://doi.org/https://doi.org/10.1016/j.dhjo.2016.10.007

Farias, C., Hastie, P. A., & Mesquita, I. (2017). Towards a more equitable and inclusive learning environment in Sport Education: Results of an action research-based intervention. *Sport, Education and Society*, *22*(4), 460-476. https://doi.org/10.1080/13573322.2015.1040752

Farrey, T. (2008). *Game on: The All-American race to make champions of our children*. ESPN Books.

Fass, P. (2010). Child kidnapping in America. *ORIGINS*, *3*(4).

Fasting, K. (2013). Dangerous liaisons: Harassment and abuse in coaching. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 333-344). Routledge.

Fawver, B., Beatty, G. F., Roman, J. T., & Kurtz, K. (2020). The status of youth coach training in the United States: Existing programs and room for improvement. *International Sport Coaching Journal*, *7*(2), 239-251. https://doi.org/10.1123/iscj.2019-0017

Feiman-Nemser, S., & Remillard, J. (1996). Perspectives on learning to teach. In F. B. Murray (Ed.), *The teacher educator's handbook: Building a knowledge base for the preparation of teachers*. Wiley.

Fraleigh, W. P. (1985). Unresolved tensions in college physical education—constructive and destructive. *Quest*, *37*(2), 134-144.

Fraser-Thomas, J., Côté, J., & Deakin, J. (2008). Understanding dropout and prolonged engagement in adolescent competitive sport. *Psychology of Sport and Exercise*, *9*(5), 645-662. https://doi.org/10.1016/j.psychsport.2007.08.003

Fraser-Thomas, J. L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education & Sport Pedagogy*, *10*(1), 19-40. https://doi.org/10.1080/1740898042000334890

Fredricks, J. A., & Eccles, J. S. (2004). Parental influences on youth involvement in sports. In M. R. Weiss (Ed.), *Developmental sport and exercise psychology: A lifespan perspective* (pp. 145-164). Fitness Information Technology.

Gano-Overway, L., Thompson, M., & Van Mullem, P. (2020). *National standards for sport coaches: Quality coaches, quality sports*. Jones & Bartlett Learning.

Gano-Overway, L., Van Mullem, P., Long, M., Thompson, M., Benham, B., Bolger, C., Driska, A., Moreno, A., & Schuster, D. (2020). Revising the National Standards for Sport Coaches Within the USA. *International Sport Coaching Journal*, *7*, 89-94. https://doi.org/10.1123/iscj.2019-0058

Gano-Overway, L. A., & Dieffenbach, K. (2019). Current practices in United States higher education coach education programs. *International Sport Coaching Journal*, *6*(2), 226-233.

Garner, P., Turnnidge, J., Roberts, W., & Côté, J. (2021). How coach educators deliver formal coach education: A full range leadership perspective. *International Sport Coaching Journal*, *8*, 23-33. https://doi.org/10.1123/iscj.2019-0074

Gaster, S. (1991). Urban children's access to their neighborhood. *Environment and Behavior*, *23*, 70-85. https://doi.org/10.1177/0013916591231004

Gearity, B. T., Callary, B., & Fulmer, P. (2013). Learning to coach: A qualitative case study of Phillip Fulmer. *Journal of Coaching Education*, *6*(2), 65-86. https://doi.org/10.1123/jce.6.2.65

Gems, G., Borish, L., & Pfister, G. (2008). *Sports in American history: From colonization to globalization*. Human Kinetics.

Gems, G., Borish, L., & Pfister, G. (2017). *Sports in American history: From colonization to globalization* (2nd ed.). Human Kinetics.

Gilbert, W., Côté, J., & Mallett, C. (2006). Developmental paths and activities of successful sport coaches. *International Journal of Sports Science & Coaching*, *1*, 69-76. https://doi.org/10.1260/174795406776338526

Gilbert, W., Gallimore, R., & Trudel, P. (2009). A learning community approach to coach development in youth sport. *Journal of Coaching Education*, *2*(2), 1-21.

Gilbert, W., Lichtenwaldt, L., Gilbert, J., Zelezny, L., & Côté, J. (2009). Developmental profiles of successful high school coaches. *International Journal of Sports Science & Coaching*, *4*(3), 415-431. https://doi.org/10.1260/174795409789623928

Gilbert, W. D., & Trudel, P. (2004). Analysis of coaching science research published from 1970-2001. *Res Q Exerc Sport*, *75*(4), 388-399. https://doi.org/10.1080/02701367.2004.10609172

Gilbert, W. D., & Trudel, P. (2006). Coach as reflective practitioner. In R. L. Jones (Ed.), *Sports Coach as Educator*. Routledge.

Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, *119*, 182-191. https://doi.org/10.1542/peds.2006-2697

Glen, J., & Lavallee, D. (2019). How do coach educators influence meaningful behavior change in sports coaches? *Kinesiologia Slovenica*, *25*(3), 16-30.

GlobalNewswire. (2019). Youth sports market projected to reach $77.6 billion by 2026. *GlobalNewswire*. https://www.globenewswire.com/news-release/2019/12/26/1964575/0/en/Youth-Sports-Market-Projected-to-Reach-77-6-Billion-by-2026-Comprehensive-Industry-Analysis-Insights.html

Gould, D. (2016). Conducting impactful coaching science research: The forgotten role of knowledge integration and dissemination. *International Sport Coaching Journal*, *3*(2), 197-203. https://doi.org/10.1123/iscj.2015-0113

Gould, D. (2019). The current youth sport landscape: Identifying critical research issues. *Kinesiology Review*, *8*(3), 150-161. https://wvu.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=s3h&AN=141351185&site=ehost-live&scope=site

Gould, D., Guinan, D., Greenleaf, C., & Chung, Y. (2002). A survey of U.S. Olympic coaches: Variables perceived to have influenced athlete performances and coach effectiveness. *The Sport Psychologist*, *16*, 229-250.

Gould, D., Lauer, L., Jannes, C., & Pennisi, N. (2006). Understanding the role parents play in tennis success: A national survey of junior tennis coaches. *British Journal of Sports Medicine*, *40*, 632-636. https://doi.org/10.1136/bjsm.2005.024927

Gray, P. (2011). The decline of play and the rise of psychopathology in children and adolescents. *American Journal of Play*, *3*(4), 443-463.

Green, B. C., & Chalip, L. (1998). Antecedents and consequences of parental purchase decision involvement in youth sport. *Leisure Sciences*, *20*(2), 95-109. https://doi.org/10.1080/01490409809512268

Green, B. C. C., Laurence, & Bowers, M. T. (2013). United States of America. In I. O'Boyle & T. Bradbury (Eds.), *Sport Governance: International Case Studies* (pp. 20).

Greenwood, E. (1957). Attributes of a profession. *Social Work*, *2*(3), 45-55. https://doi.org/10.2307/23707630

Gregory, S. (2017). How kids' sports became a $15 billion industry. *TIME*. https://time.com/4913687/how-kids-sports-became-15-billion-industry/

Grimmett, P. P., & Crehan, E. P. (1992). The nature of collegiality in teacher development: The case of clinical supervision. *Teacher development and educational change*, *12*(2), 56-85.

Güllich, A., Macnamara, B. N., & Hambrick, D. Z. (2021). What makes a champion? Early multidisciplinary practice, not early specialization, predicts world-class performance. *Perspectives on Psychological Science*, *0*, 1745691620974772. https://doi.org/10.1177/1745691620974772

Gurgis, J. J., Kerr, G. A., & Stirling, A. E. (2020). Investigating the barriers and facilitators to achieving coaching certification. *International Sport Coaching Journal*, *7*(2), 189-199. https://doi.org/10.1123/iscj.2019-0043

Guzmán, J. F., Kingston, K., & Grijalbo, C. (2015). Predicting coaches' adherence/dropout: A prospective study. *International Journal of Sports Science & Coaching*, *10*(2-3), 353-363. https://doi.org/10.1260/1747-9541.10.2-3.353

Ha, A. S., Wong, A. C., Sum, R. K., & Chan, D. W. (2008). Understanding teachers' will and capacity to accomplish physical education curriculum reform: The implications for teacher development. *Sport, Education and Society*, *13*(1), 77-95.

Hackensmith, C. W. (1966). *History of physical education*. HarperCollins Publishers.

Hague, C., McGuire, C. S., Chen, J., Bruner, M. W., Côté, J., Turnnidge, J., & Martin, L. J. (2021). Coaches' influence on team dynamics in sport: A scoping review. *Sports Coaching Review*, *10*(2), 225-248. https://doi.org/10.1080/21640629.2021.1874096

Hamilton, S. F., Hamilton, M. A., & Pittman, K. (2004). Principles for youth development. *The youth development handbook: Coming of age in American communities*, *2*, 3-22.

Hanson, D., & Herrington, M. (1976). *From college to classroom: The probationary year*. Routledge.

Hargreaves. (2000). Four ages of professionalism and professional learning. *Teachers and Teaching* *6*(2), 151-182..

Hargreaves, D. H. (1994). The new professionalism: The synthesis of professional and institutional development. *Teaching and Teacher Education*, *10*(4), 423-438. https://doi.org/https://doi.org/10.1016/0742-051X(94)90023-X

HBO. (2018). *The price of youth sports* [YouTube Video]. https://www.youtube.com/watch?v=AGxxBER5xJU

Hedlund, D. P., Fletcher, C. A., Pack, S. M., & Dahlin, S. (2018). The education of sport coaches: What should they learn and when should they learn it? *International Sport Coaching Journal*, *5*(2), 192-199. https://doi.org/10.1123/iscj.2017-0110

Høigaard, H., De Cuyper, B., Fransen, K., Boen, F., & Peters, D. M. (2015). Perceived coach behavior in training and competition predicts collective efficacy in female elite handball players. *International Journal of Sport Psychology*, *46*(6), 321-336.

Holt, N. L., Neely, K. C., Slater, L. G., Camiré, M., Côté, J., Fraser-Thomas, J., Macdonald, D., Strachan, L., & Tamminen, K. A. (2017). A grounded theory of positive youth development through sport based on results from a qualitative meta-study. *International Review of Sport and Exercise Psychology*, *10*(1), 1-49. https://doi.org/10.1080/1750984x.2016.1180704

Horgan, P., & Daly, P. (2015). The role of the coach developer in supporting and guiding coach learning: A commentary. *International Sport Coaching Journal*, *2*(3), 354-356. https://doi.org/10.1123/iscj.2015-0077

Horn, T. S., & Horn, J. L. (2007). Family influences on children's sport and physical activity participation, behavior, and psychosocial responses. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (Third Edition ed., pp. 685-711). John Wiley & Sons, Inc.

Howard, D. R., & Madrigal, R. (1990). Who makes the decision: The parent or the child? The perceived influence of parents and children on the purchase of recreation services. *Journal of Leisure Research*, *22*(3), 244-258.

Hoyle, E. (1974). Professionality, professionalism and control in teaching. *London Educational Review*, *3*(2), 13-19.

Hutchinson, S. L., Baldwin, C. K., & Caldwell, L. L. (2003). Differentiating parent practices related to adolescent behavior in the free time context. *Journal of Leisure Research*, *35*(4), 396-422.

Hyman, M. (2009). *Until it hurts: America's obsession with youth sports and how it harms our kids*. Beacon Press.

ICCE. (2013). *International Sport Coaching Framework*. https://www.icce.ws/_assets/files/iscf-1.2-10-7-15.pdf

ICCE. (2014). *International Coach Developer Framework*.

ICCE. (2021). *International Council of Coaching Excellence*. https://www.icce.ws/

Irwin, G., Hanton, S., & Kerwin, D. G. (2004). Reflective practice and the origins of elite coaching knowledge. *Reflective Practice*, *5*(3), 425-442.

ISYS. (2021). *Institute for the Study of Youth Sports*. https://education.msu.edu/youth-sports/

Jarvis, P. (2004). Adult Education and Lifelong Learning. https://doi.org/10.4324/9780203561560

Jarvis, P. (2006). *Towards a comprehensive theory of human learning*. Routledge.

Jones, G. J., Edwards, M. B., Bocarro, J. N., Bunds, K. S., & Smith, J. W. (2017). An integrative review of sport-based youth development literature. *Sport in Society*, *20*, 161-179. https://doi.org/10.1080/17430437.2015.1124569

Jones, R. L. (2006). *The sports coach as educator: Re-conceptualising sports coaching*. Routledge.

Jones, R. L., Allison, W., & Bailey, J. (2016). Candidates' experiences of elite FA coach education: Tracking the journey. In *Advances in Coach Education and Development* (pp. 169-180). Routledge.

Jones, R. L., & Turner, P. (2006). Teaching coaches to coach holistically: Can problem-based learning (PBL) help? *Physical Education and Sport Pedagogy*, *11*(2), 181-202.

Jowett, S. (2017). At the heart of effective sport leadership lies the dyadic coach-athlete relationship. *Sport & Exercise Psychology Review*, *13*, 62-64. https://doi.org/10.1016/j.copsyc.2017.05.006

Jowett, S., & Poczwardowski, A. (2007). Understanding the coach-athlete relationship. In S. Jowett & D. Lavallee (Eds.), *Social psychology in sport* (pp. 3-14). Human Kinetics.

Jowett, S., & Wachsmuth, S. (2020). Power in coach-athlete relationship. In *Women's artistic gymnastics: Socio-cultural perspectives* (pp. 121-142). Routledge.

Kamphoff, C. S., & Gill, D. L. (2013). Issues of exclusion and discrimination in the coaching profession. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 52-66). Routledge.

Kavanagh, E., Brown, L., & Jones, I. (2017). Elite athletes' experience of coping with emotional abuse in the coach–athlete relationship. *Journal of Applied Sport Psychology*, *29*(4), 402-417. https://doi.org/10.1080/10413200.2017.1298165

Kavanagh, S. S., & Danielson, K. A. (2019). Practicing justice, justifying practice: Toward critical practice teacher education. *American Educational Research Journal*, *57*(1), 69-105. https://doi.org/10.3102/0002831219848691

Kearney, P. E., Comyns, T. M., & Hayes, P. R. (2020). Coaches and parents hold contrasting perceptions of optimal youth development activities in track and field athletics.

International Journal of Sports Science & Coaching, *15*(2), 157-169. https://doi.org/10.1177/1747954119900052

Kelley, B., & Carchia, C. (2013). Hey, data data–swing! *ESPN the Magazine*, *11*.

Kellmann, M., Altfeld, S., & Mallett, C. J. (2015). Recovery–stress imbalance in Australian Football League coaches: A pilot longitudinal study. *International Journal of Sport and Exercise Psychology*, *14*(3), 240-249. https://doi.org/10.1080/1612197x.2015.1020662

Kerr, G. (2010). Physical and emotional abuse of elite child athletes: The case of forced physical exertion. *Elite child athlete welfare: International perspectives*, 41-50.

Kerr, G., Willson, E., & Stirling, A. (2019). Prevalence of maltreatment among current and former national team athletes. *University of Toronto in Partnership with AthletesCAN*.

Kerr, G., Willson, E., & Stirling, A. (2020). "It was the worst time in my life": The effects of emotionally abusive coaching on female Canadian National Team athletes. *Women in Sport and Physical Activity Journal*, *28*, 81-89. https://doi.org/10.1123/wspaj.2019-0054

Kerr, G. A., & Stirling, A. E. (2015). Professionalization of coaches to reduce emotionally harmful coaching practices: Lessons learned from the education sector. *International Journal of Coaching Science*, *9*, 21-35.

Kerr, Z. Y., Yeargin, S., Valovich Mcleod, T. C., Nittoli, V. C., Mensch, J., Dodge, T., Hayden, R., & Dompier, T. P. (2015). Comprehensive coach education and practice contact restriction guidelines result in lower injury rates in youth American football. *Orthopaedic Journal of Sports Medicine*, *3*(7), 232596711559457. https://doi.org/10.1177/2325967115594578

Kerr, Z. Y., Yeargin, S. W., Valovich Mcleod, T. C., Mensch, J., Hayden, R., & Dompier, T. P. (2015). Comprehensive coach education reduces head impact exposure in American

youth football. *Orthopaedic Journal of Sports Medicine*, *3*(10), 232596711561054. https://doi.org/10.1177/2325967115610545

Kirby, S., & Wintrup, G. (2002). Hazing and initiation: Sexual harassment and abuse issues. *Journal of Sexual Aggression*, *8*, 41-60.

Kirk, D., MacDonald, D., & O'Sullivan, M. (2006). *Handbook of physical education*. Sage.

Knowles, Z., Tyler, G., Gilbourne, D., & Eubank, M. (2006). Reflecting on reflection: exploring the practice of sports coaching graduates. *Reflective Practice*, *7*(2), 163-179. https://doi.org/10.1080/14623940600688423

Koester, M. C. (2002). Adolescent and youth sports medicine: A "growing" concern. *International Journal of Athletic Therapy and Training*, *7*(6), 6-12.

Kohl III, H. W., & Cook, H. D. (2013). Educating the student body: Taking physical activity and physical education to school.

Kurnik, J. F., Kajtna, T., Bedenik, K., & Kovac, M. (2013). Why parents enroll their children in recreational gymnastics programmes at the beginning of their education. *Science of Gymnastics Journal*, *5*(2), 41-51.

LaForge, K., Sullivan, P. J., & Bloom, G. A. (2012). Coaching behaviors in Canadian youth sport. *Athletic Insight*, *4*(3), 251-263.

Lally, P., & Kerr, G. (2008). The effects of athlete retirement on parents. *Journal of Applied Sport Psychology*, *20*(1), 42-56. https://doi.org/10.1080/10413200701788172

Lange, S. J., Kompaniyets, L., Freedman, D. S., Kraus, E. M., Porter, R., Blanck, H. M., & Goodman, A., B. (2021). *Longitudinal trends in Body Mass Index before and during the COVID-19 pandemic among persons aged 2-19 years - United States, 2018-2020* (Morbidity and Mortality Weekly Report, Issue.

Lara-Bercial, S., Bales, J., & North, J. (2020). Coaching around the world: On becoming a profession. *Coaching for Human Development and Performance in Sports*, 93-121.

Lara-Bercial, S., & Mallett, C. J. (2016). The practices and developmental pathways of professional and Olympic serial winning coaches. *International Sport Coaching Journal*, *3*(3), 221-239. https://doi.org/10.1123/iscj.2016-0083

Lara-Bercial, S., & McKenna, J. (2017). No coach, no gain: The central role of the coach in the personal development of youth performance athletes. *Journal of Sport Psychology*, *27*(3), 50-59.

Lauer, L., & Dieffenbach, K. (2013). Psychosocial training interventions to prepare youth sport coaches. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 469-480). Routledge.

LaVoi, N. M. (2016). A framework to understand experiences of women coaches around the globe: The Ecological-Intersectional Model. In *Women in sports coaching* (pp. 13-34). Routledge.

Brazil. (1998, September 1). *Law 9696, Physical Education Professional regulation.* Official journal of State.

Lawson, H. A. (1986). Occupational socialization and the design of teacher education programs. *Journal of Teaching in Physical Education*, *5*(2).

IMG Academy. (2019). *Coaching the Coaches*. LEADERS Performance Institute.

Leeder, T. M., Russell, K., & Beaumont, L. C. (2019). “Learning the hard way”: Understanding the workplace learning of sports coach mentors. *International Sport Coaching Journal*, *6*(3), 263-273. https://doi.org/10.1123/iscj.2018-0069

Leeder, T. M., Warburton, V. E., & Beaumont, L. C. (2021). Coaches' dispositions and non-formal learning situations: An analysis of the 'coach talent programme'. *Sport in Society*, *24*(3), 356-372. https://doi.org/10.1080/17430437.2019.1672154

Lefebvre, J. S., Evans, M. B., Turnnidge, J., Gainforth, H. L., & Côté, J. (2016). Describing and classifying coach development programmes: A synthesis of empirical research and applied practice. *International Journal of Sports Science & Coaching*, *11*(6), 887-899. https://doi.org/10.1177/1747954116676116

Leff, S. S., & Hoyle, R. H. (1995). Young athletes' perceptions of parental support and pressure. *Journal of Youth and Adolescence*, *24*(2), 187-203. https://doi.org/10.1007/BF01537149

Lemyre, F., Trudel, P., & Durand-Bush, N. (2007). How youth-sport coaches learn to coach. *The Sport Psychologist*, *21*, 191-209.

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & Von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents. *The Journal of Early Adolescence*, *25*, 17-71. https://doi.org/10.1177/0272431604272461

Lewis, C., Roberts, S., & Andrews, H. (2017). Women into coaching: Are you sure? In *Sport and discrimination* (pp. 89-101). Routledge.

Lewis, C. J., Roberts, S. J., & Andrews, H. (2018). 'Why am I putting myself through this?' Women football coaches' experiences of the Football Association's coach education process. *Sport, Education and Society*, *23*, 28-39. https://doi.org/10.1080/13573322.2015.1118030

Lewis, C. J., Roberts, S. J., Andrews, H., & Sawiuk, R. (2020). A creative writing case study of gender-based violence in coach education: Stacey's story. *Women in Sport and Physical Activity Journal*, *28*(1), 72-80. https://doi.org/10.1123/wspaj.2018-0046

Libman, S. (1998). Adult participation in youth sports: A developmental perspective. *Child and Adolescent Psychiatric Clinics of North America*, *7*(4), 725-744. https://doi.org/10.1016/s1056-4993(18)30208-6

Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, *15*(2), 129-151. https://doi.org/10.3102/01623737015002129

Lloyd, R. S., Faigenbaum, A. D., Stone, M. H., Oliver, J. L., Jeffreys, I., Moody, J. A., Brewer, C., Pierce, K. C., McCambridge, T. M., Howard, R., Herrington, L., Hainline, B., Micheli, L. J., Jaques, R., Kraemer, W. J., McBride, M. G., Best, T. M., Chu, D. A., Alvar, B. A., & Myer, G. D. (2014). Position statement on youth resistance training: the 2014 International Consensus. *British Journal of Sports Medicine*, *48*(7), 498-505. https://doi.org/10.1136/bjsports-2013-092952

Longman, J. (2020, September 18, 2020). The pandemic Is chasing aging coaches from the field. *The New York Times*. https://www.nytimes.com/2020/09/18/sports/covid-coach-retire.html

Lortie, D. C. (1975). *Schoolteacher: A sociological study*. University of Chicago Press.

Lyle, J. (2002). *Sport coaching concepts: A framework for coaching practice*. Routledge.

Lyle, J. (2006). *Sport coaching concepts: A framework for coaching practice (2nd ed)*. Routledge.

Lyle, J. (2010). Coaches' decision making: A naturalistic decision making analysis. *Sports coaching: Professionalisation and practice*, 27-41.

Lyle, J. (2018). The transferability of sport coaching research: A critical commentary. *Quest*, *70*(4), 419-437. https://doi.org/10.1080/00336297.2018.1453846

Maccoby, E. E. (1994). The role of parents in the socialization of children: An historical overview. In R. D. Parke, P. A. Ornstein, J. J. Rieser, & C. Zahn-Waxler (Eds.), *A century of developmental psychology* (pp. 589-615). American Psychology Association. https://doi.org/10.1037/10155-021

Machida-Kosuga, M., Schaubroeck, J. M., Gould, D., Ewing, M., & Feltz, D. L. (2017). What influences collegiate coaches' intentions to advance their leadership careers? The roles of leader self-efficacy and outcome expectancies. *International Sport Coaching Journal*, *4*(3), 265-278.

MacNamara, Á., & Collins, D. (2011). Comment on "Talent identification and promotion programmes of Olympic athletes". *Journal of Sports Sciences*, *29*(12), 1353-1356.

Macphail, A., Gorely, T., & Kirk, D. (2003). Young people's socialisation into sport: A case study of an athletics club. *Sport, Education and Society*, *8*(2), 251-267. https://doi.org/10.1080/13573320309251

MacPhail, A., Ulvik, M., Guberman, A., Czerniawski, G., Oolbekkink-Marchand, H., & Bain, Y. (2019). The professional development of higher education-based teacher educators: needs and realities. *Professional Development in Education*, *45*(5), 848-861.

Malcolm, D., Pinheiro, C., & Pimenta, N. (2014). Could and should sport coaching become a profession? Some sociological reflections. *International Sport Coaching Journal*, , 42-45. https://doi.org/10.1123/iscj.2013-0017

Malete, L., & Feltz, D. L. (2000). The effect of a coaching education program on coaching efficacy. *The Sport Psychologist*, *14*(4), 410-417. https://doi.org/10.1123/tsp.14.4.410

Malina, R. M. (2009). Children and adolescents in the sport culture: the overwhelming majority to the select few. *Journal of Exercise Science & Fitness*, *7*(2), S1-S10.

Malina, R. M. (2010). Early sport specialization: Roots, effectiveness, risks. *Current Sports Medicine Reports*, *9*(6), 364-371. https://doi.org/10.1249/JSR.0b013e3181fe3166

Mangan, J. A. (1981). *Athleticism in the Victorian and Edwardian public school: The emergence and consolidation of an educational ideology*. Routledge.

Martel, K. (2015). USA Hockey's American Development Model: Changing the coaching and player development paradigm. *International Sport Coaching Journal*, *2*(1), 39-49. https://doi.org/10.1123/iscj.2014-0060a

McCallister, S., Blinde, E., & Kolenbrander, B. (2000). Problematic aspects of the role of youth sport coach. *International Sports Journal*, *4*, 9-26.

McCleery, J., Hoffman, J. L., Tereschenko, I., & Pauketat, R. (2021). Ambitious coaching core practices: Borrowing from teacher education to inform coach development pedagogy. *International Sport Coaching Journal*, 1-12. https://doi.org/10.1123/iscj.2020-0095

McCullick, B., Schempp, P., Mason, I., Foo, C., Vickers, B., & Connolly, G. (2009). A scrutiny of the coaching education program scholarship since 1995. *Quest*, *61*, 322-335.

McCullick, B. A., Belcher, D., & Schempp, P. G. (2005). What works in coaching and sport instructor certification programs? The participants' view. *Physical Education & Sport Pedagogy*, *10*(2).

McEvoy, E., Macphail, A., & Heikinaro-Johansson, P. (2015). Physical education teacher educators: A 25-year scoping review of literature. *Teaching and Teacher Education*, *51*, 162-181. https://doi.org/10.1016/j.tate.2015.07.005

McLaren, C. D., Eys, M. A., & Murray, R. A. (2015). A coach-initiated motivational climate intervention and athletes' perceptions of group cohesion in youth sport. *Sport, Exercise, and Performance Psychology*, *4*(2), 113-126. https://doi.org/10.1037/spy0000026

McLeod, T., McGaugh, J., Boquiren, M., & Bay, R. (2008). Youth sports coaches do not have adequate knowledge regarding first-aid and injury prevention. *Applied Research in Coaching and Athletics Annual*, *23*, 130.

McMahon, J., Zehntner, C., McGannon, K. R., & Lang, M. (2020). The fast-tracking of one elite athlete swimmer into a swimming coaching role: a practice contributing to the perpetuation and recycling of abuse in sport? *European Journal for Sport and Society*, *17*(3), 265-284.

McQuade, S., & Nash, C. (2015). The role of the coach developer in supporting and guiding coach learning. *International Sport Coaching Journal*, *2*(3), 339-346. https://doi.org/10.1123/iscj.2015-0059

medalspercapita.com. (2021). *Medals per capita*. https://medalspercapita.com/

Mees, A., Sinfield, D., Collins, D., & Collins, L. (2020). Adaptive expertise – a characteristic of expertise in outdoor instructors? *Physical Education and Sport Pedagogy*, *25*(4), 423-438. https://doi.org/10.1080/17408989.2020.1727870

Merkel, D. L. (2013). Youth sport: Positive and negative impact on young athletes. *Open Access Journal of Sports Medicine*, *4*, 151.

Misener, K. E., & Danylchuk, K. E. (2009). Coaches' perceptions of Canada's National Coaching Certification Program (NCCP): Awareness and value. *International Journal of Sports Science & Coaching*, *4*(2), 233-243. https://doi.org/10.1260/174795409788549580

Mitchell, E. D. (1932). Trends in athletics in junior high schools. *The Journal of Health and Physical Education* (22).

Moon, J. (2007). *Critical Thinking: An Exploration of Theory and Practice*. Routledge.

Moon, J. A. (2001). *Short Courses and Workshops: Improving the Impact of Learning, Training and Professional Development*. Routledge.

Moon, J. A. (2004). *A Handbook of Reflective and Experiential Learning: Theory and Practice*. Routledge.

Moon, J. A. (2006). Learning Journals. https://doi.org/10.4324/9780203969212

Moon, J. A. (2013). Reflection in learning and professional development: Theory and practice.

Morgan, H. J., & Bush, A. J. (2016). Sports coach as transformative leader: arresting school disengagement through community sport-based initiatives. *Sport, Education and Society*, *21*(5), 759-777. https://doi.org/10.1080/13573322.2014.935319

Na, J. (2015). Parents' perceptions of their children's experiences in physical education and youth sport. *Physical Educator*, *72*, 139-167.

Nash, C. (2019). Professional development opportunities for coaches. In K. Dieffenbach & M. Thompson (Eds.), *Coach Education Essentials* (pp. 237-256). Human Kinetics.

Nash, C., & Collins, D. (2006). Tacit knowledge in expert coaching: Science or art. *Quest*, *58*, 465-477.

Nash, C., Martindale, R., Collins, D., & Martindale, A. (2012). Parameterising expertise in coaching: Past, present and future. *Journal of Sports Sciences*, *30*(10), 985-994.

Nash, C., & Sproule, J. (2012). Coaches perceptions of their coach education experiences. *International Journal of Sport Psychology*, *43*, 33-52.

Nash, C., & Taylor, J. (2021). 'Just let them play': Complex dynamics in youth sport, why it isn't so simple. *Frontiers in Psychology*, *12*.

National Coaching Report. (in progress).

National Sport Census. (in progress).

NAYS. (2021). *National Alliance for Youth Sports*. https://www.nays.org/

NCAA. (2020). *Estimated probability of competing in college athletics*.

NCACE. (2021). *National Committee for Accreditation of Coaching Education*. https://www.qualitycoachingeducation.org/

Neely, K. C., & Holt, N. L. (2014). Parents' perspectives on the benefits of sport participation for young children. *The Sport Psychologist*, *28*(3), 255-268. https://doi.org/10.1123/tsp.2013-0094

Nelson, L., Cushion, C., & Potrac, P. (2013). Enhancing the provision of coach education: The recommendations of UK coaching practitioners. *Physical Education & Sport Pedagogy*, *18*(2), 204-218. https://doi.org/10.1080/17408989.2011.649725

Nelson, L. J., & Cushion, C. J. (2006). Reflection in coach education: The case of the national governing body coaching certificate. *The Sport Psychologist*, *20*(2), 174-183. https://doi.org/10.1123/tsp.20.2.174

Nelson, L. J., Cushion, C. J., & Potrac, P. (2006). Formal, nonformal and informal coach learning: A holistic conceptualisation. *International Journal of Sports Science & Coaching*, *1*(3), 247-259. https://doi.org/10.1260/174795406778604627

Newman, R. E., & Miller, M. T. (1990). Historical overview of physical education teacher education curricula in American higher education. *Historical Materials.*

Newman, T. J., Santos, F., Cardoso, A., & Pereira, P. (2020). The experiential nature of coach education within a positive youth development perspective: Implications for practice and research. *International Sport Coaching Journal*, *7*(3), 398-406. https://doi.org/10.1123/iscj.2019-0106

Norman, L., Rankin-Wright, A. J., & Allison, W. (2018). "It's a concrete ceiling; It's not even glass": Understanding tenets of organizational culture that supports the progression of women as coaches and coach developers. *Journal of Sport and Social Issues*, *42*(5), 393-414. https://doi.org/10.1177/0193723518790086

Normand, J. M., Wolfe, A., & Peak, K. (2017). A review of early sport specialization in relation to the development of a young athlete. *International Journal of Kinesiology and Sports Science*, *5*(2), 37. https://doi.org/10.7575/aiac.ijkss.v.5n.2p.37

North, J. (2010). Using 'coach developers' to facilitate coach learning and development: Qualitative evidence from the UK. *International Journal of Sports Science & Coaching*, *5*(2), 239-256.

North, J. (2017). *Sport coaching research and practice*. Routledge https://doi.org/10.4324/9781315753232

North, J., Piggott, D., Lara-Bercial, S., Abraham, A., & Muir, B. (2018). The professionalization of sport coaching. In R. Thelwell & M. Dicks (Eds.), *Professional Advances in Sports Coaching: Research and Practice*. Routledge.

North, J., Piggott, D., Rankin-Wright, A., & Ashford, M. (2020). An empirical examination of U.K. coaches' issues and problems, and their support and advice networks. *International Sport Coaching Journal*, *7*(3), 283-294. https://doi.org/10.1123/iscj.2019-0049

NSCA. (2021). *National Strength and Conditioning Association*. https://www.nsca.com/certification/certification-overview/

Olusoga, P., Bentzen, M., & Kentta, G. (2019). Coach burnout: A scoping review. *International Sport Coaching Journal*, *6*(1), 42-62. https://doi.org/10.1123/iscj.2017-0094

Olusoga, P., Butt, J., Maynard, I., & Hays, K. (2010). Stress and coping: A study of world class coaches. *Journal of Applied Sport Psychology*, *22*(3), 274-293. https://doi.org/10.1080/10413201003760968

Paquette, K., & Trudel, P. (2018). Learner-centered coach education: Practical recommendations for coach development administrators. *International Sport Coaching Journal*, *5*(2), 169-175. https://doi.org/10.1123/iscj.2017-0084

Paquette, K., Trudel, P., Duarte, T., & Cundari, G. (2019). Participating in a learner-centered coach education program: Composite vignettes of coaches' and coach educators' experiences. *International Sport Coaching Journal*, *6*(3), 274-284. https://doi.org/10.1123/iscj.2018-0085

Pelikhova, J. (2014). *Supporting the professional development needs of high school athletic coaches: An action research project to create a coaching resource guide*. University of California, Los Angeles.

Pennycook, G., Cheyne, J. A., Barr, N., Koehler, D. J., & Fugelsang, J. A. (2015). On the reception and detection of pseudo-profound bullshit. *Judgment and Decision Making*, *10*(6), 549-563.

Petitpas, A. J., Cornelius, A. E., Van Raalte, J. L., & Jones, T. (2005). A framework for planning youth sport programs that foster psychosocial development. *The Sport Psychologist*, *19*(1), 63-80. https://doi.org/10.1123/tsp.19.1.63

Piggott, D. (2012). Coaches' experiences of formal coach education: A critical sociological investigation. *Sport, Education and Society, 17*(4), 535-554.

Portenga, S. T., Aoyagi, M. W., & Cohen, A. B. (2017). Helping to build a profession: A working definition of sport and performance psychology. *Journal of Sport Psychology in Action*, *8*, 47-59.

Poucher, Z. A., Bissett, J. E., & Tamminen, K. A. (2020). Development of a webinar for sSport coaches: Suggested best practices for supporting athletes. *Journal of Sport Psychology in Action*, *12*(2), 73-86.

Preston, C., Allan, V., & Fraser-Thomas, J. (2021). Facilitating positive youth development in elite youth hockey: Exploring coaches' capabilities, opportunities, and motivations. *Journal of Applied Sport Psychology*, *33*(3), 302-320. https://doi.org/10.1080/10413200.2019.1648327

Raakman, E., Dorsch, K., & Rhind, D. (2010). The development of a typology of abusive coaching behaviours within youth sport. *International Journal of Sports Science & Coaching*, *5*(4), 503-515. https://doi.org/10.1260/1747-9541.5.4.503

Read, D. (2003). Beyond coaching clinics. *Athletic Management*, *15*(5), 37-43.

Reade, I. (2010). Understanding the change process: Valuing what it is that coaches do: A commentary. *International Journal of Sports Science & Coaching*, *5*(2), 165-167. https://doi.org/10.1260/1747-9541.5.2.165

Reade, I., Rodgers, W., & Hall, N. (2008). Knowledge transfer: How do high performance coaches access the knowledge of sport scientists? *International Journal of Sports Science & Coaching*, *3*(3), 319-334.

Rodrigue, F., He, C., & Trudel, P. (2016). Concept mapping: Its use for high performance sport coach development. *The psychology of effective coaching and management*, 71-90.

Rodrigue, F., & Trudel, P. (2020). A "personal learning coach" for high-performance coaches: A companion to reflect and learn from one's own coaching practice. In *Coach education and development in sport: Instructional strategies.* (pp. 141-153). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780429351037-12

Roetert, E. P., Ellenbecker, T. S., & Kriellaars, D. (2018). Physical literacy: Why should we embrace this construct? *British Journal of Sports Medicine*, *52*(20), 1291-1292. https://doi.org/10.1136/bjsports-2017-098465

Rolls, S., & Plauborg, H. (2009). Teachers' career trajectories: An examination of research. In *Teachers' career trajectories and work lives* (pp. 9-28). Springer.

Rottensteiner, C., Konttinen, N., & Laakso, L. (2015). Sustained participation in youth sports related to coach-athlete relationship and coach-created motivational climate. *International Sport Coaching Journal*, *2*, 29-38. https://doi.org/10.1123/iscj.2014-0060

Rubin, K. H., Coplan, R., Chen, X., Buskirk, A. A., & Wojslawowicz, J. C. (2005). Peer relationships in childhood. In *Encyclopedia of Primary Prevention and Health Promotion*. https://doi.org/10.1007/978-1-4615-0195-4_117

Rundle-Thiele, S., & Auld, C. (2009). Should I stay or should I go? Retention of junior sport coaches. *Annals of Leisure Research*, *12*, 1-21. https://doi.org/10.1080/11745398.2009.9686806

Rynne, S. (2014). 'Fast track' and 'traditional path' coaches: Affordances, agency and social capital. *Sport, Education and Society*, *19*(3), 299-313. https://doi.org/10.1080/13573322.2012.670113

Rynne, S. B., & Mallett, C. J. (2012). Understanding the work and learning of high performance coaches. *Physical Education & Sport Pedagogy*, *17*(5), 507-523. https://doi.org/10.1080/17408989.2011.621119

Sage, G. H. (1989). Becoming a high school coach: From playing sports to coaching. *Research Quarterly for Exercise and Sport*, *60*(1), 81-92.

Salmela, J. (1995). Learning from the development of expert coaches. *Coaching and Sport Science Journal*, *2*(2), 3-13.

Scanlan, T. K., & Lewthwaite, R. (1986). Social psychological aspects of competition for male youth sport participants: IV. Predictors of enjoyment. *Journal of Sport Psychology*, *8*(1).

Schempp, P., McCullick, B., & Mason, I. S. (2006). Development of expert coaching. In *Sports Coach as Educator*.

Schempp, P. G., McCullick, B. A., Grant, M. A., Foo, C., & Wieser, K. (2010). Professional playing experience does not lead to professional coaching success. *Journal of Coaching Education*, *3*(3), 72-82. https://doi.org/10.1123/jce.3.3.72

Schinke, R. J., Bloom, G. A., & Salmela, J. H. (1995). The career stages of elite Canadian basketball coaches. *Avante*, *1*(1), 48-62.

Schlitz, H. (2021, August 15). Youth sports referees are quitting in droves due to a toxic combination of abuse from coaches and parents, low salaries, and COVID-19. *Business Insider*.

Schoenstedt, L., Vickers, B., & Carr, D. (2016). Perceptions of coaching education in 17 physical education curriculums. *International Journal of Humanities and Social Science*, *6*(2), 1-8.

Schulz, M. R., Marshall, S. W., Yang, J., Mueller, F. O., Weaver, N. L., & Bowling, J. M. (2004). A prospective cohort study of injury incidence and risk factors in North Carolina high school competitive cheerleaders. *The American Journal of Sports Medicine*, *32*(2), 396-405. https://doi.org/10.1177/0363546503261715

Sheehy, T., Zizzi, S., Dieffenbach, K., & Sharp, L.-A. (2019). ". . . Didn't only change my coaching, changed my life": Coaches' use of sport psychology for their own development and performance. *The Sport Psychologist*, *33*(2), 137-147. https://doi.org/10.1123/tsp.2018-0061

Sheridan, D., Coffee, P., & Lavallee, D. (2014). A systematic review of social support in youth sport. *International Review of Sport and Exercise Psychology*, *7*, 198-228. https://doi.org/10.1080/1750984x.2014.931999

Shurley, J. P., Todd, J., & Todd, T. (2019). *Strength coaching in america: A history of innovation that transformed sports*. University of Texas Press.

Siegenthaler, K. L., & Gonzalez, G. L. (1997). Youth sports as serious leisure. *Journal of Sport and Social Issues*, *21*(3), 298-314. https://doi.org/10.1177/019372397021003006

Silva, J. M. (1989). Toward the professionalization of sport psychology. *The Sport Psychologist*, *3*(3), 265-273. https://doi.org/10.1123/tsp.3.3.265

Smith, R. E., & Smoll, F. L. (2017). Coaching behavior and effectiveness in sport and exercise psychology. In: Oxford University Press.

Smolianov, P., Murphy, J., McMahon, S. G., & Naylor, A. H. (2015). Comparing the practices of US Soccer against a global model for integrated development of mass and high-performance sport. *Managing Sport and Leisure*, *20*, 1-21.

Solmon, M. A. (2021). Physical education and sport pedagogy: The application of the academic discipline of kinesiology. *Kinesiology Review*, *10*(3), 331-338. https://doi.org/10.1123/kr.2021-0026

Sparvero, E., Chalip, L., & Green, B. C. (2008). United States. In B. Houlihan & M. Green (Eds.), *Comparative Elite Sport Development: Systems, Structures and Public Policy*. Butterworth-Heinemann.

SportForLife. (2019). *Long-term development in sport and physical activity*.

Standal, O. F., & Hemmestad, L. B. (2010). Becoming a good coach: Coaching and phronesis. In A. R. Hardman & C. Jones (Eds.), *The ethics of sports coaching* (pp. 240). Taylor & Francis.

Stebbings, J., Taylor, I. M., & Spray, C. M. (2016). Interpersonal mechanisms explaining the transfer of well- and ill-being in coach-athlete dyads. *Journal of Sport and Exercise psychology*, *38*(3), 292-304. https://doi.org/10.1123/jsep.2015-0172

Stirling, A. E., & Kerr, G. A. (2008a). Defining and categorizing emotional abuse in sport. *European Journal of Sport Science*, *8*(4), 173-181.

Stirling, A. E., & Kerr, G. A. (2008b). Elite female swimmers' experiences of emotional abuse across time. *Journal of Emotional Abuse*, *7*(4), 89-113.

Stirling, A. E., & Kerr, G. A. (2013). The perceived effects of elite athletes' experiences of emotional abuse in the coach–athlete relationship. *International Journal of Sport and Exercise Psychology*, *11*(1), 87-100. https://doi.org/10.1080/1612197x.2013.752173

Stodter, A., & Cushion, C. J. (2014). Coaches' learning and education: a case study of cultures in conflict. *Sports Coaching Review*, *3*(1), 63-79.

Stodter, A., & Cushion, C. J. (2017). What works in coach learning, how, and for whom? A grounded process of soccer coaches' professional learning. *Qualitative Research in Sport, Exercise and Health*, *9*(3), 321-338. https://doi.org/10.1080/2159676x.2017.1283358

Stodter, A., & Cushion, C. J. (2019). Layers of learning in coach developers' practice-theories, preparation and delivery. *International Sport Coaching Journal*, *6*(3), 307-316. https://doi.org/10.1123/iscj.2018-0067

Stone, J. A., Rothwell, M., Shuttleworth, R., & Davids, K. (2020). Exploring sports coaches' experiences of using a contemporary pedagogical approach to coaching: An international perspective. *Qualitative Research in Sport, Exercise and Health*, *13*(4), 639-657.

Stoszkowski, J., & Collins, D. (2016). Sources, topics and use of knowledge by coaches. *J Sports Sci*, *34*(9), 794-802. https://doi.org/10.1080/02640414.2015.1072279

Stoszkowski, J., MacNamara, Á., Collins, D., & Hodgkinson, A. (2021). "Opinion and fact, perspective and truth": Seeking truthfulness and integrity in coaching and coach education. *International Sport Coaching Journal*, *8*(2), 263-269. https://doi.org/10.1123/iscj.2020-0023

Strand, B., Lyman, K. J., David, S., Landin, K., Albrecht, J., & Deutsch, J. (2019). High school coaches' knowledge of emergency care. *ICHPER-SD Journal of Research*, *10*(2), 33-39.

Strean, W., & Holt, N. (2001). Coaches', athletes' and parents' perceptions of fun in youth sports: Assumptions about learning and implications for practice. *Avante*, *63*, 1-14.

Tawse, H., Bloom, G. A., Sabiston, C. M., & Reid, G. (2012). The role of coaches of wheelchair rugby in the development of athletes with a spinal cord injury. *Qualitative Research in Sport, Exercise and Health*, *4*(2), 206-225.

Taylor, B., & Garratt, D. (2010). The professionalisation of sports coaching: relations of power, resistance and compliance. *Sport, Education and Society*, *15*, 121-139. https://doi.org/10.1080/13573320903461103

Taylor, W. G., & Garratt, D. (2013). Coaching and professionalisation. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 27-39). Routledge.

Thompson, A., Potrac, P., & Jones, R. (2015). 'I found out the hard way': Micro-political workings in professional football. *Sport, Education and Society*, *20*(8), 976-994. https://doi.org/10.1080/13573322.2013.862786

Trudel, P., Culver, D., & Werthner, P. (2013a). Considerations for coach development administrators. *Critical perspectives on becoming a sports coach*, *375*.

Trudel, P., Culver, D., & Werthner, P. (2013b). Looking at coach development from the coach-learner's perspective. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching*. Routledge.

Trudel, P., & Gilbert, W. (2006). Coaching and coach education. In D. Kirk, D. MacDonald, & M. O'Sullivan (Eds.), *Handbook of Physical Education* (pp. 516-539). SAGE Publication. https://doi.org/10.4135/9781848608009.n29

Trudel, P., Gilbert, W., & Rodrigue, F. (2016). The journey from competent to innovator: Using appreciative inquiry to enhance high performance coaching. *AI Practitioner*, 40-46. https://doi.org/10.12781/978-1-907549-27-4-5

Trudel, P., Gilbert, W., & WERThNER, P. (2010). Coach education effectiveness. *Sport coaching: Professionalisation and practice*, 135-152.

Trudel, P., Milestetd, M., & Culver, D. M. (2020). What the empirical studies on sport coach education programs in higher education have to reveal: A review. *International Sport Coaching Journal*, *7*, 61-73. https://doi.org/10.1123/iscj.2019-0037

Tscholl, P., Feddermann, N., Junge, A., & Dvorak, J. (2009). The use and abuse of painkillers in international soccer. *The American Journal of Sports Medicine*, *37*(2), 260-265. https://doi.org/10.1177/0363546508324307

Turnnidge, J., & Côté, J. (2017). Transformational coaching workshop: Applying a person-centred approach to coach development programs. *International Sport Coaching Journal*, *4*(3), 314-325. https://doi.org/10.1123/iscj.2017-0046

USADA. (2011). What sport means in America: A study of sport's role in society. *Journal of Coaching Education*, *4*(1), 2-44.

USCCE. (2021). *United States Center for Coaching Excellence*. https://www.uscoachexcellence.org/

Vaeyens, R., Güllich, A., Warr, C. R., & Philippaerts, R. (2009). Talent identification and promotion programmes of Olympic athletes. *Journal of Sports Sciences*, *27*(13), 1367-1380.

Van Mullem, P., & Mathias, K. (2021). Coach development: Practical recommendations for interscholastic sport. *International Sport Coaching Journal*, *8*, 101-112. https://doi.org/10.1123/iscj.2020-0007

Van Woezik, R. A., McLaren, C. D., Côté, J., Erickson, K., Law, B., Lafrance Horning, D., Callary, B., & Bruner, M. W. (2021). Real versus ideal: Understanding how coaches gain knowledge. *International Sport Coaching Journal*, 1-14. https://doi.org/10.1123/iscj.2021-0010

Vargas-Tonsing, T. M. (2007). Coaches' preferences for continuing coaching education. *International Journal of Sport Science & Coaching*, *2*, 25-35.

Vealey, R. S., & Chase, M. A. (2016). *Best practice for youth sport*. Human Kinetics.

Vella, S., Oades, L., & Crowe, T. (2011). The role of the coach in facilitating positive youth development: Moving from theory to practice. *Journal of Applied Sport Psychology*, *23*(1), 33-48. https://doi.org/10.1080/10413200.2010.511423

Vierimaa, M., Erickson, K., Côté, J., & Gilbert, W. (2012). Positive youth development: A measurement framework for sport. *International Journal of Sports Science & Coaching*, *7*(3), 601-614. https://doi.org/10.1260/1747-9541.7.3.601

Villalon, C., Dieffenbach, K., & Kiosoglous, C. (in progress). Perceptions of professionalism by collegiate rowing coaches.

Villalon, C. A., & Martin, S. B. (2020). High school coaches' coaching efficacy: Relationship with sport psychology exposure and gender factors. *Journal of Applied Sport Psychology*, *32*, 64-80. https://doi.org/10.1080/10413200.2018.1549620

Visek, A. J., Achrati, S. M., Mannix, H. M., McDonnell, K., Harris, B. S., & Dipietro, L. (2015). The Fun Integration Theory: Toward sustaining children and adolescents sport participation. *Journal of Physical Activity and Health*, *12*(3), 424-433. https://doi.org/10.1123/jpah.2013-0180

Wagner, M., Jones, T., & Riepenhoff, J. (2010). Children may be vulnerable in $5 billion youth sport industry. *Columbus Dispatch*.

Waldron, S., DeFreese, J. D., Register-Mihalik, J., Pietrosimone, B., & Barczak, N. (2020). The costs and benefits of early sport specialization: A critical review of literature. *Quest*, *72*, 1-18. https://doi.org/10.1080/00336297.2019.1580205

Walker, L. F., Thomas, R., & Driska, A. P. (2018). Informal and nonformal learning for sport coaches: A systematic review. *International Journal of Sports Science & Coaching*, *13*(5), 694-707. https://doi.org/10.1177/1747954118791522

Walsh, J., & Carson, F. (2019). Searching for a signature pedagogy in novice coach education. *International Sport Coaching Journal*, *6*(3), 349-353.

Watchman, T., & Spencer-Cavaliere, N. (2017). Times have changed: Parent perspectives on children's free play and sport. *Psychology of Sport and Exercise*, *32*, 102-112.

Watts, D. (2020). *Exploring professional coach educators in the United Kingdom: Experiences, roles and realities.* [Doctoral dissertation, Loughborough University].

Watts, D. W., Cushion, C. J., & Cale, L. (2021). Exploring professional coach educators' journeys and perceptions and understandings of learning. *Sport, Education and Society*, 1-15. https://doi.org/10.1080/13573322.2021.1887115

Weiss, M. R., & Sisley, B. L. (1984). Where have all the coaches gone? *Sociology of Sport Journal*, 332-247.

Werthner, P., & Trudel, P. (2006). A new theoretical perspective for understanding how coaches learn to coach. *The Sport Psychologist*, *20*, 198-212.

Werthner, P., & Trudel, P. (2009). Investigating the idiosyncratic learning paths of elite Canadian coaches. *International Journal of Sports Science & Coaching*, *4*(3), 433-449. https://doi.org/10.1260/174795409789623946

Whitehead, M. (2013). Definition of physical literacy and clarification of related issues. *ICSSPE Bulletin*, *65*(1.2).

Whitley, M. A., Smith, A. L., Dorsch, T. E., Bowers, M. T., & Centeio, E. E. (2021). Reimagining the youth sport system across the United States: A commentary from the

2020–2021 President's Council on Sports, Fitness & Nutrition Science Board. *Journal of Physical Education, Recreation & Dance*, *92*(8), 6-14. https://doi.org/10.1080/07303084.2021.1963181

Wiersma, L. D., & Fifer, A. M. (2008). "The schedule has been tough but we think it's worth it": The joys, challenges, and recommendations of youth sport parents. *Journal of Leisure Research*, *40*(4), 505-530.

Wiersma, L. D., & Sherman, C. P. (2005). Volunteer youth sport coaches' perspectives of coaching education/certification and parental codes of conduct. *Research Quarterly for Exercise and Sport*, *76*(3), 324-338. https://doi.org/10.1080/02701367.2005.10599303

Wiggins, D. K. (2013). A worthwhile effort? History of organized youth sport in the United States. *Kinesiology Review*, *2*(1), 65-75. https://doi.org/10.1123/krj.2.1.65

Williams, G. G., & MacNamara, Á. (2021). Coaching on the talent pathway: Understanding the influence of developmental experiences on coaching philosophy. *International Sport Coaching Journal*, *8*(2), 141-152. https://doi.org/10.1123/iscj.2019-0099

Williams, S. P., & Bush, A. J. (2019). Connecting knowledge (s) to practice: A Bernsteinian theorisation of a collaborative coach learning community project. *Sport, Education and Society*, *24*(4), 375-389.

Winchester, G., Culver, D., & Camiré, M. (2013). Understanding how Ontario high school teacher-coaches learn to coach. *Physical Education and Sport Pedagogy*, *18*(4), 412-426.

Winter, S., & Collins, D. J. (2016). Applied sport psychology: A profession? *The Sport Psychologist*, *30*, 89-96. https://doi.org/10.1123/tsp.2014-0132

Witt, P. A., & Dangi, T. B. (2018). Why children/youth drop out of sports. *Journal of Park and Recreation Administration*, *36*(3).

Wright, T., Trudel, P., & Culver, D. (2007). Learning how to coach: The different learning situations reported by youth ice hockey coaches. *Physical Education & Sport Pedagogy*, *12*(2), 127-144. https://doi.org/10.1080/17408980701282019

Wuerth, S., Lee, M. J., & Alfermann, D. (2004). Parental involvement and athletes' career in youth sport. *Psychology of Sport and Exercise*, *5*(1), 21-33. https://doi.org/10.1016/s1469-0292(02)00047-x

Zakrajsek, R., & Zizzi, S. (2008). How do coaches' attitudes change when exposed to a sport psychology workshop? *Journal of Coaching Education*, *1*, 66-83.