



Toward an Integrated Understanding of the Youth Sport System

Travis E. Dorsch^a, Alan L. Smith^b, Jordan A. Blazo^c, Jay Coakley^d, Jean Côté^e, Christopher R. D. Wagstaff^f, Stacy Warner^g, and Michael Q. King^a

^aUtah State University; ^bMichigan State University; ^cLouisiana Tech University; ^dUniversity of Colorado Colorado Springs; ^eQueen's University; ^fUniversity of Portsmouth; ^gEast Carolina University

ABSTRACT

The aim of the present article is to outline a heuristic model that facilitates movement toward an integrated understanding of the youth sport system. We define the *youth sport system* as the set of interdependent persons and contexts that influence and are influenced by an athlete in youth sport. Our model builds directly from a systems perspective, and its tenets of holism, feedback loops, and roles. Specifically, we argue that the persons and contexts that surround an athlete in youth sport should be examined collectively, self-correct over time, and take on certain functions that are negotiated over time. The model extends past contributions toward integration by outlining how proximal and distal processes within youth sport can be studied in a more unified way. Looking forward, research designed to capture the nuanced ways persons and contexts influence and are influenced by one another in youth sport will be best positioned to impact theory and practice in meaningful ways.

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Youth sport is perhaps the most common extracurricular activity across the world, with most young people participating in structured or unstructured sport activities during childhood and adolescence (Hulteen et al., 2017). Youth sport participation has been linked to numerous physical, psychological, emotional, social, and intellectual benefits, but also has been associated with negative outcomes such as risk-taking, eating disorders, low self-esteem, aggression, and decreased morality (Fraser-Thomas et al., 2005). The extent to which youth experience positive or negative outcomes in sport is influenced by their interactions with others as well as the broader contexts in which their participation occurs (García Bengoechea & Johnson, 2001).

Despite extensive research addressing the many persons and contexts that surround youth in sport, few scholars have attempted to generate an integrated understanding of the youth sport system. This is surprising because fields such as communication, human development, kinesiology, psychology, sport management, and others contribute to this interdisciplinary area of inquiry. One attempt at integration was made by García Bengoechea (2002), who argued that processes (e.g., coaching, parenting, peer interactions), personal characteristics (e.g., an athlete's age, gender, and ability),

contextual factors (e.g., an athlete's level of participation), and time (e.g., the athlete's stage of maturation, the duration of a salient relationship) influence young athletes' developmental experiences in sport. This conceptual perspective aligned with calls to employ more dynamic models of reciprocal causation in sport (e.g., Brawley & Martin, 1995), as well as broader theorizing in the human development literature (e.g., Bronfenbrenner, 2005 *process-person-context-time* framework).

Although it is important to examine the dynamic and reciprocal processes that influence youth development in sport, it also remains essential to acknowledge the *interconnectedness* of these processes across a range of persons and contexts. Researchers interested in family dynamics have examined athletes' interactions with parents and/or siblings, those interested in team dynamics have examined athletes' interactions with coaches and/or peers, and others have examined the role structural factors play in youth sport. Such work has done much to extend youth sport knowledge, yet has not captured the interconnected nature of the persons and contexts that may reciprocally influence one another. A systems lens (Broderick, 1993; Von Bertalanffy, 1972) has the potential to guide researchers in capturing this interconnection by enabling the examination of a broad range of social relationships

CONTACT Travis E. Dorsch  Travis.Dorsch@usu.edu  Department of Human Development and Family Studies, Utah State University, 2905 Old Main Hill, Logan, UT 84322, USA.

Author Note: The 3rd through 7th authors contributed equally to the completion of this manuscript and are listed in alphabetical order. The authors have no financial and/or personal relationships that influenced this work.

and the ways these relationships may shape or be shaped by the contexts in which persons interact. This affords scholars the opportunity to highlight the extensive web of dynamic and reciprocal relationships that define the youth sport system.

Here we define the *youth sport system* as 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. Over the course of a young athlete's development, persons and contexts interact systematically and change in relative salience from toddlerhood through middle-to-late adolescence (Côté & Vierimaa, 2014). The systems perspective (Broderick, 1993; Von Bertalanffy, 1972) consists of several tenets that can help us better understand the youth sport system.

A primary tenet of the systems perspective is *holism*, which stresses that the persons and contexts that surround an individual should be viewed collectively rather than independently (Broderick, 1993). In youth sport, athletes' interactions within the family and team, as well as with the broader contexts that surround them, should be seen as constituting a dynamic, reciprocal, intricate, and sometimes coordinated system rather than as independent, top-down influences on the athlete. A second tenet of the systems perspective is that the persons and contexts that constitute a system participate in *feedback loops*, whereby self-corrections occur based on interactions with other persons and contexts within the system. For example, families and youth sport teams have the capacity to change course (e.g., offer feedback, discontinue participation, start a new team or league) if the contexts in which sport takes place do not align with their goals. Lastly, an important assumption specific to the systems perspective is that the persons and contexts that constitute a system will take on certain *roles* that are negotiated over time (see Smith & Hamon, 2012). For example, the roles that persons play in youth sport vary across organizations, and the roles that organizations play in youth sport vary across communities and societies. These three tenets can help researchers from a range of disciplines better understand how persons and contexts may influence or be influenced by athletes' behaviors, attitudes, experiences, and outcomes in youth sport.

Given the international proliferation of youth sport research over recent decades (see Gould, 2019), it is fitting that empirical knowledge across multiple areas of the youth sport literature has systematically deepened. Given this growth of knowledge, it is not surprising that many scholars have narrowed their focus to more

targeted areas of understanding. While this narrowing has led to deeper consideration of the roles of parents, siblings, peers, and coaches, as well as the organizations, communities, and societies in which young athletes engage, an unintended consequence has been the construction of empirical "silos" that often remain independent of one another (see Duda, 1999; Schary & Cardinal, 2015). Therefore, a need exists to establish a conceptual framework that helps youth sport scholars move toward thoughtful integration of the core areas of knowledge about youth sport. The process of pursuing this integration has the potential to foster a range of interdisciplinary collaborations resulting in new and important research questions and discoveries. This is likely to yield a more nuanced understanding of the youth sport system.

The aim of the present article is to outline a heuristic model that facilitates movement toward an integrated understanding of the youth sport system. Heuristic models are early practical and flexible frameworks that offer a working understanding of a specific area of inquiry and that are useful in catalyzing theory development. In the subsequent sections, we briefly detail how the *family subsystem* (comprised of an athlete, parents, and siblings), the *team subsystem* (comprised of an athlete, peers, and coaches), and the *environmental subsystem* (comprised of organizations, communities, and societies) have the potential to impact athletes' behaviors, attitudes, experiences, and outcomes in youth sport. Our model integrates these three subsystems and highlights some novel questions that could be tested by future scholars from a range of disciplines. Although we identify elements within and links across the persons and contexts in the model, we do not assume the model is inclusive of all possibilities, unchanging, or equally applicable across all athletes, families, teams, or environments.

In presenting the model, we extend past contributions toward theoretical integration (e.g., García Bengoechea, 2002) by outlining how proximal (e.g., parent pressure and support, sibling modeling and differentiation, peer social comparison and expectations, coach-relationships and leadership) and distal (e.g., organizational culture and standards, community infrastructure and access, societal traditions and values) aspects of the youth sport system can be studied in a more integrated way. Our model has the potential to inform scholars who wish to examine the intersections of persons and contexts in youth sport. Specifically, we hope to facilitate systemic and interdisciplinary understanding of the youth sport system across a range of settings. This offers the potential to inform practitioners who are charged with designing youth sport contexts

and shaping the daily interactions that occur among young athletes and their parents, siblings, peers, and coaches.

The family subsystem in youth sport

The first component of the youth sport system is the family subsystem. The family is the most proximal—and in many cases most salient—subsystem with regard to athlete behaviors, attitudes, experiences, and outcomes, especially in the earliest years of sport participation (Côté, 1999), and has been shown to have lasting impacts (Dixon et al., 2008). Thus, researchers from various disciplines have targeted families as an important reference point for understanding the development of athletes in sport and physical activity settings (e.g., Brustad, 2010). Two primary family members who have the potential to influence and be influenced by athletes in youth sport are parents and siblings.

As co-participants and important socialization agents in youth sport, *parents* are essential contributors to the behaviors, attitudes, experiences, and outcomes of young athletes (Babkes & Weiss, 1999; Côté, 1999; Fredricks & Eccles, 2004). Although researchers have extensively explored parent-child interactions in youth sport (see Dorsch et al., 2019), few have examined parents' roles as co-participants in the broader youth sport system. That is, much of this research has considered parents as providers and interpreters of the youth sport experience without fully acknowledging the many factors within the family, within the athlete's team, and across the contexts in which an athlete participates that have the potential to influence and/or be influenced by parent involvement. This is an important consideration, given recent ecological understanding of parents' development in youth sport (Dorsch et al., 2015a; Holt et al., 2008). Whereas a rich literature describes the influence of parents on young athletes across various national contexts, it is also important for researchers to consider the many ways persons and contexts may shape parents' involvement in youth sport. For example, through a developmental lens, parents' roles in youth sport are often driven by the changing characteristics of the athlete (e.g., age, gender, ability), the organizational or community context (e.g., missions, standards, initiatives, and support), and the societies in which the athlete participates (e.g., resources and policy). These factors are dynamic and may shape the nature and development of parents' goals for their children vis-à-vis the parent-child sport relationship and how parents are involved in their children's participation on a day-to-day basis (Dorsch et al., 2015b; Knight & Holt, 2014). This assertion aligns with Côté and colleagues' developmental

model of sport participation, which highlights the dynamic nature of parent roles and involvement patterns in youth sport (Côté, 1999; Côté & Vierimaa, 2014). In addition to these external factors, parents' person characteristics as set forth in Bronfenbrenner's (2005) PPCT model of human development (e.g., gender, sport experiences, parenting style) also shape the roles they assume and goals they adopt for their children in sport (Dorsch et al., 2015a; Holt et al., 2008).

To optimize parents' roles as socialization agents in youth sport, scholars and practitioners have sought to shape parent involvement in ways that limit athlete perceptions of parental pressure and facilitate athlete perceptions of parental support (e.g., Harwood & Knight, 2015). In line with this work, researchers have begun to document strategies that can be used to engage parents in evidence-based learning (e.g., Dorsch et al., 2017; Thrower et al., 2017). Given the multiple roles that parents hold, they have described feeling ill-equipped to optimally interact with their children in youth sport (see Harwood & Knight, 2015). Accordingly, parents have been shown to: (a) seek the help of extended family, friends, and community members to meet the time demands of youth sport (Burgess et al., 2016), (b) draw on the professional and interpersonal knowledge of coaches to begin to understand the needs of their children and the technical aspects of the sport (Knight & Holt, 2014), and (c) encourage their children to model siblings and build relationships with peers to manage the physical and emotional demands of sport (Knight & Holt, 2014). It is important, therefore, to acknowledge that parents are an integral part of the family subsystem and the larger youth sport system (Teques et al., 2018).

The developmental significance of *siblings* in youth sport is understudied, yet holds much promise for helping build a holistic picture of the family subsystem and broader youth sport system. Although siblings have attributes in common with many interpersonal relationships, they also possess unique characteristics and developmental importance (Cicirelli, 1995). For example, the sibling relationship is often marked by competition and cooperation, modeling and differentiation, social comparison, and experiences of compassion (Furman & Buhrmester, 1985). The potential depth and varied experiences of this relationship can be important to the roles siblings play in shaping each other's social, emotional, and cognitive development (Yeh & Lempers, 2004). Moreover, siblings can be developmentally salient in tandem with other social agents such as parents and peers (e.g., Bell et al., 1985; Fagan & Najman, 2005). This is notable considering prevailing evidence that parents are the primary providers and interpreters of youth sport, and the documented increase in the salience of

peers as a proxy for family during late childhood and early adolescence (Duncan et al., 2005; Savin-Williams & Berndt, 1990). Importantly, sibling interactions are thought to foster social comparison and social-cognitive development, providing a foundation for relationships with other peers (Dunn, 2007; McHale et al., 2012). Given that sibling interactions are consequential to development, siblings may influence one another's participation in, and affective responses to, structured and unstructured sport (Horn & Horn, 2007).

Researchers recently have begun to explore the roles of siblings in sport (see Blazo & Smith, 2018). Examples of this work include the experience of having an athletically gifted sibling in the household (Blazo et al., 2014; Newhouse-Bailey et al., 2015) and socialization into and continued involvement in sport (e.g., Osai & Whiteman, 2017; Ziviani et al., 2006). Results of this work suggest that young athletes engage in sibling processes such as modeling and differentiation that shape their sport-related behaviors, attitudes, experiences, and outcomes. As researchers seek to integrate these and other topics via sustained lines of investigation, theoretically- and developmentally informed studies that view siblings as a component of the family subsystem and the broader youth sport system are needed.

The team subsystem in youth sport

The second component of the youth sport system is the team subsystem. The team is considered proximal to the athlete and becomes especially important during adolescence, when transitioning to sport contexts that are less often directed by parents (Côté, 1999). Two primary persons within the team subsystem who may influence or be influenced by athletes are peers and coaches.

Peers are essential yet relatively underappreciated contributors to athletes' behaviors, attitudes, experiences, and outcomes in youth sport. Whereas most researchers exploring social dynamics in sport have focused on coaches and parents, there have also been efforts focused on peers (Smith et al., 2019; Weiss & Stuntz, 2004). There is much value to examining peers in youth sport because, as youth move into more intensive participation during adolescence, relationships with fellow participants can become a proxy for family. Peers serve as an important reference for social comparison, spend extensive periods of time together, fulfill various relational functions, and often hold relatively equal power to one another as compared to parents, coaches, and other adults (Smith et al., 2019).

The empirical literature on peers in youth sport varies across countries and cultures, though some persistent streams of inquiry are evident. There is a well-established

link between competence and social acceptance in sport (Evans & Roberts, 1987; Weiss & Duncan, 1992), and sport can foster the cultivation and expression of friendships (Weiss & Stuntz, 2004; Weiss et al., 1996) and social identity (Bruner et al., 2017). At the same time, high-performance sport contexts that are competitive in nature can challenge the development of authentic relationships (Adams & Carr, 2019), introduce conflict among peers that needs to be managed (Holt et al., 2012), and even involve the victimization of some participants (Partridge & Knapp, 2016). Thus, a young athlete's sport involvement can serve as a pathway to positive social outcomes or to diminished social standing and well-being, suggesting that youth sport is a form of social currency (Nicholson et al., 2013). The motivational climate reinforced by peers also has been shown to be salient in youth sport (McLaren et al., 2016; Smith et al., 2010; Vazou et al., 2006) as have peer relation-inferred self-efficacy (i.e., RISE) perceptions (Jackson et al., 2007, 2014). Collectively, the extant literature offers evidence of the importance of teammates and competitors in youth sport and suggests that peers should be considered in any broader treatment of the youth sport system.

Initial steps to integrate understanding of peers' contribution to the youth sport system can be found in research designed to consider multiple persons simultaneously with respect to social motivation, well-being, or other outcomes. Efforts of this nature have been conducted that examine peers along with parents (e.g., Ullrich-French & Smith, 2006), coaches (Gardner et al., 2016; Riley & Smith, 2011), and teachers (Cox & Ullrich-French, 2010). Exploring relationships or interactions among people is challenging and complex. However, it is essential to pursue such work and capture the integration of persons and contexts, as is advocated in systems theory (Broderick, 1993; Von Bertalanffy, 1972).

Coaches have the potential to influence and be influenced by athletes' behaviors, attitudes, experiences, and outcomes in youth sport, and several conceptual models have been developed to better understand the coach's role in youth sport (e.g., Chelladurai, 2007; Côté et al., 1995; Jowett, 2005; Smith & Smoll, 2002). These models have emerged from a range of countries and are grounded in different literatures, including leadership, expertise, coaching, motivation, and education. In a review of these models and the broader coaching literature, Côté and Gilbert (2009) proposed a succinct, yet comprehensive, definition of coaching effectiveness: "The consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes' competence, confidence, connection, and character in specific coaching contexts" (p. 316). This integrative definition frames effectiveness as coaches' ability to exhibit professional and interpersonal behaviors that

foster positive developmental outcomes in their athletes. Studies of coaches in various sports show an association between coaches' effective behaviors and athletes' outcomes such as enjoyment, competence, persistence, teamwork, and initiative (e.g., Álvarez et al., 2009; Coatsworth & Conroy, 2009; Erickson & Côté, 2016; Pelletier et al., 2001).

Importantly, coaching requires consistent interactions with others within the family and team subsystems (e.g., parents, siblings, peers, and other coaches). Because these interactions are embedded within organizations, communities, and societies, coaching research would benefit from efforts to generate a more holistic understanding of the complex factors that are linked to coaching effectiveness. This is consistent with a systems approach, which suggests development takes place via interactions among interrelated persons within salient developmental contexts (Broderick, 1993).

Viewing coaches within the team subsystem and the broader youth sport system necessitates a nuanced conceptualization of coaching processes. Examples of how to integrate understanding of coaching effectiveness can be seen in the way coaches are expected to build and maintain relationships. Specifically, research has been conducted on parent-coaches (e.g., Weiss & Fretwell, 2005), the coach-athlete relationship (e.g., Horne & Carron, 1985; Olympiou et al., 2008), and the parent-athlete-coach triangle (e.g., Hellstedt, 1987; Jowett & Timson-Katchis, 2005). Although this research has been designed to capture dyadic—and in some cases triadic—relationships, it could be extended to integrate psychological, behavioral, and affective processes and outcomes that occur within and across the family, team, and environmental subsystems. This would be similar to the recent work from Canada examining transformational leadership among youth sport coaches (e.g., Turnnidge & Côté, 2017). Moving forward, conceptually driven efforts to pursue such extensions would advance holistic understanding of the youth sport system.

The environmental subsystem in youth sport

The third component of the youth sport system is the environmental subsystem. This is considered a distal subsystem with reference to the athlete, reflecting the design and delivery of youth sport as well as the norms associated with and meanings ascribed to sport participation. Three primary contexts within the environmental subsystem that may influence or be influenced by young athletes are organizations, communities, and societies.

The most proximal context to athletes, and to the families and teams in which they are embedded, is the organization. *Organizations* are the entities (e.g., academies, clubs, schools, municipal entities, for-profit and not-for-profit businesses) that design and deliver sport to youth (Wagstaff, 2017, 2019). Perhaps the most pervasive line of organizational research in sport targets the ways organizations impose numerous demands (i.e., stressors) on athletes and the persons with whom athletes regularly interact (see Arnold et al., 2017). Many organizations that offer sport seek to provide guidance regarding their missions, standards, and cultures to reduce the demands faced by athletes and others, while developing opportunities for persons within the organization to thrive. In recent years, this has included a focus on safe sport principles tied to prevention of injury and abuse (Johnson et al., 2020; Mountjoy et al., 2020).

Utilizing a systems lens affords researchers the opportunity to acknowledge the presence of feedback loops, as well as the narratives and metaphors people use to describe their organizations. As such, researchers should consider how organizations design and deliver sport opportunities for youth based on their missions, standards, and cultures, as well as the ways they may be shaped by the parents, coaches, and other stakeholders who contribute to their operation (Legg et al., 2016; Maitland et al., 2015). For instance, explorations of the structure, boundaries, power, hierarchy, function, resource and information sharing, and subgrouping within organizations might provide valuable insights into youth sport environments as interconnected, living human systems. Initial attempts to conduct research in youth sport have largely failed to attend to the impact athletes, and the persons and contexts that surround them, have on the organizations in which they participate and vice versa in an iterative and transactional manner. This gap may be addressed by incorporating organizational and systems-based thinking within more established research lines on parents, siblings, peers, and coaches. In turn, a fuller appreciation may be gained regarding the important role organizations play in such complex systems.

The interaction of parents, siblings, peers, and coaches within organizations occurs differently across *communities*. For example, research indicates that towns with fewer than 100,000 inhabitants may possess unique features related to community size and behavior patterns of youth that are conducive to athletes' sustained engagement in sport (Turnnidge et al., 2014). In terms of the physical environment, smaller communities provide youth with more space for unorganized physical activity and sports with peers (Balish & Côté, 2014). However, this is balanced by the fact that larger communities often

provide youth with increased accessibility, exposure, and competition (Grieve & Sherry, 2012). From a behavioral perspective, smaller cities may provide integrated approaches to sport participation that foster more engagement from parents, siblings, peers, and coaches whereas larger cities may offer a broader cross-section of activities and competitive trajectories (Surya et al., 2012). Finally, the size of a community has the potential to impact the value placed on positive social norms (e.g., purposeful mentoring, prosocial behavior, communal child-rearing) and the ways parents, coaches, and organizations design and deliver sport (Bale, 2003; Balish & Côté, 2014; Fraser-Thomas et al., 2010; Turnnidge et al., 2014).

Communities establish and fortify the norms associated with sport participation while also providing support at the group level and fostering a sense of belongingness among individuals. This is often referred to as sense of community, and is vital because it fulfills an innate human need for relatedness (McMillan & Chavis, 1986; Sarason, 1974). Because youth have been shown to benefit in myriad ways from increased sense of community, sport is often championed as a means to enhance personal and community development (Warner & Dixon, 2011, 2013; Warner et al., 2012). Specifically, sense of community has been linked to outcomes such as better health (e.g., Warner et al., 2017) and fewer delinquent behaviors (e.g., Battistich & Hom, 1997). Given the potential range of characteristics (e.g., size, initiatives, access, infrastructure) that can impact how communities support youth in sport, as well as community factors that shape how sport is designed and delivered, it is critical to understand how communities fit within the environmental subsystem and broader youth sport system.

Societies shape the meanings that individuals, and the persons and contexts that surround them, give to athletes' behaviors, attitudes, experiences, and outcomes in youth sport, and how they integrate those meanings into norms for sport participation and ultimately the design and delivery of sport (Bowers & Green, 2013). For example, in societies characterized by socio-economic inequality, sports for youth from wealthier families tend to focus on skills and future opportunities (e.g., college and/or professional participation), whereas programs for youth from lower income families tend to focus on social control and personal deficit reduction (Coakley, 2002; Whitley et al., 2019). It is important to recognize that the perceived significance of youth sport in societies depends on popular beliefs about the connection between sport involvement and athletes' psychosocial development, social acceptance, and the achievement of educational and occupational success.

Youth sport is generally designed and delivered in ways that reflect and reaffirm the traditions and values that are important in a society; however, these values and traditions can be expressed in positive or negative ways and can be inclusive or exclusive in nature. Importantly, it is usually assumed that the lessons taught, and thought to be learned, in youth sport reflect and reaffirm those traditions and values by way of various feedback loops (Coakley, 1983). As an example, in Western societies where individualism is valued, youth sport is generally designed and delivered in ways that place importance on characteristics such as independence, toughness, competition, achievement, and self-reliance. It is also assumed that athletes who demonstrate these characteristics will have success, and thus confirm these characteristics as important within the society (see Bondin et al., 2020; Fine, 1987; Goodman, 1979; Mrozek, 1983).

Whether youth sport is subsidized by the government, its constituent communities, or individual public or private organizations varies across societies and has the potential to impact youth behaviors, attitudes, experiences, and outcomes in sport. For example, the structure of youth sport in China is shaped by the federal government. State policy emphasizes elite sport training among youth who are strategically selected for programs. Alternatively, the design and delivery of sport in Japan is closely tied to physical education in the schools. In much of Europe, Australia, and New Zealand, youth sport is linked to school-based physical education or sponsored by local sport clubs that are age-integrated and focused on participation in one or more sports around which the club and the social lives of its members are organized. Developing countries often have limited public or private resources for youth sport, and the programs that do exist may be sponsored through the outreach of non-governmental organizations from wealthier societies. Developing countries that prioritize resources for youth sport (e.g., India, Kenya, South Africa) tend to organize them around externally determined solutions to perceived cultural and socialization deficits of its youth, with limited long-term impact (Whitley et al., 2019).

Youth sport programs in the United States have traditionally been associated with communities (e.g., through parks and recreation departments) and/or organizations (e.g., Little League Baseball) until age 12 or 13, after which sport is often linked to public school systems. This model subsidizes (at least in part) the design and delivery of sport through state or municipal tax dollars, and highlights the inherent value of sport as a public good. Increasingly, however, youth sport is being designed and delivered by entities other than

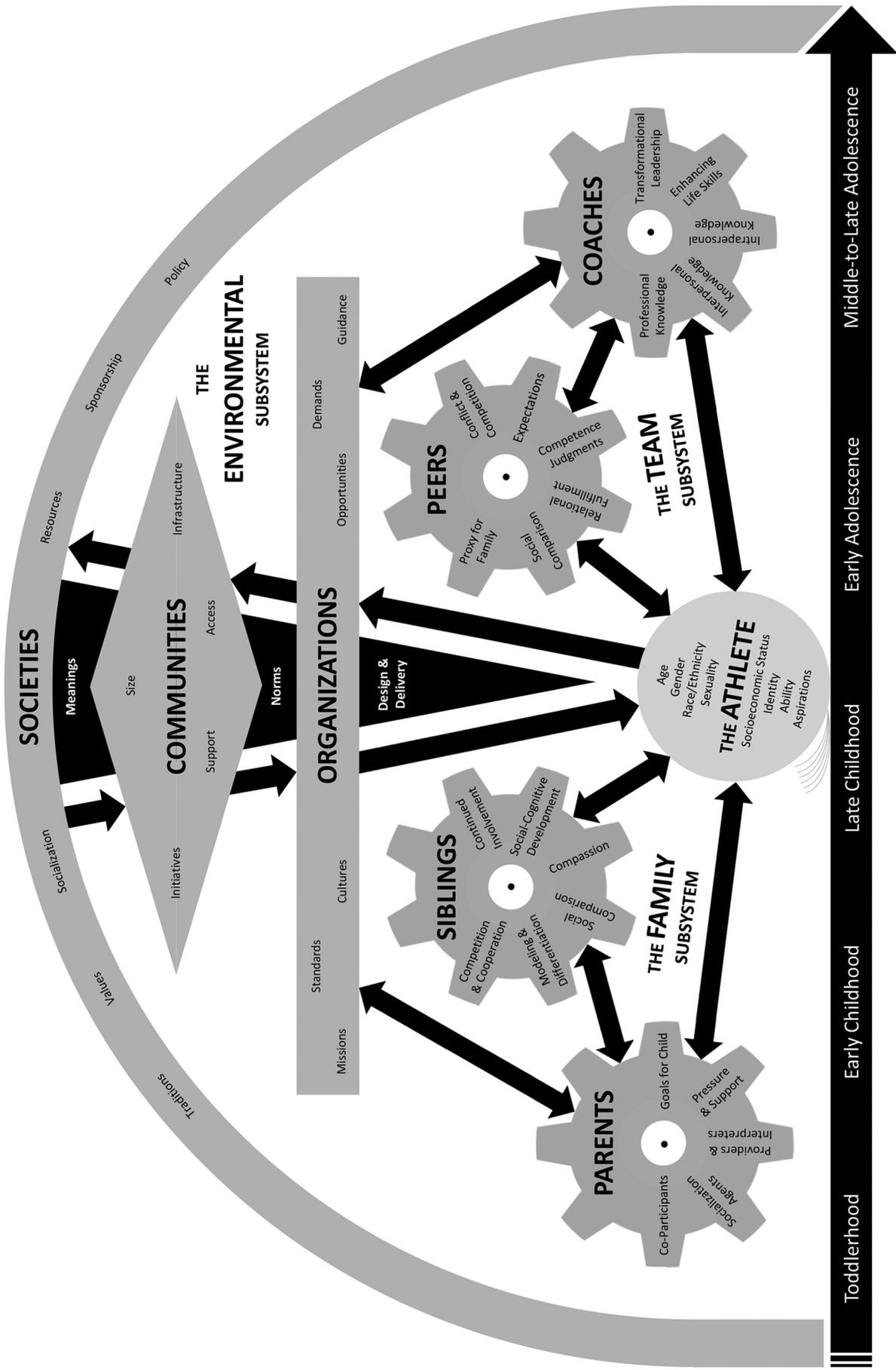


Figure 1. Heuristic model of the youth sport system and its three interrelated subsystems.

communities and schools, and thus reflects the diverse missions of sponsors ranging from for-profit businesses to nonprofit organizations and local youth sport entrepreneurs. It can be argued, therefore, that youth sport is becoming fragmented, with little continuity across organizations, communities, and societies. Additionally, it appears that when the livelihoods of the adults who control and coach youth sports depend on fees paid by families, programs are organized and marketed to meet the financial missions of organizers and coaches, and the goals of fee-paying parents, rather than the overall developmental needs of youth (Coakley, 2002, 2010; Hyman, 2012).

Designing future research to integrate the subsystems

Our aim is to outline a heuristic model that facilitates movement toward an integrated understanding of the youth sport system. In pursuing this aim, the previous sections not only detail that parents, siblings, peers, coaches, organizations, communities, and societies may influence and be influenced by athletes' behaviors, attitudes, experiences, and outcomes in youth sport, but how scholars might think of these persons and contexts as systemic and interrelated across development. In highlighting the key constructs and connections within and across the family, team, and environmental subsystems, we forward a heuristic model of the youth sport system in [Figure 1](#). It showcases key constructs related to the persons and contexts within youth sport, but is not intended to be a comprehensive exposition of the many ways these persons and contexts might interact. In youth sport, families, teams, and contexts should be viewed as integrated and responsive to one another. We therefore hope the model encourages a range of sport psychology and social science researchers to design and execute research in a more integrated way within and across the family, team, and environmental subsystems. This means not just seeking a greater understanding of athletes and the persons and contexts that surround them, but of the myriad processes that have the potential to influence or be influenced by athletes' behaviors, attitudes, experiences, and outcomes over the course of development.

Depicted by the curved outer shell of the model, societal factors are the most distal context within the youth sport system. Much of our understanding of youth sport comes from research conducted in Western and/or industrialized countries with relatively educated and affluent persons. These societies afford the necessary resources (e.g., time, money, knowledge) to engage in youth sport

in an organized way. In light of this, our model calls researchers to account for the many diverse ways sport is enacted, interpreted, and experienced in other societies. Societal factors are important in this regard, as they shape the meanings we give to participation in sport. More inclusive future research is critical to a full understanding of the youth sport system. Our model provides a potential starting point for scholars who wish to understand the importance of, and the traditions associated with, youth sport in other societies. Work in this area could target the range of societal values associated with sport participation, and the policies that shape the socialization of athletes, parents, siblings, peers, and coaches.

An important aspect of the model to be explored in future research will be how societies impact athletes' behaviors, attitudes, experiences, and outcomes. Questions originating from this level of the model might include: (a) how do societal traditions impact the design and delivery of youth sport by way of community initiatives and organizational missions? (b) in what types of societies does the creation of youth sport policy impact community infrastructure, organizational standards, and athlete behavior (e.g., participation rates, sport choice)? and (c) how do societal resources (e.g., relative affluence versus non-affluence) impact organizational opportunities for, and demands on, athletes, coaches, and parents? Importantly, future research questions in this domain should be developed in light of evidence that societies define and engage in youth sport in varying ways (Messner & Musto, 2016). Ethnographic research utilizing retrospective surveys, interviews, and the archival analysis of national, regional, local, and personal records may be well-positioned to address questions pertaining to societal effects on athletes' behaviors, attitudes, experiences, and outcomes over time in youth sport. This might be of particular interest to scholars who are investigating the legal aspects (e.g., protections of civil liberties, safe sport initiatives, liability concerns) that shape youth sport in various cultures. Thoughtfully constructed comparative research could afford scholars the opportunity to examine similarities and differences across multiple societies.

Just beneath societies in the model exist communities. Empirical work in youth sport has largely neglected to account for the roles communities play in the norms associated with participation in youth sport. This is surprising because communities, more than societies at large, have the potential to shape or be shaped by young athletes' (and other persons') behaviors, attitudes, experiences, and outcomes in sport. Typically, community-level influences are driven by the size of a community, the initiatives and support it offers persons who engage in youth sport, and the access and infrastructure that define how sports are

engaged in (Balish & Côté, 2014). Community factors therefore play an important role in the short- and long-term developmental outcomes experienced by athletes.

An important factor to examine in future research will be how communities impact family and team subsystems via organizations. Questions originating from this level of the model might include: (a) how do community initiatives impact the design and delivery of sport by organizations? (b) in what ways can community infrastructure shape the sport opportunities provided by organizations to the athletes who participate? and (c) how do interactions within the team subsystem (among, athletes, peers, and coaches) and family subsystem (among athletes, parents, and siblings) differ across organizations within a community? Future research should be designed in light of knowledge that communities are shaped by broader society and also have the potential to shape and be shaped by families, teams, and organizations. Case-study research utilizing multiple methodologies may be well-positioned to highlight these feedback loops.

At the center of the integrated model lie organizations, and it is organizations that serve as an intermediary between the distal and proximal factors that can influence or be influenced by athletes' behaviors, attitudes, experiences, and outcomes in youth sport. This central position in the model is a result of organizations being formed in view of the broader roles played by societies and communities, while also being charged with creating the direct contexts in which athletes, families, and teams participate. Driven by feedback loops, organizations such as academies, clubs, schools, municipal entities, places of worship, and businesses foster opportunities for youth and serve as gatekeepers to the missions, standards, and cultures by which success, failure, and development are judged, while also being shaped by the parents and coaches who contribute to their functioning (Legg et al., 2016).

Considering extant research on organizations in youth sport (see Wagstaff, 2017, 2019), an important direction for future work will be to address the potential feedback loops among persons and organizations within the youth sport system. Questions stemming from this level of the model might include: (a) what organizational factors foster or limit the enhancement of coaches' professional and interpersonal knowledge? (b) how do the demands placed on coaches and parents by organizations impact the team and family subsystems at various developmental levels of sport? and (c) how is an organization's design and delivery of sport shaped by aspects of the community (e.g., infrastructure and access) as well as attributes of the athletes it serves (e.g., age, gender, race/ethnicity, sexuality, socioeconomic status, identity, ability, etc.)?

Future research in this domain should be developed considering that parents and coaches are largely responsible for structuring the organizations that offer youth sport, especially those that serve younger children at the recreational level (Project Play, 2015). Program evaluation research incorporating focus groups, surveys, observation, and daily diaries with athletes, parents, and coaches could be especially valuable in capturing the dynamic and reciprocal relationships persons in the youth sport system have with sport-delivering organizations in their respective communities. Additional research targeting feedback loops in the youth sport system could be designed to examine the ways athletes "give back" to youth sport when they move into new and different roles (e.g., as former athletes, parents, volunteers, coaches, or officials). Lerner and colleagues' 6Cs model could contribute to the conceptual extension of this developmental knowledge, wherein the 6th C represents the concept of *contribution* to one's self, family, community, and society (Lerner, 2004; Lerner et al., 2005).

The four "gears" within our model represent the most proximal persons to the athlete within the youth sport system: parents, siblings, peers, and coaches. The gears contain descriptive characteristics, words, and phrases that highlight salient concepts from an international body of literature. These concepts, in many cases, represent proximal processes that take place on a daily basis among these persons (García Bengoechea, 2002). In line with Bronfenbrenner's (2005) conceptualization of person characteristics, proximal processes are guided by an athlete's age, gender, race/ethnicity, sexuality, socioeconomic status, identity, ability, and aspirations, among other factors. Importantly, we acknowledge that the personal characteristics of parents, siblings, peers, and coaches also shape athletes' behaviors, attitudes, experiences, and outcomes in youth sport. Although not explicitly specified in Figure 1, the personal characteristics of parents, siblings, peers, and coaches should also be considered in work informed by our model. We also acknowledge that the same "system" is not experienced by all athletes. As examples, family subsystem interactions occur differently if there are no siblings in the household, in a single-parent household, or if the athlete is living and training away from family (Wright et al., 2019).

In line with Côté's developmental model of sport participation, the salience of athletes' interactions with other persons evolves over the course of development. Specifically, athletes experience (1) shifts in the sources of competence information that they prioritize, (2) plasticity in the development and maintenance of relationships, and thus how they interact with other persons, and (3) the dynamic roles and involvement of other persons (see Côté & Vierimaa, 2014). These factors change from toddlerhood

through middle-to-late adolescence and are thus highlighted by the athlete (depicted with a ball) moving from left to right across the black arrow at the bottom of the model. Despite normative trends, it is important to note that the developmental salience of athletes' relationships with parents, siblings, peers, and coaches is not always linear, predictable, or mutually exclusive. Thus, as an example, the family subsystem has the potential to be impactful well beyond childhood, even if it is expected that the team subsystem might be of particular importance as a sport career evolves.

There are a wide range of research questions that could be addressed within this portion of the model. Of particular interest is the interrelationship of the family and team subsystems via the athlete. Questions situated within this portion of the model might include: (a) to what extent are parents' goals for their children in youth sport associated with coaches' expectations, and how is this shaped by the athlete's age and gender? (b) how do athletes balance social comparison to siblings and peers, and how does this change over time? and (c) what impact does an athlete's ability have on the way parents and coaches engage with the athlete's siblings and peers in sport? Future questions attending to the integration of the family and team subsystems should be developed considering evidence that proximal processes are not static and constant, but dynamic and changing (Côté, 1999), and in light of the fact that they may vary across communities and societies. Developmentally informed research is needed to capture the nuance of athletes' behaviors, attitudes, experiences, and outcomes over time in youth sport (Smith et al., 2012).

In examining the model, it is important to acknowledge some of the conceptual work that preceded it. In the bottom half of the model, we view members of the family and team subsystems (i.e., parents, siblings, peers, and coaches) as interconnected. In doing so, our model builds directly from a systems perspective, and specifically its tenet of holism (Broderick, 1993). In depicting parents, siblings, peers, and coaches as "gears" engaging in dyadic reciprocal relationships with the athlete (and in some cases each other), the model pays homage to work by Bell (1968) and others who highlighted the feedback loops that drive socialization process within close relationships. Last, our depiction of the athlete "ball" is informed, in part, by person characteristics as set forth in Bronfenbrenner's (2005) PPCT model of human development. Depicting the ball moving from left to right, spanning a time period from toddlerhood through middle-to-late adolescence, aligns with Côté's developmental model of sport participation (see Côté & Vierimaa, 2014) and personal assets framework for sport (Côté et al., 2019), as well as the time component of Bronfenbrenner's PPCT model. It also highlights that athletes' behaviors, attitudes,

experiences, and outcomes are not static, but instead change and are negotiated over time. This aligns with the systems perspective, and specifically its tenet of roles.

In the top half of the model, the environmental subsystem is comprised of three contexts: organizations, communities, and societies. Our conceptualization of these contexts builds from present understanding of organizational psychology (Wagstaff, 2019), community psychology (Warner, 2016), and sport sociology (Coakley, 2016), but also broadens the scope of what typically has been considered within the youth sport system. In our model, the family and team subsystems are represented as being nested within the broader environmental subsystem. The three subsystems, collectively, are posited to influence and be influenced by athletes via the structure of, and daily interactions among, the persons and contexts that surround them.

Challenges and limitations

Approaching youth sport through an integrated lens presents several challenges and limitations. Most obviously, it can be difficult to integrate the higher levels of the model into everyday research and practice. At the broadest level, for example, cross-cultural issues may shape how the model is interpreted and applied in different youth sport contexts around the world (Ryba et al., 2013; Si & Lee, 2007). Certain aspects of our model may be more salient in societies or communities where competitive sport is more widely practiced.

An additional consideration is that our model is delimited to persons who interact with young people in the youth sport context. This includes parents and siblings within the family subsystem and peers and coaches within the team subsystem. Given the model's focus on the youth sport system, it does not account for other potentially important persons, such as teachers, mentors, and peers who are not teammates. These persons also can influence and be influenced by the athlete's sport participation. Future research, therefore, could target the direct and indirect impacts of these persons on children's sport-related outcomes and experiences.

Our model does not explicitly account for conflict that may be introduced within or across the various subsystems. For example, athletes are often forced to reconcile differences between their own goals and the goals their parents or coaches might have for their participation in sport. The process of reconciliation can be further shaped by athletes' interpretation of peer and sibling influences, as well as the broader expectations of their sport-delivering individual, organization, or community. Moving forward, researchers might view conflict within or across the family, team, and environmental subsystems through a lens of disequilibrium, another tenet of the

systems perspective (Broderick, 1993). Disequilibrium is the state of imbalance experienced by an individual when new experiences cannot be understood or easily accommodated (Berger, 2005). Applying this tenet to future research on the youth sport system would further extend theoretically grounded understanding of the independent and simultaneous effects various persons and contexts have within the youth sport system.

Finally, the potential impact of our model on current thinking in the field of kinesiology may be discounted because our model speaks to concepts not usually measured or discussed in kinesiology journals. The environmental subsystem is understudied in kinesiology research, especially as it relates to the social, cognitive, and emotional aspects of sport and physical activity behavior in young people. However, incorporating this subsystem in our model orients kinesiologists to its importance and potential for advancing knowledge. Zelaznik and Harper (2007) contend that the sociological, anthropological, and philosophical aspects of sport and all other forms of human movement should be of central interest to kinesiologists who aim to promote intrinsic motivation for physical activity. We hope that our model increases consideration of these components of the youth sport system.

Conclusion

In presenting this heuristic model of the youth sport system, we have extended past work championing theoretical integration (e.g., García Bengoechea, 2002) and have highlighted potentially valuable research questions. Moreover, we have provided various considerations for scholars who wish to examine the intersections of persons and contexts in youth sport. In doing so, we hope to move sport scientists and leaders toward a systemic and interdisciplinary understanding of the parents, siblings, peers, coaches, organizations, communities, and societies that surround athletes in youth sport. Conversely, other aspects of the model may be more salient where lifetime sports are practiced in less organized or competitive settings. In all cases, conceptually driven, interdisciplinary work attending to the systems perspective tenets of holism, feedback loops, and roles remains best positioned to capture the nuanced ways persons and contexts influence and are influenced by athletes in youth sport. We believe that such work has the potential to meaningfully impact theory and practice with regard to the persons and contexts that comprise the youth sport system.

References

Adams, A., & Carr, S. (2019). Football friends: Adolescent boys' friendships inside an English professional football

- (soccer) academy. *Soccer & Society*, 20(3), 471–493. <https://doi.org/10.1080/14660970.2017.1331164>
- Álvarez, M. S., Balaguer, I., Castillo, I., & Duda, J. L. (2009). Coach autonomy support and quality of sport engagement in young soccer players. *The Spanish Journal of Psychology*, 12(1), 138–148. <https://doi.org/10.1017/S1138741600001554>
- Arnold, R., Fletcher, D., & Daniels, K. (2017). Organisational stressors, coping, and outcomes in competitive sport. *Journal of Sports Sciences*, 35(7), 694–703. <https://doi.org/10.1080/02640414.2016.1184299>
- Babkes, M. L., & Weiss, M. R. (1999). Parental influence on children's cognitive and affective responses to competitive soccer participation. *Pediatric Exercise Science*, 11(1), 44–62. <https://doi.org/10.1123/pes.11.1.44>
- Bale, J. (2003). *Sports geography* (2nd ed.). Routledge.
- Balish, S., & Côté, J. (2014). The influence of community on athletic development: An integrated case study. *Qualitative Research in Sport, Exercise and Health*, 6(1), 98–120. <https://doi.org/10.1080/2159676X.2013.766815>
- Battistich, V., & Hom, A. (1997). The relationship between students' sense of their school as a community and their involvement in problem behaviors. *American Journal of Public Health*, 87(12), 1997–2001. <https://doi.org/10.2105/AJPH.87.12.1997>
- Bell, N. J., Avery, A. W., Jenkins, D., Feld, J., & Schoenrock, C. J. (1985). Family relationships and social competence during late adolescence. *Journal of Youth and Adolescence*, 14(2), 109–119. <https://doi.org/10.1007/BF02098651>
- Bell, R. Q. (1968). A reinterpretation of the direction of effects in studies of socialization. *Psychological Review*, 75(2), 81–95. <https://doi.org/10.1037/h0025583>
- Berger, K. S. (2005). *The developing person through the life span* (6th ed.). Worth.
- Blazo, J. A., Czech, D. R., Carson, S., & Dees, W. (2014). A qualitative investigation of the sibling sport achievement experience. *The Sport Psychologist*, 28(1), 36–47. <https://doi.org/10.1123/tsp.2012-0089>
- Blazo, J. A., & Smith, A. L. (2018). A systematic review of siblings and physical activity experiences. *International Review of Sport and Exercise Psychology*, 11(1), 122–159. <https://doi.org/10.1080/1750984X.2016.1229355>
- Bondin, V. I., Luybetsky, N. P., Schalohyan, S. I., Garasimov, M. V., & Samygin, S. I. (2020). Sport in the context of globalization. In E. G. Popkova & B. S. Sergi (Eds.), *Artificial intelligence: Anthropogenic nature vs. social origin* (pp. 237–247). Springer.
- Bowers, M. T., & Green, B. C. (2013). Reconstructing the community based youth sport experience: How children derive meaning from unstructured and organized settings. *Journal of Sport Management*, 27(6), 422–438. <https://doi.org/10.1123/jsm.27.6.422>
- Brawley, L. R., & Martin, K. A. (1995). The interface between social and sport psychology. *The Sport Psychologist*, 9(4), 469–497. <https://doi.org/10.1123/tsp.9.4.469>
- Broderick, C. B. (1993). *Understanding family process: Basics of family systems theory*. Sage.
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Sage.
- Bruner, M. W., Balish, S. M., Forrest, C., Brown, S., Webber, K., Gray, E., McGuckin, M., Keats, M. R., Rehman, L., &

- Shields, C. A. (2017). Ties that bond: Youth sport as a vehicle for social identity and positive youth development. *Research Quarterly for Exercise and Sport*, 88(2), 209–214. <https://doi.org/10.1080/02701367.2017.1296100>
- Brustad, R. J. (2010). The role of family in promoting physical activity. *President's Council on Physical Fitness and Sports Research Digest*, 10(3), 1–8.
- Burgess, N. S., Knight, C. J., & Mellalieu, S. D. (2016). Parental stress and coping in elite youth gymnastics: An interpretative phenomenological analysis. *Qualitative Research in Sport, Exercise and Health*, 8(3), 237–256. <https://doi.org/10.1080/2159676X.2015.1134633>
- Chelladurai, P. (2007). Leadership in sports. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (pp. 113–135). Wiley.
- Cicirelli, V. G. (1995). *Sibling relationships across the lifespan*. Plenum Press.
- Coakley, J. (1983). Play, games and sports: Developmental implications for young people. In J. C. Harris & R. J. Park (Eds.), *Play, games and sports in cultural contexts* (pp. 431–450). Human Kinetics.
- Coakley, J. (2002). Using sports to control deviance and violence among youths: Let's be critical and cautious. In M. Gatz, M. A. Messner, & S. J. Ball-Rokeach (Eds.), *Paradoxes of youth and sport* (pp. 13–30). State University of New York Press.
- Coakley, J. (2010). The “logic” of specialization: Using children for adult purposes. *Journal of Physical Education, Recreation and Dance*, 81(8), 16–18. <https://doi.org/10.1080/07303084.2010.10598520>
- Coakley, J. (2016). Youth sports in the United States. In K. Green & A. Smith (Eds.), *Handbook of youth sport* (pp. 84–97). Routledge.
- Coatsworth, J. D., & Conroy, D. E. (2009). The effects of autonomy-supportive coaching, need satisfaction, and self-perceptions on initiative and identity in youth swimmers. *Developmental Psychology*, 45(2), 320–328. <https://doi.org/10.1037/a0014027>
- 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., Allan, V., Turnnidge, J., Vierimaa, M., & Evans, M. B. (2019). Youth talent development in sport. In T. S. Horn & A. L. Smith (Eds.), *Advances in sport and exercise psychology* (4th ed., pp. 467–482). Human Kinetics.
- 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., & Vierimaa, M. (2014). The developmental model of sport participation: 15 years after its first conceptualization. *Science & Sport*, 29(Suppl. 1), S63–S69. <https://doi.org/10.1016/j.scispo.2014.08.133>
- Côté, J., Salmela, J. H., Trudel, P., Baria, A., & Russell, S. (1995). The coaching expert model: A grounded assessment of expert gymnastic coaches' knowledge. *Journal of Sport & Exercise Psychology*, 17(1), 1–17. <https://doi.org/10.1123/jsep.17.1.1>
- Cox, A. E., & Ullrich-French, S. (2010). The motivational relevance of peer and teacher relationship profiles in physical education. *Psychology of Sport and Exercise*, 11(5), 337–344. <https://doi.org/10.1016/j.psychsport.2010.04.001>
- Dixon, M. A., Warner, S. M., & Bruening, J. E. (2008). More than just letting them play: The enduring impact of parental socialization on female sport involvement. *Sociology of Sport Journal*, 25(4), 538–559. <https://doi.org/10.1123/ssj.25.4.538>
- Dorsch, T. E., King, M., Dunn, C. R., Osai, K. V., & Tulane, S. (2017). The impact of evidence-based parent education in organized youth sport: A pilot study. *Journal of Applied Sport Psychology*, 29(2), 199–214. <https://doi.org/10.1080/10413200.2016.1194909>
- Dorsch, T. E., Smith, A. L., & McDonough, M. H. (2015a). Early socialization of parents through organized youth sport. *Sport, Exercise, and Performance Psychology*, 4(1), 3–18. <https://doi.org/10.1037/spy0000021>
- Dorsch, T. E., Smith, A. L., Wilson, S. R., & McDonough, M. H. (2015b). Parent goals and verbal sideline behavior in organized youth sport. *Sport, Exercise, and Performance Psychology*, 4(1), 19–35. <https://doi.org/10.1037/spy0000025>
- Dorsch, T. E., Vierimaa, M., & Plucinik, J. (2019). A citation network analysis of research on parent-child interactions in youth sport. *Sport, Exercise, and Performance Psychology*, 8(2), 145–162. <https://doi.org/10.1037/spy0000140>
- Duda, J. L. (1999). The motivation to study motivation: Goal perspectives and their influence. In G. G. Brannigan (Ed.), *The sport scientist: Research adventures* (pp. 57–73). Longman.
- Duncan, S. C., Duncan, T. E., & Stryker, L. A. (2005). Sources and types of social support in youth physical activity. *Health Psychology*, 24(1), 3–10. <https://doi.org/10.1037/0278-6133.24.1.3>
- Dunn, J. (2007). Siblings and socialization. In J. Grusec & P. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 309–329). Guilford Press.
- Erickson, K., & Côté, J. (2016). A season-long examination of the motivational tone of coach-athlete interactions in youth sport. *Psychology of Sport and Exercise*, 22, 264–272. <https://doi.org/10.1016/j.psychsport.2015.08.006>
- Evans, J., & Roberts, G. C. (1987). Physical competence and the development of children's peer relations. *Quest*, 39(1), 23–35. <https://doi.org/10.1080/00336297.1987.10483854>
- Fagan, A. A., & Najman, J. M. (2005). The relative contributions of parental and sibling substance use to adolescent tobacco, alcohol, and other drug use. *Journal of Drug Issues*, 35(4), 869–883. <https://doi.org/10.1177/002204260503500410>
- Fine, G. A. (1987). *With the boys: Little league baseball and preadolescent culture*. University of Chicago Press.
- 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>
- Fraser-Thomas, J. L., Côté, J., & MacDonald, D. J. (2010). Community size in youth sport settings: Examining developmental assets and sport withdrawal. *PHENex Journal*, 2(2). <https://ojs.acadiau.ca/index.php/phenex/article/view/8>
- 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.

- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the qualities of sibling relationships. *Child Development*, 56(2), 448–461. <https://doi.org/10.2307/1129733>
- García Bengoechea, E. (2002). Integrating knowledge and expanding horizons in developmental sport psychology: A bioecological perspective. *Quest*, 54(1), 1–20. <https://doi.org/10.1080/00336297.2002.10491763>
- García Bengoechea, E., & Johnson, G. M. (2001). Ecological systems theory and children's development in sport: Toward a process–person–context–time research paradigm. *Avante*, 7(1), 20–31.
- Gardner, L. A., Magee, C. A., & Vella, S. A. (2016). Social climate profiles in adolescent sports: Associations with enjoyment and intention to continue. *Journal of Adolescence*, 52, 112–123. <https://doi.org/10.1016/j.adolescence.2016.08.003>
- Goodman, C. (1979). *Choosing sides: Playground and street life on the lower east side*. Schocken Books.
- 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>
- Grieve, J., & Sherry, E. (2012). Community benefits of major sport facilities: The Darebin international sports centre. *Sport Management Review*, 15(2), 218–229. <https://doi.org/10.1016/j.smr.2011.03.001>
- Harwood, C. G., & Knight, C. J. (2015). Parenting in youth sport: A position paper on parenting expertise. *Psychology of Sport and Exercise*, 16(1), 24–35. <https://doi.org/10.1016/j.psychsport.2014.03.001>
- Hellstedt, J. C. (1987). The coach/parent/athlete relationship. *The Sport Psychologist*, 1(2), 151–160. <https://doi.org/10.1123/tsp.1.2.151>
- Holt, N. L., Knight, C. J., & Zukiwski, P. (2012). Female athletes' perceptions of teammate conflict in sport: Implications for sport psychology consultants. *The Sport Psychologist*, 26(1), 135–154. <https://doi.org/10.1123/tsp.26.1.135>
- Holt, N. L., Tamminen, K. A., Black, D. E., Sehn, Z. L., & Wall, M. P. (2008). Parental involvement in competitive youth sport settings. *Psychology of Sport and Exercise*, 9(5), 663–685. <https://doi.org/10.1016/j.psychsport.2007.08.001>
- 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* (pp. 685–711). Wiley.
- Horne, T., & Carron, A. V. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology*, 7(2), 137–149. <https://doi.org/10.1123/jsp.7.2.137>
- Hulsteen, R. M., Smith, J. J., Morgan, P. J., Barnett, L. M., Hallal, P. C., Colyvas, K., & Lubans, D. R. (2017). Global participation in sport and leisure-time physical activities: A systematic review and meta-analysis. *Preventive Medicine*, 95, 14–25. <https://doi.org/10.1016/j.ypmed.2016.11.027>
- Hyman, M. (2012). *Until it hurts: America's obsession with youth sports and how it harms our kids*. Beacon Press.
- Jackson, B., Beauchamp, M. R., & Knapp, P. (2007). Relational efficacy beliefs in athlete dyads: An investigation using actor–partner interdependence models. *Journal of Sport & Exercise Psychology*, 29(2), 170–189. <https://doi.org/10.1123/jsep.29.2.170>
- Jackson, B., Gucciardi, D. F., Lonsdale, C., Whipp, P. R., & Dimmock, J. A. (2014). “I think they believe in me”: The predictive effects of teammate-and classmate-focused relation-inferred self-efficacy in sport and physical activity settings. *Journal of Sport & Exercise Psychology*, 36(5), 486–505. <https://doi.org/10.1123/jsep.2014-0070>
- Johnson, N., Hanna, K., Novak, J., & Giardino, A. P. (2020). US center for SafeSport: Preventing abuse in sports. *Women in Sport and Physical Activity Journal*, 28(1), 66–71. <https://doi.org/10.1123/wspaj.2019-0049>
- Jowett, S. (2005). On repairing and enhancing the coach-athlete relationship. In S. Jowett & C. Harwood (Eds.), *The psychology of coaching* (pp. 14–26). British Psychological Association.
- Jowett, S., & Timson-Katchis, M. (2005). Social networks in sport: Parental influence on the coach-athlete relationship. *The Sport Psychologist*, 19(3), 267–287. <https://doi.org/10.1123/tsp.19.3.267>
- Knight, C. J., & Holt, N. L. (2014). Parenting in youth tennis: Understanding and enhancing children's experiences. *Psychology of Sport and Exercise*, 15(2), 155–164. <https://doi.org/10.1016/j.psychsport.2013.10.010>
- Legg, J., Snelgrove, R., & Wood, L. (2016). Modifying tradition: Examining organizational change in youth sport. *Journal of Sport Management*, 30(4), 369–381. <https://doi.org/10.1123/jsm.2015-0075>
- Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among American youth*. Sage.
- Lerner, R. M., Lerner, J. V., Almerigi, J., 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: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence*, 25(1), 17–71. <https://doi.org/10.1177/0272431604272461>
- Maitland, A., Hills, L. A., & Rhind, D. J. (2015). Organisational culture in sport – A systematic review. *Sport Management Review*, 18(4), 501–516. <https://doi.org/10.1016/j.smr.2014.11.004>
- McHale, S. M., Updegraff, K. A., & Whiteman, S. D. (2012). Sibling relationships and influences in childhood and adolescence. *Journal of Marriage and Family*, 74(5), 913–930. <https://doi.org/10.1111/j.1741-3737.2012.01011.x>
- McLaren, C. D., Newland, A., Eys, M., & Newton, M. (2016). Peer-initiated motivational climate and group cohesion in youth sport. *Journal of Applied Sport Psychology*, 29(1), 88–100. <https://doi.org/10.1080/10413200.2016.1190423>
- McMillan, D., & Chavis, D. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6–23. [https://doi.org/10.1002/1520-6629\(198601\)14:1<6::AID-JCOP2290140103>3.0.CO;2-I](https://doi.org/10.1002/1520-6629(198601)14:1<6::AID-JCOP2290140103>3.0.CO;2-I)
- Messner, M. A., & Musto, M. (2016). *Child's play: Sport in kids' worlds*. Rutgers University Press.
- Mountjoy, M., Vertommen, T., Burrows, K., & Greinig, S. (2020). #SafeSport: Safeguarding initiatives at the Youth Olympic Games 2018. *British Journal of Sports Medicine*, 54(3), 176–182. <https://doi.org/10.1136/bjsports-2019-101461>

- Mrozek, D. J. (1983). *Sport and American mentality, 1880–1920*. University of Tennessee Press.
- Newhouse-Bailey, M., Dixon, M. A., & Warner, S. (2015). Sport and family functioning: Strengthening elite sport families. *Journal of Amateur Sport*, 1(2), 1–26. <https://journals.ku.edu/jams/issue/view/432/2>
- Nicholson, M., Brown, K., & Hoye, R. (2013). Sport's social provisions. *Sport Management Review*, 16(2), 148–160. <https://doi.org/10.1016/j.smr.2012.08.003>
- Olympiou, A., Jowett, S., & Duda, J. L. (2008). The psychological interface between the coach-created motivational climate and the coach-athlete relationship in team sports. *The Sport Psychologist*, 22(4), 423–438. <https://doi.org/10.1123/tsp.22.4.423>
- Osai, K. V., & Whiteman, S. D. (2017). Family relationships and youth sport: Influence of siblings and parents on youth's participation, interests, and skills. *Journal of Amateur Sport*, 3(3), 86–105. <https://doi.org/10.17161/jas.v3i3.6518>
- Partridge, J. A., & Knapp, B. A. (2016). Mean girls: Adolescent female athletes and peer conflict in sport. *Journal of Applied Sport Psychology*, 28(1), 113–127. <https://doi.org/10.1080/10413200.2015.1076088>
- Pelletier, L. G., Fortier, M. S., Vallerand, R. J., & Brière, N. M. (2001). Associations among perceived autonomy support, forms of self-regulation, and persistence: A prospective study. *Motivation and Emotion*, 25(4), 279–306. <https://doi.org/10.1023/A:1014805132406>
- Project Play. (2015). *Sport for all, play for life*. Aspen Institute.
- Riley, A., & Smith, A. L. (2011). Perceived coach-athlete and peer relationships of young athletes and self-determined motivation for sport. *International Journal of Sport Psychology*, 42(1), 115–133. <http://www.ijsp-online.com/abstract/view/42/115>
- Ryba, T. V., Stambulova, N. B., Si, G., & Schinke, R. J. (2013). ISSP position stand: Culturally competent research and practice in sport and exercise psychology. *International Journal of Sport and Exercise Psychology*, 11(2), 123–142. <https://doi.org/10.1080/1612197X.2013.779812>
- Sarason, S. B. (1974). *The psychological sense of community: Prospects for a community psychology*. Jossey-Bass.
- Savin-Williams, R. C., & Berndt, T. J. (1990). Friendship and peer relations. In S. S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 277–307). Harvard University Press.
- Schary, D. P., & Cardinal, B. J. (2015). Interdisciplinary and intradisciplinary research and teaching in kinesiology: Continuing the conversation. *Quest*, 67(2), 173–184. <https://doi.org/10.1080/00336297.2015.1017586>
- Si, G. C., & Lee, H. (2007). Cross-cultural issues in sport psychology research. In S. Jowett & D. Lavalley (Eds.), *Social psychology in sport* (pp. 279–288). Human Kinetics.
- Smith, A. L., Dorsch, T. E., & Monsma, E. V. (2012). Developmentally informed measurement in sport and exercise psychology research. In G. Tenenbaum, R. C. Eklund, & A. Kamata (Eds.), *Measurement in sport and exercise psychology* (pp. 131–141). Human Kinetics.
- Smith, A. L., Mellano, K. T., & Ullrich-French, S. (2019). Peers and psychological experiences in physical activity settings. In T. S. Horn & A. L. Smith (Eds.), *Advances in sport and exercise psychology* (4th ed., pp. 133–150). Human Kinetics.
- Smith, A. L., Gustafsson, H., & Hassmén, P. (2010). Peer motivational climate and burnout perceptions of adolescent athletes. *Psychology of Sport and Exercise*, 11(6), 453–460. <https://doi.org/10.1016/j.psychsport.2010.05.007>
- Smith, R. E., & Smoll, F. L. (2002). *Way to go, coach!: A scientifically-proven approach to youth sports coaching effectiveness*. Warde Publishers.
- Smith, S. R., & Hamon, R. R. (2012). *Exploring family theories* (3rd ed.). Oxford University Press.
- Surya, M., Bruner, M. W., MacDonald, D. J., & Côté, J. (2012). A comparison of developmental activities of elite athletes born in large and small cities. *PHEnex Journal*, 4(1), 1–8. <https://ojs.acadiau.ca/index.php/phenex/article/view/1445>
- Teques, P., Serpa, S., Rosado, A., Silva, C., & Calmeiro, L. (2018). Parental involvement in sport: Psychometric development and empirical test of a theoretical model. *Current Psychology*, 37(1), 234–249. <https://doi.org/10.1007/s12144-016-9507-2>
- Thrower, S. N., Harwood, C. G., & Spray, C. M. (2017). Educating and supporting tennis parents: An action research study. *Qualitative Research in Sport, Exercise and Health*, 9(5), 600–618. <https://doi.org/10.1080/2159676X.2017.1341947>
- 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>
- Turnnidge, J., Hancock, D. J., & Côté, J. (2014). The influence of birth date and place of development on youth sport participation. *Scandinavian Journal of Medicine & Science in Sports*, 24(2), 461–468. <https://doi.org/10.1111/sms.12002>
- Ullrich-French, S., & Smith, A. L. (2006). Perceptions of relationships with parents and peers in youth sport: Independent and combined prediction of motivational outcomes. *Psychology of Sport and Exercise*, 7(2), 193–214. <https://doi.org/10.1016/j.psychsport.2005.08.006>
- Vazou, S., Ntoumanis, N., & Duda, J. L. (2006). Predicting young athletes' motivational indices as a function of their perceptions of the coach-and peer-created climate. *Psychology of Sport and Exercise*, 7(2), 215–233. <https://doi.org/10.1016/j.psychsport.2005.08.007>
- Von Bertalanffy, L. (1972). The history and status of general systems theory. *Academy of Management Journal*, 15(4), 407–426.
- Wagstaff, C. R. D. (2017). *The organizational psychology of sport: Key issues and practical applications*. Routledge.
- Wagstaff, C. R. D. (2019). A commentary and reflections on the field of organizational sport psychology. *Journal of Applied Sport Psychology*, 31(1), 134–146. <https://doi.org/10.1080/10413200.2018.1539885>
- Warner, S. (2016). Sport and sense of community theory. In G. B. Cunningham, J. Fink, & A. Doherty (Eds.), *Routledge handbook of theory in sport management* (pp. 189–198). Routledge.
- Warner, S., & Dixon, M. A. (2011). Understanding sense of community from the athlete's perspective. *Journal of Sport Management*, 25(3), 257–271. <https://doi.org/10.1123/jsm.25.3.257>
- Warner, S., & Dixon, M. A. (2013). Sports and community on campus: Constructing a sports experience that matters. *Journal*

- of *College Student Development*, 54(3), 283–298. <https://doi.org/10.1353/csd.2013.0044>
- Warner, S., Dixon, M. A., & Chalip, L. C. (2012). The impact of formal versus informal sport: Mapping the differences in sense of community. *Journal of Community Psychology*, 40(8), 983–1003. <https://doi.org/10.1002/jcop.21506>
- Warner, S., Sparvero, E., Shapiro, S., & Anderson, A. (2017). Yielding healthy community with sport? *Journal of Sport for Development*, 5(8), 41–52. <https://jsfd.org/2017/05/01/yielding-healthy-community-with-sport/>
- Weiss, M. R., & Duncan, S. C. (1992). The relationship between physical competence and peer acceptance in the context of children's sports participation. *Journal of Sport & Exercise Psychology*, 14(2), 177–191. <https://doi.org/10.1123/jsep.14.2.177>
- Weiss, M. R., & Fretwell, S. D. (2005). The parent-coach/child-athlete relationship in youth sport: Cordial, contentious, or conundrum? *Research Quarterly for Exercise & Sport*, 76(3), 286–305. <https://doi.org/10.1080/02701367.2005.10599300>
- Weiss, M. R., Smith, A. L., & Theeboom, M. (1996). "That's what friends are for:" Children's and teenagers' perceptions of peer relationships in the sport domain. *Journal of Sport & Exercise Psychology*, 18(4), 347–379. <https://doi.org/10.1123/jsep.18.4.347>
- Weiss, M. R., & Stuntz, C. P. (2004). A little friendly competition: Peer relationships and psychosocial development in youth sport and physical activity contexts. In M. R. Weiss (Ed.), *Developmental sport and exercise psychology: A lifespan perspective* (pp. 165–196). Fitness Information Technology.
- Whitley, M. A., Massey, W. V., Camiré, M., Blom, L. C., Chawansky, M., Forde, S., Boutet, M., Borbee, A., & Darnell, S. C. (2019). A systematic review of sport for development interventions across six global cities. *Sport Management Review*, 22(2), 181–193. <https://doi.org/10.1016/j.smr.2018.06.013>
- Wright, E., Gould, D., & Erickson, K. (2019). Home away from home: An examination of the billet family experience in junior ice hockey. *Journal of Applied Sport Psychology*. Advance online publication. <https://doi.org/10.1080/10413200.2019.1674945>
- Yeh, H. C., & Lempers, J. D. (2004). Perceived sibling relationships and adolescent development. *Journal of Youth and Adolescence*, 33(2), 133–147. <https://doi.org/10.1023/B:JOYO.0000013425.86424.0f>
- Zelaznik, H. N., & Harper, W. A. (2007). Skill and physical activity: A central dogma for kinesiology. *Quest*, 59(1), 163–169. <https://doi.org/10.1080/00336297.2007.10483545>
- Ziviani, J., Macdonald, D., Ward, H., Jenkins, D., & Rodger, S. (2006). Physical activity and the occupations of children: Perspectives of parents and children. *Journal of Occupational Science*, 13(3), 180–187. <https://doi.org/10.1080/14427591.2006.9726514>