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Georgia I. Lundy

School of Kinesiology and Health Studies, Queen's University, 11gil@queensu.ca

Veronica Allan

School of Health and Kinesiology and Health Science, York University, vallon@yorku.ca

Ian Cowburn

Carnegie School of Sport, Leeds Beckett University, i.h.cowburn@leedsbeckett.ac.uk

Jean Cote

School of Kinesiology and Health Studies, Queen's University, jc46@queensu.ca

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Parental Support, Sibling Influences, and Family Dynamics Across the Development of Canadian Interuniversity Student-Athletes

Georgia Lundy
Queen's University

Veronica Allan
Queen's University

Ian Cowburn
Leeds Beckett University

Jean Côté
Queen's University

ABSTRACT

A vast body of research focuses on the role of parents in athlete development; however, little is known about developmental influences of siblings. In general, family dynamics (i.e., patterns of relating or interacting among family members) have yet to be investigated in youth sport contexts. This study examines how family dynamics and the individual roles of parents and siblings influence the development of Canadian interuniversity student-athletes over time. Participants included four male and six female student-athletes. Each participant took part in a qualitative retrospective timeline interview. All data was subjected to a thematic analysis. Results indicate that siblings and parents play separate yet intricately connected roles in athlete development throughout childhood and adolescence. Overall, participants described a cohesive family unit built on shared values and joint participation in sport activities. They described stable and dynamic forms of support from their parents over time, and positive and negative sibling influences. These findings offer valuable insight into the dynamic nature of parent and sibling relationships with athletes in youth sport and beyond, as well as how these relationships operate in the broader family environment to optimize (and, at times, hinder) athletic development.

Keywords: Athlete Development, Family Dynamics, Parents, Siblings, Youth Sport

When youth experience optimal development in sport, they are exposed to a host of potential benefits, including enhanced physical health, psychological wellbeing, and social relationships (Eime, Young, Harvey, Charity, & Payne, 2013), as well as the transfer of life skills, such as leadership and self-regulation (Jacobs & Wright, 2018). Provided that a variety of factors are known to influence athletic development, from genetic, training, and psychological characteristics to sociocultural influences and context (Baker & Horton, 2004), the Personal Assets Framework (PAF) was developed to describe and explain patterns of youth development and the accrual of positive developmental assets and outcomes in sport over time (Côté, Turnnidge, & Evans, 2014). The PAF posits that three dynamic elements interact to shape the long-term development of youth in sport: *appropriate settings*, including the social and physical environment; *quality social dynamics*, such as relationships with coaches, parents, and peers; and *personal engagement in activities*, which may involve structured, unstructured, adult-led, and youth-led activities (Côté, et al., 2014).

Although the interaction of all three elements contributes to complex developmental processes, the nature and quality of young athletes' social relationships have received substantive attention in the literature to date (e.g., Barnett, 2008; Fraser-Thomas, Côté, & Deakin, 2005). In particular, familial influences are regarded as one of the most important factors influencing the development of athletes throughout the childhood and adolescent years (Bloom, 1985; Côté & Hay, 2002; Côté & Fraser-Thomas, 2015; Harwood & Knight, 2009). Parents and guardians are responsible for their child's experiences and social interactions, such as signing up a child for their first sport activity. They also

model – directly and indirectly – the social skills and behaviours that children will use in their daily interactions with others (Saxon & Siegler, 2010). In a similar vein, what a child learns from their siblings plays an important role in how they develop social and emotional skills into adulthood (Kramer & Conger, 2009). As such, the influence of parents and siblings, not just in sport, but more generally, cannot be overstated when it comes to children's development.

While a large body of evidence supports the importance of parental roles and support in youth sport, the influence of other family members living in close proximity to developing young athletes (e.g., siblings) and the dynamic system of the family unit as a whole have yet to be investigated beyond a preliminary level (Taylor, Carson, & Collins, 2017). To optimize the development of youth in sport, thus promoting a host of short- and long-term psychosocial benefits, a comprehensive understanding of the family system is warranted. As such, the purpose of our study was to explore how family dynamics (i.e., patterns of relating or interacting among family members comprising a unique family unit) – encompassing an athlete's individual relationships with parents and siblings – influence the development of Canadian interuniversity (i.e., varsity) student-athletes. Three research questions were addressed:

1. How do varsity student-athletes' relationships with (a) their parents and (b) their siblings change over the course of development?
2. How does the broader family dynamic of a future varsity student-athlete change over the course of development?
3. How do these changes positively or negatively influence the developmental trajectory of a varsity student-athlete?

Our decision to focus on university-level student-athletes stemmed from the fact that these individuals have attained a relatively high degree of success both academically and athletically extending beyond the high school years and into young adulthood. As such, these athletes have achieved a balance of long-term outcomes associated with optimal development in sport: long-term participation, high-level performance, and personal development (Côté et al., 2014). In doing so, this study will examine the role of Family Systems Theory (FST; Taylor & Collins, 2015) in the broader context of the PAF (Côté et al., 2014) through the experiences of university-level varsity athletes in Canada.

Parental Roles and Support

For several decades, researchers have documented the salient role that parents play in the early, middle and later years of a child's development. In the early stages of development (e.g., ages 6-12), Bloom (1985) and Côté (1999) agree that it is crucial for parents to enroll their children in a variety of different activities to provide them with the freedom to eventually choose the sport or activity they are passionate about pursuing. These early years of sport engagement serve as a way for parents to interact and engage with their children prior to the middle years (e.g., ages 13-15; Dorsch, Smith, & McDonough, 2015), in which parents play a key role in supporting their child's sport participation and continued development. For parents, this involves a substantial investment of resources, money, and time (Côté, 1999). In the later years (e.g., ages 15 and over), parents continue to influence their child's development; however, their role shifts from providing primary (and often necessary) support to that of "fitness consultants" or "career advisors" (Côté, 1999).

While the role that parents play in their child's sport involvement may change over time, so too might the types of support offered by parents over the course of their child's athletic development. Côté and Hay (2002) describe four forms of parental support: emotional support, informational support, tangible support, and companionship. Throughout development, athletes turn to their parents for emotional support (e.g., encouragement, reassurance) in times of sadness, frustration, and stress. This form of support reflects an autonomy-supportive parenting style, in which athletes feel as though parents pay attention to them when they express themselves (Keegan, Spray, Harwood, & Lavallee, 2010).

Alternatively, informational support from parents takes the form of instruction, feedback, and advice related to sport-specific skills or more general decisions regarding sport specialization and investment. According to Knight, Dorsch, Osai, Haderlie, and Sellars (2016), parents who have a sport background similar to their children will be more likely to provide effective informational support. In contrast, tangible support relates to the time and money parents give up in order for their child to participate in sport. Although tangible support may impose stress on parents, it is essential for enabling progress in competitive sport (Harwood & Knight, 2009). Finally, companionship allows parents to form social bonds with their children. For example, both the parent and child engage in sport-related activities together (e.g., attending sporting events, watching sport shows on

TV). Overall, Harwood and Knight (2015) stress the importance of providing support that reflects the child's experiences and desires in the preferred sport.

Parental roles and support in the youth sport context have been investigated extensively over the years. To date, researchers have garnered a well-informed understanding of how parents' roles in youth-athlete development change over time, as well as the types of support that parents provide more generally across youth-athlete development. However, parents are not the only family members with the potential to significantly impact the development of youth in sport. Many developing young athletes grow up in close physical and age-related proximity to their siblings, who often participate in the same or similar activities (Blazo, Czech, Carson, & Dees, 2014; Davison, 2004). Thus, siblings also may influence athlete development.

Sibling Influences

Unlike the literature focused on parental roles and support, research examining sibling influences on athlete development is less robust. That being said, there is some evidence to suggest that siblings can have both positive and negative effects on one another in relation to their sport development (e.g., Blazo & Smith, 2015; Côté, 1999; Davis & Meyer, 2008; Davison, 2004; Hopwood, Farrow, MacMahon, & Baker, 2015; Taylor et al., 2017). Regarding the positive effects, Blazo and Smith (2015) posit that siblings aid one another in their participation and continuation in sport, which may be a predictor of future sport success. Generally speaking, girls and boys who are physically active experience more support from siblings in the context of the physical activities in which they participate when compared to youth who are less active (Davison, 2004). The mechanism behind this relationship may partially be explained by the work of Davis and Meyer (2008), who demonstrated that same-sex siblings are an important source of emotional support (e.g., showing pride in one another) and informational support (e.g., offering tips and advice) for one another in high performance sport. A study by Hopwood et al. (2015) provides nuance specific to the birth order of each sibling, suggesting that older siblings have the potential to positively influence younger siblings in their sport trajectory. For example, Taylor and colleagues (2017) discuss the influences an older sibling may impart on a younger sibling through observational learning and skill development.

On the other hand, competition among siblings may have negative effects on athlete development. For example, Davis and Meyer (2008) demonstrated that youth with siblings were motivated to maintain athletic status and perform better than their sibling in order to impress others who observe their performance. As such, siblings may extrinsically motivate one another in order to perform. While any form of motivation may have positive effects on the skill development and success of an athlete, extrinsic motivation may be associated with negative consequences related to the psychological health of an individual. For example, siblings and peers may extrinsically motivate one another when they feel the need to perform well in order to maintain the friendship, which may be detrimental to the overall quality of the relationship (e.g., Keegan et al., 2010). Furthermore, jealousy may arise when younger siblings feel as though their

older sibling receives more attention in his or her sport (Blazo et al., 2014). By drawing on preliminary evidence describing sibling roles and support, we can infer that siblings are likely to have an important influence on youth-athlete development in sport – for better or for worse.

Family Dynamics and Structure

In describing FST, Taylor and Collins (2015) depict the importance of subsystems within a family that differentiate one family from another. FST suggests that all members in a family interact together to influence the behaviour of each individual member, and each individual member plays a role in the family relationship as a unit (Fingerman & Bermann, 2000). As such, family dynamics encompass the individual relationships that exist between family members, as well as the broader unit to which those relationships contribute. The individual relationships that an athlete forms with each parent and sibling are clearly important for the overarching family relationship. However, the influence of these relationships on family functioning and the broader dynamics that exist among family members have yet to receive any significant attention in the sport literature. What we do know is that the varied relationships within a family influence one another differently depending on family structure (Furman & Burhmester, 1985) and that overall family support is important for sustaining physical activity behaviours (Davison, 2004). We also know that positive family relationships play an important role in athlete development as a whole (Donohue, Miller, Crammer, & Cross, 2007). Thus, the family unit may be just as important as the individual relationships between an athlete and his or her family members in terms of fostering optimal development in and through sport.

Method

The guiding theoretical orientation for this study was symbolic interactionism. According to Benzie and Allen (2001), symbolic interactionism is built upon three basic assumptions: (a) people attach meanings to objects and individuals in their lives, (b) meanings are developed through the process of interaction between people (via symbols or language), and (c) the interactive process through which meanings are assigned and modified is constantly changing. From the perspective of symbolic interactionists, the individual and the context in which the individual exists cannot be separated; therefore, reality is tentative and relational (i.e., meanings are context-dependent). Knowledge of reality is achieved through attempts to interpret and understand the meaning that has been attributed to a particular person, object or situation from the perspective of the subject and his or her surrounding context. As such, we aimed to examine the meaning of familial relationships in the context of athletic development from the perspective of current varsity athletes.

Using a retrospective timeline interview procedure, the interviewer and participant worked closely together to construct a visual timeline of the participant’s lifespan sport experiences (e.g., Adriansen, 2012). This timeline served to facilitate discussion surrounding the role of the participants’ family

members within and throughout their development into varsity athletes. Guided by symbolic interactionism, we assumed that athletes would construct their sport timelines in relation to their own meanings and experiences, which would be impacted by their interactions with parents and siblings throughout their development.

Participants

Recruitment for this study focused on individual and team sport athletes at the interuniversity (i.e., varsity) level in Canada. To be considered for inclusion, athletes were required to have at least one sibling that was born within four years of themselves (i.e., no more than a four-year age gap). A four-year age gap was selected in line with previous research suggesting that this would be an appropriate age gap for the comparison of siblings (Blazo & Smith, 2015). This decision was informed by the theory of social comparison processes (Festinger, 1954), which suggests that it may be difficult to compare people who are too dissimilar from one another. Siblings who are born within four years of one another were considered more likely to have developed within a similar physical and social environment, thus enabling a prospectively more fruitful exploration of sibling relationships and family dynamics within a comparable developmental context. In total, four male and six female varsity athletes were interviewed (for demographic details, see Table 1). All participants attended an established and reputable post-secondary institution in Canada. Although we did not collect data related to socioeconomic status, participants described their development in a manner consistent with a middle- to upper-class upbringing.

Table 1.
Participant Demographics

Pseudonym	Age	Sport	Number of Siblings	Number of Siblings within 4-year age gap
Jennifer	21	Cross-Country	2	2
Elizabeth	25	Lacrosse	5	At least 1
Maria	21	Rowing	2	2
John	21	Football	1	1
Eric	18	Cross-Country	2	1
Samantha	20	Lacrosse and Squash	5	At least 1
Todd	18	Rowing	3	2
Molly	21	Basketball	1	1
Heather	21	Soccer	1	1
Chris	22	Ultimate Frisbee	2	2

Note. “At least one” means the participant stated they had at least one sibling within the age gap.

Procedures

Athletes were recruited through e-mails that were sent to the head coaches of varsity teams, and they forwarded information about the study to their athletes. Interested athletes took part in an interview procedure, which was based on a retrospective timeline approach outlined by Adriansen (2012). To begin the interview, participants worked collaboratively with the interviewer to co-create a visual timeline of the athlete's sport involvement. Using a large sheet of paper and writing utensils (e.g., pens and markers), the participant guided the researcher in recording the sport activities, important moments, and major life experiences or milestones experienced by the participant in relation to his or her athletic development and family life. Subsequently, a semi-structured interview guide was used to elicit key information associated with the participant's development into a varsity athlete. Based on the PAF (Côté et al., 2014), the interview guide was divided into three sets of questions aligning with the three dynamic elements considered to influence the quality of youths' development in sport: activities (e.g., "In addition to the structured activities we are placing on the timeline, in what ways were you involved in less formal sport and physical activity – led by yourself, your peers, or your siblings?"), relationships (e.g., "How has your relationship with [family member] influenced your sport involvement?"), and settings (e.g., "How do you think your environment – at home or in sport – has affected your development in sport over time?"). Questions concerning the participant's relationships formed the bulk of the interview guide, as we aimed to explore the role of parents and siblings within each athlete's personal sport history. The timeline was used as a tool to facilitate recall and stimulate discussion during the interview (Adriansen, 2012).

Data Analysis

Interviews were transcribed verbatim and thematically analyzed (see Braun, Clarke, & Weate, 2016) using NVivo software. A thematic analysis enabled an exploration of patterns within and between the participants' interviews – allowing an in-depth examination of the meanings and interactions that participants described regarding the influence of family throughout their development as athletes (cf. Benzies & Allen, 2001). As outlined by Braun and colleagues (2016), the following six phases guided the analysis: (a) familiarization – reading and re-reading the transcripts to develop an intimate familiarity with the data, (b) generating initial codes – line by line coding of the transcripts, (c) developing themes – sorting initial codes into overarching themes, (d) refining themes – examining whether or not candidate themes are representative of the coded extracts and the dataset as a whole, (e) naming themes – labeling each of them with an appropriate representation, and (f) writing the report.

Throughout the analysis, abductive reasoning was used to create meaningful and practically relevant findings (e.g., Coppola, Hancock, Allan, Vierimaa, & Côté, 2018; Taylor, Ntoumanis, & Smith, 2009). Correspondingly, the findings were generated through an iterative process of inductive and deductive analytical approaches. In Phases 1 and 2, the first author approached the analysis inductively. To assist with familiarization, she took notes

on the transcripts and kept a reflexive journal. Initial codes were reviewed by the second author, who acted as a critical friend (i.e., a "theoretical sounding board," challenging biases or assumptions; Sparkes & Smith, 2014) throughout the analytical process. After the initial codes were generated, they were grouped into constituent themes in Phase 3. At this time, the first author employed a deductive lens to map the codes onto the elements of existing frameworks (e.g., the PAF; Côté et al., 2014). From this point forward, the first and second authors moved back and forth between inductive and deductive analytical approaches (i.e., abductive reasoning) as the themes were refined and labelled. For example, a framework emerged that aligns with the elements of the PAF but provides information specific to family dynamics and relationships in a developmental sport context.

Results

The analysis revealed that interactions among family members – namely, parents and siblings – played an important role in shaping varsity athletes' developmental pathway in sport. Considering these findings, we noticed stable interactions and positive relationships of the family unit as a whole (i.e., athlete, siblings, and parents) with respect to physical activity and sport participation, including the surrounding environment. Furthermore, two distinct and dynamic influences emerged within the family unit. First, *parental influences* encompassed the changing types and levels of support (i.e., tangible, informational, and companionship) afforded to the athletes throughout their development. Second, *sibling influences* stemmed from a variety of common sources expressed by the participants, including shared sport experiences, competition among siblings, and role modelling. While the overall family context remained stable over time (i.e. family environments and values), parent, and sibling influences changed in strength and content over the course of development.

Stable Family Context

At the broadest level, positive family dynamics and shared values were crucial for the successful development of varsity-level athletes. A stable family context facilitated the more dynamic parental and sibling influences over time. Three sub-themes supported the overarching family context theme: First, strong family values and bonds were important for catalyzing healthy development, in and out of the sport context. Second, participation in physical activity and sport together as a family facilitated interest and engagement in sport. Third and finally, positive family environments – whether permanent or alternative family environments (e.g., a cottage) – with access to leisurely activities, facilitated opportunities for deepening interest in sport and 'quality' family time.

Family values. Many of the participants recognized strong family values and healthy relationships among family members that, although existing separately from their sport involvement, played an important role in supporting their development. These participants explained how their families valued spending time together, even when more advanced training and competition

schedules meant working harder to make time for those shared experiences. Resilient family values and bonds were exemplified by Elizabeth, who stated:

We always had family dinners together every single night... a lot of the times as you get older you start missing more and more because practices tend to fall during meals... but [mom and dad] would try and time it around the most amount of people who could possibly be there.

Not all participants had positive relationships with their family at all times throughout development, but these participants still described positive family dynamics on the whole. For instance, Molly described a turbulent relationship with her mother when she was growing up and how her family dynamics were not ideal, but conceded that spending time together was still a core family value:

I just know for sure we had family dinner regardless of if someone had practice. Right after school or later we made sure we had time for everyone to sit down and have an hour out of our day where we'd be sitting together talking and stuff like that.

Molly recognizes her higher appreciation for family now than she did before as her family is not all living together anymore. When she reunites with her family now, they are all happy to be together.

Alternatively, family values were not necessarily constricted to the biological or “home” family of an athlete. John’s parents divorced when he was young; consequently, he spent a lot of time with the family of a close childhood friend. This family became his “adoptive” sport family, supporting his sport participation in the early years of his involvement. He described this family as being one of the most influential factors in shaping his sport career, allowing him to “build the love for sports.” This family helped out by driving him to and from practice, and generally “hanging out playing sports for about seven years of [his] life.” Overall, group or family values that favored togetherness and active lifestyles served to foster a stable context for supporting development in and through sport.

Family sport participation. In some cases, participating in one or multiple sports, together as a family, was important for promoting athletic growth and motivation to continue participation in sport activities. For example, as a varsity cross-country and track athlete, Chris described the role his family played in starting his running career: “It was my family doing it; it’s a group of runners called [club name] and they’re a group of runners all over the world, and we joined the one where we lived... we’d do this once a week.” Chris went on to describe how his family’s participation in a running group influenced his decision to specialize in the sport and pursue higher levels of competition as a distance runner. Furthermore, when families participated in sport together, they were able to nurture positive interactions within their family as a whole. To demonstrate, Elizabeth described some of her fondest memories as “playing the Christmas squash tournament with my family or one of our skiing chairlift rides.” Elizabeth maintained positive associations with the sporting environment, which may have contributed toward her motivation and success in the sport environment. Interactions among family members in sport allowed for compatibility and shared values, reinforcing a positive family environment.

Positive home or alternative family environments. The broader environment in which some of the participants’ families were situated also played an important role in stimulating sport engagement individually, and thus contributing to positive family dynamics. Participants’ families tended to live in environments that promoted physical activity, such as neighbourhoods with easy access to sport opportunities. As an example, Samantha attributed her early sport involvement (e.g., ages 6-12) to time spent with family in their backyard:

I think a lot of it was my dad used to play with us in the backyard... We had a big backyard and there were always sisters who I had to play with so we’d spend a ton of time in the backyard and neighbors would always come to our house.

This environment promoted participation in sport from a very young age. As emphasized by a few athletes, alternative family environments (e.g., family-owned or rented cottage or chalets; vacation destinations) also were important for providing children with opportunities to spend quality time together with their families. For example, when Maria – a rower – was asked about having the opportunity to engage in leisurely activities, she responded that her family’s cottage enabled her with these opportunities. These alternative family environments allowed for participants to engage in various recreational physical activities and offered the additional opportunity to promote positive interactions among individuals in the family. Whereas not all participants’ families had second homes such as cottages, regular vacations at venues such as ski hills or camping adventures offered similar opportunities for families to spend time together in physical activity-promoting contexts. Nonetheless, we must acknowledge that several of the participants in this study had access to resources that enabled these alternative family environments. Opportunities for families to participate together in a shared environment – whether at or away from home – encouraged successful sport participation among these young athletes, but having the resources to do so also was an important part of the process.

Dynamic Supporters: Parental Influences on Athlete Development

While the overarching family context remained stable over time, the type and amount of support provided by parents was active and changed over the course of development. Three types of support were identified, consistent with previous research (Côté & Hay, 2002): Informational, tangible, and companionship. While companionship support remained stable throughout some of the participants’ personal sport timelines, other forms of support (i.e., informational, tangible) became more prominent in specific phases of development.

Informational support. Many participants described receiving informational support from their parents at a young age (i.e., ages 6-12), and this type of support peaked as they began to specialize in more competitive sports (i.e., ages 12-16). The participants described informational support as guidance when children were struggling (e.g., to make a decision) regarding their trajectory in sport. Parents tended to offer this type of support by taking on roles such as volunteer coaches in the early years of their child’s sport involvement. Although parents did not always fill

formal coaching roles as participants grew older, informal support assisted the athletes as they progressed to higher levels of competition. For example, Heather – a competitive soccer player – stated, “If I was a boxer my dad would be my coach in the ring,” thus emphasizing the crucial role her father had played in her sport involvement. Contrarily, Heather did mention that her father once prevented her from continuing in the track and field events of discus and shot put at a young age because he did not believe the events were feminine enough; he stated that she would thank him for this decision in the future. Heather expressed that she never envisioned herself competing at a high level in these events and only would have continued to participate until the seventh grade. Despite this, Heather emphasized that this was the only time she was ever inhibited from engaging in an activity and was still able to participate in other recreational sports that could be viewed as more masculine such as mountain biking and skate boarding. Informational support tended to peak as athletes transitioned into more competitive sport involvement but declined when the athlete began a varsity sport career. In the words of Molly: “My mom’s role definitely changed after she coached me in competitive soccer... and then she was more of a spectator at my sports and stuff like that, which is where both my parents kind of fall now.” Varsity coaches were able to provide participants with informational support at this stage.

Tangible support. As soon as athletes began to participate in organized sport (i.e., ages 6-12), many parents began to provide tangible support. In general, tangible support can be described as the extent to which parents provide physical or material support for their child’s sport participation (Côté & Hay, 2002). Chris noted that his parents played an important role in his sport participation “early on” because “they’re your transport and looking after you and stuff like that.” Jennifer stated that “early on I obviously needed [my parents] more just for instrumental reasons, driving me and costs.” Additionally, Samantha emphasized that her parents “were always financially supportive of like lessons or anything like that,” however in order to receive this form of tangible support, a demonstration of strong interest and work ethic in the sport was required. Similar to informational support, tangible support became more prominent when parents realized their children were serious about pursuing sports. At this stage, parents dedicated a significant amount of time and financial resources to their child’s sport participation, while also assisting their child with research into sport-related opportunities for advancement. For example, Chris stated how his parents’ role changed after they noticed he wanted to take sports to the next level: “In 2010, we considered sending me back to [home country] to attend soccer schools in [home country] full time.” This was because Chris’s home country provided him with better sporting opportunities that would enable his trajectory. While financial support remained consistent or increased over time, tangible support in the form of transportation became less frequent as athletes gained independence and moved away from home.

Companionship. In many cases, companionship support tended to remain stable over time. Companionship support allows parents and children to develop a positive relationship through athletes’ sport participation. As exemplified in the overarching family context theme, parents were able to create social connections with their children through sport at all stages of

development. For example, Molly talked about how her and her mom participated in a “moms and tots” soccer program at the beginning of her sport participation years while Todd reported playing tennis with his siblings and dad in his early adolescence. John – a football player – who viewed a lack of this support in his own development as an athlete, expressed the importance of companionship:

I wish my dad was there more. It definitely would have been a motivator and he was a really good athlete. So I know there was lots of other kids to have their dad to help them out with their skills but I never really had that so I wish he was there for that aspect.

John was an outlier in our sample considering the lack of tangible, informational and companionship support he experienced during his own development as an athlete; nonetheless, his responses reinforced the importance of parental support.

Role Models and Rivals: Sibling Influences on Athlete Development

Sibling influences on athletic development also were identified as dynamic and changing over time. Sibling roles tended to be most prominent in the early years of sport participation but often were impactful in terms of stimulating participants’ motivation and interest in competitive sport involvement. Three sub-themes helped capture the complexity of the sibling role in participants’ sport development: (a) shared sport experiences, (b) role modelling, and (c) competition and rivalry.

Shared sport experiences. Many participants who were close in age with their siblings were presented with numerous opportunities for shared sport experiences. In the early years of sport participation (i.e., ages 6-12), siblings were able to engage in both structured (e.g., organized sports) and unstructured (e.g., outdoor play, pick-up games) sport activities together. As an example of these informal activities, Heather stated: “Me and my brother played every single day after school all the time in our backyard. We would play baseball until there was no light.” These shared experiences provided opportunities for physical skill development outside of structured practice time, while also maintaining a high level of enjoyment.

Moving into higher levels of competition (e.g., ages 13+), some siblings who specialized in the same sport and continued to share sport experiences often described a competitive advantage over their other teammates. Siblings who were involved in the same sport at a competitive level described relationships founded on empathy and understanding, as well as opportunities for practice and improvement. As such, athletes were able to access both informational and emotional support from their teammate-siblings. Samantha explains, “Because I had older sisters that were more serious in it, I got to practice shooting too, which was lucky for me because I got to be become better.” Even athletes who had parted ways at the varsity level to compete for different teams described a sense of emotional support and accountability. For example, Molly described the benefits of visiting home at the same time as her sister: “It’s nice when we both go home. We can both go out to the gym together and stuff like that and we keep each other on schedule training-wise.”

Role modelling. Among some of the participants in our study, younger siblings were inevitably exposed to older sibling's sport experiences and benefitted regardless of whether or not they were the same or opposite sex. For example, when referring to his younger sister, Eric said, "She did the same sports as I did pretty much, when I got enrolled, she got enrolled too." This phenomenon was primarily observed in the early years of sport participation (i.e., ages 6-12), unless participants continued onto competitive involvement and specialization (i.e., ages 13-15) in the same sport – in which case, older siblings remained important role models for their younger counterparts. Not only did younger siblings often enroll in the same sports as their older brothers or sisters, but they also often viewed their older sibling's sport accomplishments as inspirational. Many younger siblings aspired to achieve what their older sibling had done, which motivated continued participation and an ambition for high performance. To demonstrate, Samantha – a lacrosse player – referred to her older sister as "the best athlete in the house" and stated, "I just felt like I was way younger than her... I feel like I always looked up to her." On the other hand, participants who did not pursue athletic careers within the same sport as their siblings often did not view their siblings with the same reverence. For instance, Jennifer explains, "I really kind of took my own route with running so then it became less comparable, but yeah I looked up to [my brothers] more so in the elementary school years because in high school we really started differentiating ourselves."

While some younger siblings perceived their older siblings as highly influential in shaping their decisions and motivation within competitive sport, the opposite was not the case. In comparison, some older siblings did not recognize their younger siblings as particularly influential for motivating or directing their sport participation. With respect to her younger sister, Molly explained:

I don't think she ever really had an influence on whether or not I would play sports just 'cause I was older and went through it first. I'm sure it's different for her 'cause [she was] watching me grow up and play so many sports.

Some older siblings described a stronger parental influence, whereas some younger siblings were able to admire and model themselves after the athletic endeavours of their brothers and sisters.

Competition and rivalry. In the sport context, competition between siblings can have positive and negative effects on sport trajectory. Through a positive lens, competition often drove motivation to excel in athletic development – particularly when younger siblings were determined to achieve or exceed the skillset of an older sibling. A few younger siblings described feeling overshadowed by older siblings and wanted to prove themselves as equals. In the words of Heather when she was a child:

Having an older brother, not that he was excelling in sports, it's just that he was older than me so everything he did he has two years of age and he was a boy so he had a natural ability to do things better than me which I didn't like.

These feelings often motivated young athletes to practice sport skills in order to compensate for what they lacked in physical growth and maturity. Siblings who specialized in the same sport and continued to compete with or against one another into adolescence and early adulthood also described how inter-sibling rivalry motivated improvement. For example, Elizabeth – a

lacrosse player – discussed how her relationship with her sister influenced her work ethic when they played together on the same varsity team, stating: "It wasn't because we wanted to work harder, it was because we wanted to beat each other." Contrary to a positive perspective on sibling competition, siblings who specialized in the same sport described how the constant competition could be discouraging and hinder motivation. With respect to competing against her younger sister, Elizabeth explained: "If anything, it discourages me and I think it's because she can probably beat me and I'm not ready to give up that title."

Alternatively, sibling competition remained present even when one sibling pursued a competitive sport career and the other did not. The mere presence of a sibling appeared to instill a competitive instinct that could then be transferred to the sport environment. For example, when referring to his brothers, Chris – an Ultimate Frisbee player – stated:

The two together have fostered a very competitive nature inside of me. I did want to beat my brothers, whether they played sports or not. I wanted to beat them at whatever they were doing kind of thing whether it was board games, academics.

As children, some participants described constantly trying to "be better than their sibling." Participants who grew up with siblings who excelled in areas outside of sport (e.g., academics) described feeling motivated to excel in sport to prove that they could dominate that domain.

Challenges to Sport Development

Although many of the participants reported positive experiences with their families over the course of their development, some participants expressed hardships throughout their upbringings that stood in contrast to the other athletes. For example, Eric – a cross-country runner – mentioned the passing of his father and how it affected his sister differently than himself. He stated: "She was like really, really good at sports, like way better than I was but she took [the death of our father] really hard and like didn't do anything anymore." Although Eric's sister did not continue with sports after her father's death, Eric was able to excel in his athletic endeavors. As another example that was previously described in the companionship section of the parental influences theme, John's parents divorced when he was child. When asked about his family environment and opportunities to participate in sport while growing up, John reported, "It was all through my mom, it was me, my mom, and my sister. She got me into the big league for hockey. She was the one, she was always the one who got me into these leagues."

Although John received support from his mother and close family friends (his "adoptive" sport family), he expressed how he could have benefited from his father being more involved in his development.

Discussion

This study aimed to extend the body of literature examining parental influences in athletic development, and to investigate specifically how other familial relationships, such as sibling

influences, and the broader family dynamic contribute to the development of Canadian interuniversity student-athletes. Furthermore, we have provided a body of evidence that illuminates the role of FST (Taylor & Collins, 2015) in the broader context of youth development, as described within the PAF (Côté et al., 2014). Our analysis revealed three main themes: (a) the stable family context, (b) dynamic support of parents and (c) siblings as role models and rivals.

These findings offer insight into the dynamic nature of parent and sibling relationships with athletes in youth sport, as well as how these relationships operate in the broader family environment to optimize (and, at times, hinder) athletic development.

The PAF describes three dynamic elements that contribute to optimal long-term development in youth athletes: personal engagement in activities, appropriate settings, and quality relationships (Côté et al., 2014). While the “relationships” component was used to contextualize the findings of our study, all three dynamic elements were captured within the stable family context theme. First, the importance of personal engagement in activities was exemplified through family unit participation in sport. Provided that both peer- and adult-led activities are important to optimize the development of youth-athletes (Côté et al., 2014), the interaction among all members of a family in sport activities may provide opportunities for varied forms of play and practice as led by parents, siblings, and athletes themselves.

Consistent with FST, our findings support the importance of the broader family relationships developed through the interactions of various dyads within a family (Fingerman & Bermann, 2000). Moreover, positive family environments may promote sport engagement through easy access to leisurely sporting activities (e.g., kayaking at family cottage, skiing while at family cabin). A positive family environment with access to opportunities to participate in physical activities together may have been important for facilitating quality relationships among family members, given that multiple family structures within close proximity positively interact to influence sport trajectory in children (Wheeler, 2011). Provided that family support is important for sustaining physical activity behaviours (Davison, 2004), positive family dynamics created through family participation in activities, a family environment in which physical activity is valued, and quality relationships among family members may have played an important role in facilitating the developmental pathways of these athletes. That being said, the alternative family environments (e.g., cottages, ski trips) discussed by participants in this study suggest that these athletes may have been brought up in families of middle to high socioeconomic status. As such, access to these extensive resources may have played an important role in facilitating athletes’ sport development, thus aligning with previous research showing that lower socioeconomic status is associated with lower rates of sport participation (Kamphuis, Van Lenthe, Giskes, Huisman, Brug, & Mackenbach, 2008).

Our findings were consistent with the vast body of literature suggesting that parents are influential in an individual’s athletic development (Bloom 1985; Côté & Hay, 2002; Côté & Fraser Thomas, 2015; Harwood & Knight, 2009; Scanlan & Lewthwaite, 1986). Researchers have documented the salience of informational support in the early years of an athlete’s sport

trajectory (e.g., Holt, Tamminen, Black, Sehn, & Wall, 2008), and participants in our study discussed increases in tangible and informational support from parents during adolescence. However, declines in both types of support were noted during participants’ varsity careers – likely because the athletes had moved away from home to attend university and compete as a varsity athlete in another city, province, or country. These findings are consistent with the work of Bloom (1985), which affirms that developing athletes are able to progress over time without direct guidance from their parents. The findings suggest that tangible and informational support increased in early years of athletic development and decreased in later stages, while companionship persisted throughout athletic development (e.g., Dorsch, Smith, & Dotterer, 2016). Alternatively, our findings did not adequately reflect emotional support, which has been described as parents offering encouragement and reassurance in times of frustration or stress (Côté & Hay, 2002). Although athletes expressed various forms of support from parents throughout their athletic trajectories, their descriptions did not appropriately reflect this specific form of support.

While our findings offer important insight and nuance with respect to parental roles and support in the development of varsity student-athletes, perhaps the most novel contribution of the study is an understanding of dynamic sibling influences in athletic development. For example, participants often described their siblings as most influential between the ages of six and 16, and less influential during the most competitive years in older adolescence and young adulthood – unless siblings were engaged in the same sport during this time. Siblings may be able to relate to one another more closely if they are engaged in the same sport (e.g., practicing together), thus encouraging positive communication and a more intimate relationship (Trussell, 2014).

In addition to valued sibling relationships stemming from shared sport experiences, younger siblings who strive to be like their older sibling often have more intimate relationships compared to those who want to be different (Whiteman, McHale, & Crouter, 2007). Consistent with Davis and Meyer’s (2008) research, we found that older siblings are able to provide informational support for their younger siblings, thus serving as role models. In contrast, participants with younger siblings (but not older siblings) did not express the same relationship with their siblings. This could be due to the fact that the older siblings already are receiving informational support from parents and have advanced beyond the level of knowledge obtained by a younger sibling.

Another important finding – entailing both positive and negative effects – was the role of sibling rivalry in motivating athletic success. While Davis and Meyer (2008) discussed sibling competition in the sport context, our findings suggest that this type of competition exists in non-sport contexts as well. For example, some participants were motivated to beat their siblings in other domains (e.g., academics), or attempted to differentiate themselves from their siblings by succeeding athletically even when their sibling was not an athlete. These findings are consistent with previous literature, which suggests that older siblings can have a positive effect on the work ethic of younger siblings and thus motivate them to work harder (Côté, 1999; Hopwood et al., 2015).

In some cases, however, sibling rivalries may not have positive implications for mental health. For example, some participants felt discouraged when the competition was too intense, leading to sport drop-out. These findings are consistent with the work of Trussell (2014), which showed that when younger siblings were viewed as the more successful athlete, older siblings questioned their skill level and desire to continue with the sport. Finally, these findings reflect the work of Taylor, Carson, and Collins (2017), which provides insight into jealousy among siblings within their sport achievements. They determined that if a younger sibling succeeds before an older sibling, the older sibling may compensate with false information (e.g., making excuses for his or her poor performance).

Implications

While there is an extensive body of research focused on parental roles and support in youth sport, this study has valuable theoretical and practical implications that not only extends this research, but also contributes novel insights related to sibling influences and family dynamics more broadly. Theoretically speaking, we have provided an in-depth understanding of how families factor into the “quality social relationships” dimension of the PAF using FST. This is the first time FST has been used in conjunction with the PAF to understand how familial relationships influence youth development in sport. By taking a holistic look at the family system, which includes the individual relationships between athletes, their parents, and their siblings, and the family relationship as a whole, we have provided important context for future research, and we hope that other researchers will continue to acknowledge and examine the multidimensional influences of families in sport from a variety of perspectives.

The findings of our research also indicate the importance of fostering positive family environments and relationships among family members, while also drawing attention to the role of socioeconomic status and resources in facilitating these outcomes. While some elements (e.g., family sport participation, shared family values, positive relationships) may not be contingent upon a family’s resources, the availability of certain assets, such as vacation homes and travel, appear to facilitate opportunities for family bonding in sport-related activities, which has the potential to ease young athletes’ sport development. Altogether, these elements may increase opportunities for youth to experience success and thus compete in their desired sport at a highly competitive level. For families that do not have the resources to participate together in sport-related activities or travel to destinations where such activities might occur, alternative supports are needed to encourage family bonding in sport activities that are affordable and enjoyable.

Limitations and Future Directions

Before concluding, we must acknowledge some limitations of our research. First, our findings were based on a homogeneous sample of participants who attended the same university, and the majority of the participants were raised in the same country. The participants in this study were largely raised in middle-to-upper

class families with extensive access to resources that supported their development in sport. Consequently, our findings may not be generalizable to athletes of more diverse backgrounds and socio-economic status. Another limitation was the size of the sample. Although we gained the in-depth perspectives of 10 participants included in this study, a larger number of participants may have revealed new themes or provided additional context for existing themes. By increasing the size of the sample, there also would be an opportunity to recruit participants from more diverse backgrounds and socio-economic status.

There still is a long way to go in terms of understanding family dynamics within the complex developmental processes that occur in sport. Continued research into parental influences in sport should move beyond the types of support offered by parents, to examine the relationship between contextual factors (e.g., socio-economic status, marital status of parents, family values) and parental support for youth sport participation. For example, a study comparing traditional nuclear families and blended families/households may provide unique insight into parental and sibling influences on athlete development. An explicit focus on the family context may be necessary to fully unpack the factors that influence parental and sibling influences in sport, as well as additional family relations that help or hinder athlete development.

Additionally, although we aimed to examine the relationship between participants and siblings within a four-year age range, participants with additional siblings who *did* exceed a four-year age gap also appeared to influence athletic development. Therefore, future research should consider similarities and differences between siblings of varying age ranges, as siblings may take on different roles depending on their age. Another important factor worth consideration is the number of siblings in a family. Research by Barnett (2008) demonstrated that there tends to be more sport involvement if there are more siblings in a family. As such, future research should account not only for differences in age among siblings, but also the number of siblings. Finally, gender also may play an important role in defining the nature of sibling relationships, and thus warrants further attention in the literature.

Conclusion

The findings from our study reflect previous literature to suggest the importance of familial influences in athletic development over time. Taken together, the family context can be understood as the environment in which an athlete develops stable relationships with family members that influence his or her sport-related values and trajectory through sport. On the other hand, parent and sibling influences may have a more direct impact on athletic progression via the provision of guidance, support, motivation, and competition. This study not only validates the importance of parental figures in athlete development, but also builds upon the minimal research examining sibling influences in sport. Overall, this study provides insight into the family-related factors and dynamics that cumulatively contribute to a successful sport trajectory.

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