AN INTEGRATIVE CASE STUDY OF POSITIVE YOUTH DEVELOPMENT IN A RECREATIONAL COMMUNITY SPORT PROGRAM

by

Matthew Vierimaa

A thesis submitted to the Graduate Program in Kinesiology and Health Studies
In conformity with the requirements for
the degree of Doctor of Philosophy

Queen’s University
Kingston, Ontario, Canada
July, 2016

Copyright ©Matthew Vierimaa, 2016
Abstract

Participation in organized activities is associated with many markers of positive youth development (PYD) such as improved self-esteem, social competence, and academic achievement (Mahoney et al., 2009). Sport is an extra-curricular activity that is particularly popular among youth, as nearly three quarters of Canadian children and adolescents are engaged in organized sport or physical activity (CFLRI, 2012). Much of the research in this area has examined sport programs which are explicitly structured to promote life skills or PYD outcomes; however, the sustainability of such programs has recently been called into question (Turnnidge, Hancock, & Côté, 2014). The purpose of this program of research was to conduct an in-depth case study of a successful, sustainable community youth basketball league.

Study 1 was a qualitative descriptive exploration of coaches’ perceptions of the basketball league. This study provided a general overview of the structure and perceived benefits of the league, from the perspective of current coaches. Coaches highlighted the unique emphasis that the league places on fun and positive immediate sport experiences.

Study 2 expanded on selected themes from Study 1, namely, the salience of the league’s culture and tendency for former players to return to the league as volunteers. This study used an ethnographic approach wherein the first author volunteered as an assistant coach on a basketball team over the course of a six-month season. This approach enabled him to gain considerable first hand insight into the organizational culture of the basketball league.

The third and final study adopted a quantitative approach using both systematic observation and questionnaires to investigate the relationship between PYD outcomes and observed athlete behaviour during basketball games. A cluster analysis revealed the presence of two distinct groups of athletes characterized by relatively high and low perceptions of PYD
outcomes, which were also associated with varying behavioural characteristics during competition.

The results of these three studies provide a detailed blueprint of a successful youth sport program that has been sustained over 60 years. While not without limitations, many characteristics of the league should prove useful in structuring youth sport programs in other contexts.
Co-Authorship

As dissertation co-supervisors, Dr. Jean Côté and Dr. Mark Bruner are co-authors on all three manuscripts contained within this dissertation (Chapters 3-5). Additionally, Jennifer Turnnidge is a co-author on one manuscript (Chapter 3). On all three manuscripts, Matthew Vierimaa had primary responsibility for the conception and study design, data collection, analysis and interpretation of data, and the drafting and revision of the manuscript documents.

**Manuscript 1:** *Just for the fun of it: Coaches’ perceptions of an exemplary community youth sport program.* This manuscript is currently under review at Physical Education and Sport Pedagogy and is presented according to the journal’s guidelines. Dr. Côté, Dr. Bruner, and Mrs. Turnnidge, all provided input regarding the study’s design, interpretation of data and editorial feedback on the manuscript.

**Manuscript 2:** *The organizational culture of a community youth sport program.* This manuscript is currently under review at Sport, Exercise, and Performance Psychology and is presented according to the journal’s guidelines. Dr. Côté and Dr. Bruner provided input regarding the study’s design, interpretation of results, and editorial feedback on the manuscript.

**Manuscript 3:** *Positive youth development and observed athlete behaviour in recreational sport.* This manuscript is currently in preparation for submission to Psychology of Sport and Exercise and is presented according to the journal’s guidelines. Dr. Côté and Dr. Bruner provided input regarding the study’s design, statistical analyses, interpretation of results, and editorial feedback on the manuscript.
Acknowledgements

First, I would like to thank my supervisors, Dr. Mark Bruner and Dr. Jean Côté. Your unwavering support and belief in me has been invaluable. You have always afforded me the flexibility to research my own interests and passions, all the while providing excellent tag-team feedback (no matter how tight the timeline!). I have enjoyed the working relationships that we have developed and look forward to our continued collaborations in the future.

Second, thank you to all of my lab mates, past and present. There are way too many of you to name, but I am grateful for all of the friends and colleagues that I have come to know over the years through the PLAYS. Individuals have come and gone, but the lab has always maintained a positive, collegial atmosphere.

Third, I’d be remiss if I didn’t thank everyone from the basketball league for their participation in this project. Roland, our initial innocent chat over coffee regarding an op-ed in the Whig serendipitously set this whole program of research into motion – thank you for reaching out! Your continued interest and support throughout this process has made my time with the league a truly gratifying experience.

Finally, I’d like to thank my family for all of their support and encouragement. Jess, you have always been there for me through the highs and lows. I couldn’t have done this without you, as you have patiently put up with the many evenings and weekends in the lab that were necessary to get this written. Archer, thank you for usually sleeping through the night, and making it easy to maintain my perspective and work-life balance. Dad, you were always my number one supporter and I think about you every day– this dissertation is dedicated to you.
# Table of Contents

Abstract ................................................................................................................................. ii
Co-Authorship ....................................................................................................................... iv
Acknowledgements ............................................................................................................. v
List of Figures ....................................................................................................................... viii
List of Tables ......................................................................................................................... ix
Chapter 1: General Introduction ......................................................................................... 1
Chapter 2: Literature Review ............................................................................................... 3
Chapter 3: Just for the fun of it: Coaches’ perceptions of an exemplary community youth sport program .......................................................... 21
  Abstract ............................................................................................................................... 22
  Introduction ......................................................................................................................... 23
  Method ................................................................................................................................. 25
  Results ................................................................................................................................. 29
  Discussion ......................................................................................................................... 38
  References ......................................................................................................................... 44
Chapter 4: The organizational culture of a community youth sport program .................. 48
  Abstract ............................................................................................................................... 49
  Introduction ......................................................................................................................... 50
  Method ................................................................................................................................. 54
  Results ................................................................................................................................. 61
  Discussion ......................................................................................................................... 73
  References ......................................................................................................................... 78
Chapter 5: Positive youth development and observed athlete behaviour in recreational sport ......................................................................................... 81
  Abstract ............................................................................................................................... 82
  Introduction ......................................................................................................................... 83
  Methods ............................................................................................................................. 86
  Results ................................................................................................................................. 93
  Discussion ......................................................................................................................... 98
  References ......................................................................................................................... 105
Chapter 6: General Discussion ............................................................................................ 109
Appendix A Study 1: Letter of Information and Consent Form ........................................... 125
Appendix B Study 1: Interview Guide .................................................................................. 129
Appendix C Study 2: Letters of Information and Consent Forms ....................................... 132
Appendix D Study 2: Interview Guides ........................................................................................................ 139
Appendix E Study 3: Letters of Information and Consent Forms .............................................................. 145
Appendix F 4 Cs Questionnaire Package .................................................................................................. 153
Appendix G Athlete Behaviour Coding System – Coding Manual .............................................................. 160
Appendix H Mean duration of observed behaviours ................................................................................ 170
List of Figures

Figure 2-1. The Personal Assets Framework for Sport.................................................................8
Figure 3-1. Themes integrated with the Personal Assets Framework for Sport .............................29
List of Tables

Table 2-1. Sport-specific definitions of the 4 Cs ................................................................. 7
Table 3-1. Overview and description of identified themes. .................................................. 30
Table 5-1. Description of coding categories. ........................................................................ 91
Table 5-2. Descriptives and correlation matrix for all questionnaire and observational variables .......... 95
Table 5-3. Descriptive statistics by cluster on all questionnaire and observational variables. ............... 97
Table 6-1. Mean duration (in seconds) for all observational variables by cluster. ......................... 171
Chapter 1

General Introduction

Organized sport is an extremely popular type of extra-curricular activity, as nearly 75% of young Canadians participate in some type of sport each year (CFLRI, 2012). While ample evidence exists regarding the myriad of health and psychosocial benefits (e.g., Bailey, 2006) associated with sport participation, organized sport has also been linked with a number of negative outcomes such as increased aggression and substance abuse (Eccles & Barber, 1999; Gardner & Janelle, 2002). Thus, it is imperative to obtain a better understanding of the social and environmental factors that underpin positive experiences in sport in order to work toward optimizing youth’s athletic and psychosocial development.

Positive youth development (PYD) is a strength-based perspective on adolescence that views youth as resources to be developed, rather than problems to be solved, and contends that all youth have personal strengths that can be promoted and flourished (e.g., Lerner, Dowling, & Anderson, 2003). One method of facilitating the development of these strengths is through participation in organized, out-of-school activities, which provide critical opportunities for mutually influential interactions between individuals and their environment (Lerner, 2002). Consequently, it is important to consider the nature and relational aspects of youth activities to further shed light on the contribution of extra-curricular activities on PYD.

Traditionally, PYD researchers have studied extra-curricular after-school programs (e.g., 4-H; Lerner et al., 2005). However, there is a growing belief organized sport may also be a fertile context through which PYD can be facilitated (Fraser-Thomas, Côté, & Deakin, 2005; Holt, 2016). Since this activity requires high amounts of effort and concentration, occurs regularly
over time, and is inherently enjoyable, organized sport may be predisposed to promote PYD outcomes such as initiative (Larson, 2000). Unsurprisingly, research on PYD in sport has steadily proliferated over the past decade (Holt, 2016). Over this period of time, research has been conducted in a wide variety of sport contexts including competitive high school (e.g., Holt, Tink, Mandigo, & Fox, 2008; Camiré, Trudel, & Forneris, 2009) and community sport (e.g., Fraser-Thomas & Côté, 2009; Fraser-Thomas, Côté, & MacDonald, 2010), as well as sport camps (e.g., Anderson-Butcher et al., 2013; Jones, Dunn, Holt, Sullivan, & Bloom, 2011). Nevertheless, research in other sport contexts such as recreational sport remains scarce (Holt & Jones, 2008). In addition, research is needed to help identify the characteristics of sustainable and effective community sport programs that facilitate PYD (Petitpas et al., 2005).

Thus, this program of research employed a case study approach to examine a successful, sustainable community youth basketball league. The objectives of this line of research were to: 1) provide a rich description of a recreational basketball league that has a celebrated 60 year history of facilitating holistic athlete development, and 2) shed light on the relational processes through which PYD occurs among the players that were currently involved in this basketball league.
Chapter 2

Literature Review

Positive Youth Development

Positive youth development (PYD) is an asset-building perspective on adolescence that suggests that all developing youth have personal strengths, and that one method of facilitating the development of these strengths is through participation in organized extra-curricular activities (e.g., Benson, 2006). This perspective is rooted in relational developmental systems theory (Lerner, 2002), which suggests that PYD occurs through the mutually influential interaction between individuals and their context. Thus, it is important to consider the nature and structure of the activities in which youth participate to better understand their potential contribution to PYD. While PYD research has predominantly focused on community activities such as after-school clubs (e.g., 4-H; Lerner et al., 2005), organized sport is also considered a salient social context in which to promote PYD (Fraser-Thomas et al., 2005). In fact, PYD researchers that come from a developmental psychology perspective have traditionally been somewhat superficial in their definition of sport as an inclusive and generic contextual variable that does not account for the different contexts of various sport experiences (e.g., Zarrett et al., 2009). Since this approach views sport as a single homogenous activity, it fails to reflect the myriad of potential differences in youth sport programs and the different social contexts of various sport activities. Agans and Geldhof (2012) suggested that researchers need to continue to study the organized sport context in greater detail to examine other salient cultural, social, and sport-specific factors (e.g., competitive level) that may influence PYD. Recently, sport researchers have begun to embrace this call in studying PYD outcomes in various types of
organized sport programs, including competitive high school (e.g., Holt et al., 2008; Camiré, Trudel, & Forneris, 2009) and community sport (e.g., Fraser-Thomas & Côté, 2009; Fraser-Thomas, Côté, & MacDonald, 2010), as well as sport camp settings (e.g., Anderson-Butcher et al., 2013; Jones, Dunn, Holt, Sullivan, & Bloom, 2011). However, there remains a need to expand sport PYD research beyond these primarily competitive settings to investigate comparatively understudied recreational sport (Holt & Jones, 2008). The proliferation of PYD research in sport has led to the adoption of several different PYD frameworks by sport researchers. The following sections will review the four predominant frameworks that have been applied in sport contexts: 1) the domains of learning experiences (Dworkin, Larson, & Hansen, 2003), 2) the developmental assets (Benson, 2006), 3) life skills (Hodge & Danish, 1999), and 4) the Cs (Lerner et al., 2005).

**Domains of learning experiences.** Dworkin et al. (2003) identified six main domains of learning experiences that relate to personal (i.e., identity formation, development of initiative, and emotion regulation) and interpersonal development (i.e., teamwork and social skills, positive relationships, and the development of adult networks and social capital). Using these domains of learning experiences, it has been shown that sport provides unique learning experiences in comparison to other extra-curricular activities such as faith-based groups and fine arts, as youth sport participants tend to report greater initiative, emotion regulation, and self-knowledge, but also negative peer interactions and inappropriate adult behaviours (Hansen, Larson, & Dworkin, 2003; Larson, Hansen, & Moneta, 2006). MacDonald and colleagues (2012) conducted psychometric testing of Hansen and Larson’s (2005) Youth Experience Survey 2.0 and did not find strong support for its factor structure in a sport context. Instead, MacDonald et al. developed a revised version of the scale made up of five dimensions: personal and social skills, initiative,
goal setting, cognitive skills, and negative experiences. Subsequent research using MacDonald and colleagues’ (2012) scale has identified numerous social and environmental factors impacting PYD in sport (e.g., Bruner, Eys, Wilson, & Côté, 2014; MacDonald, Côté, Eys, & Deakin, 2011).

**The developmental assets.** The 40 developmental assets are referred to as the building blocks of human development and are considered characteristics of programs that aim to facilitate PYD (Benson, 2006). These 40 developmental assets are evenly split into internal (i.e., positive identity, social competencies, positive values, and commitment to learning) and external (i.e., support, empowerment, boundaries and expectations, and constructive use of time) dimensions. Benson (2006) suggests that youth who possess more assets are more likely to thrive and less likely to engage in maladaptive risky behaviours. In a sport context, Strachan, Côté, and Deakin (2009) highlighted empowerment, support, and positive identity as three particularly salient assets for optimizing youth’s enjoyment and development in sport. In a study comparing the sport environments of small versus large communities, Fraser-Thomas, Côté, and MacDonald (2010) found that smaller communities may offer more psychosocially supportive environments due to higher perceptions of support, boundaries and expectations, and commitment to learning. These studies highlight the potential usefulness of the developmental assets in identifying specific attributes of sport programs that effectively promote PYD.

**Life skills.** While the previous two frameworks describe developmental experiences and program characteristics which facilitate PYD, the life skills approach instead focuses on explicitly teaching youth skills through sport-based programming that can be transferred to other life domains. Life skills are physical, behavioural, or cognitive skills required to deal with everyday demands and challenges (Hodge & Danish, 1999). Many sport-based life skills
programs exist, and one widely researched example is the First Tee (e.g., Weiss, Bolter, & Kipp, 2016; Weiss, Stuntz, Bhalla, Bolter, & Price, 2013), which uses golf as a context for teaching life skills and enhancing core values. Central to the life skills approach to PYD is the contention that life skills (and their transfer to other domains) must be explicitly taught by trained adults (Turnnidge et al., 2014). The long-term sustainability of this explicit approach to teaching life skills and PYD has been called into question given the additional time, resources, and training that is often required in the implementation of these programs (Turnnidge et al., 2014). The resources needed for these specialty sport programs may potentially overlook underserved populations who would benefit the most from the enriching experiences afforded by sport participation.

**The Cs.** While it is clear that PYD and life skills can be studied using several different frameworks, the 5 Cs (Lerner et al., 2005) may be one of the most popular and widely adopted. Rather than focusing on characteristics of programs or environments, the 5 Cs framework instead describes PYD as youth’s development in five key areas (competence, confidence, connection, caring/compassion, and character) through participation in extracurricular activities (e.g., organized sport). The ultimate long-term outcome of this process is the notion of contribution, whereby developing adolescents eventually become thriving, contributing members of society and give back to themselves, their family, and their community (Lerner, 2004). Thus, this conceptualization of PYD is marked by both proximal (i.e., the 5 Cs) and distal (i.e., contribution) outcomes.

In reviewing the 5 Cs in a youth sport context, Côté and colleagues (2010) proposed a collapsed 4 Cs framework in response to the integration of caring/compassion within the sport literature on character. This sport-specific conceptualization of the Cs highlights that PYD
frameworks developed in other contexts may not be entirely appropriate for use in sport without subsequent adaptation and testing (Jones et al., 2011). Using this collapsed 4 Cs framework, Côté and Gilbert (2009) posited that these four constructs represent desirable athlete outcomes of sport participation which include indicators of both performance (i.e., competence) and psychosocial development (i.e. confidence, connection, and character). For brief definitions of each of these constructs, refer to Table 2-1.

Table 2-1. Sport-specific definitions of the 4 Cs (adapted from Côté et al., 2010; Vierimaa et al., 2012).

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>A positive view of one’s ability or actions in sport, which can be understood in terms of technical, tactical, and physical skills.</td>
</tr>
<tr>
<td>Confidence</td>
<td>The degree of certainty individuals possess regarding their ability to be successful in sport.</td>
</tr>
<tr>
<td>Connection</td>
<td>Positive relational bonds with the social actors and institutions in a particular sport context. Most commonly, connection can be understood in terms of athletes’ relationships with their coaches (e.g., coach-athlete relationship quality) or teammates (e.g., friendship, team cohesion).</td>
</tr>
<tr>
<td>Character</td>
<td>Respect for rules and others, engaging in socially-appropriate behaviours, and a sense of morality (i.e., right and wrong).</td>
</tr>
</tbody>
</table>

In order to develop an approach to measure the 4 Cs in a youth sport context, Vierimaa and colleagues (2012) reviewed the sport literature for existing instruments and measurement techniques that were related to each individual construct that make up the 4 Cs. As a result, a measurement toolkit was proposed that is made up of existing instruments and techniques that have been previously used in youth sport research. Even though the validity of the individual instruments has been tested through previous research, the toolkit as a whole has only recently
been applied in sport research (Allan & Côté, 2016; Erickson & Côté, 2016b). Thus, the 4 Cs toolkit proposed by Vierimaa and colleagues (2012) should be viewed as an evolving method used to measure changes in athlete development over time.

**A Personal Assets Approach to Youth Sport**

While sport is often regarded as an activity that has the potential to foster PYD, the process through which development occurs through sport participation is not well understood (Côté et al., 2016). As a result, Côté and colleagues (2014; 2016) have proposed a model called the Personal Assets Framework (PAF) for Sport (Figure 2-1), which describes the dynamic elements that help explain changes in PYD outcomes over time. The PAF suggests that the interaction of three dynamic elements: 1) personal engagement in activities, 2) appropriate settings, and 3) quality social relationships affect growth in the 4 Cs and ultimately influence the long-term outcomes of performance, participation, and personal development. The following sections will describe each main component of the PAF (Figure 2-1) in greater detail.

![Figure 2-1. The Personal Assets Framework for Sport (Côté et al., 2016).](image-url)
Personal engagement in activities. Côté and colleagues (2014; 2016) suggest that youth’s engagement in sport activities acts as a proximal process to promote the development of the 4 Cs. This personal engagement is more likely to occur when youth participate in a diverse range of developmentally appropriate activities. Diverse sport experiences among youth emphasize creativity and exploration, and are associated with long-term sport participation and personal development (Busseri, Rose-Krasnor, Willoughby, & Chalmers, 2006; Fredricks & Eccles, 2006).

Côté, Erickson, and Abernethy (2013) developed a taxonomy based on the youth sport literature to help categorize sport activities along a general continuum ranging from practice to play. Activities at the practice end of the continuum are highly structured and are designed to improve athletes’ performance, while play activities are intended to be simply fun and enjoyable. Côté and colleagues (2013) highlight that these varied activities fulfill unique needs in youth, and as such it is emphasized that diverse youth sport experiences should provide the optimal conditions for positive sport experiences and development (Côté & Abernethy, 2012). At the intersection of Côté and colleagues’ (2013) taxonomy lies organized competition and games. This prototype activity is unique in that it exemplifies characteristics of both play and practice, and it is through participation in this activity that youth are able to apply the skills that they have learned in other learning environments (Vierimaa, Erickson, & Côté, 2016). Organized competitions and games are directly supervised by coaches and have an underlying focus on performance, but retain an element of creativity and spontaneity as athletes are able to integrate skills learned from play activities.
Organized games in recreational sport settings are a particularly unique situation as there is a lessened focus on winning and performance, so athletes may be even more likely to exert their creativity without the undue pressure to perform or win. Since recreational activities are focused more on promoting fun and enjoyment through competitive games that have little consequences on the future status of the individuals or the team participating, it provides a unique sport context for the development of the 4 Cs. However, while recreational athletes have previously been studied in combination with athletes from competitive contexts (e.g., MacDonald et al., 2012; Turnnidge, Vierimaa, & Côté, 2012), little is known about athletes’ unique PYD experiences in recreational sport that focus mainly on play and games. The majority of the extant sport research on PYD has focused on competitive sport contexts that emphasize the long-term development and performance of athletes in training. Further research is needed to investigate PYD in recreational sport contexts that focus on the immediate enjoyment of sport during games and play (Holt & Jones, 2008).

**Appropriate settings.** In order to optimize PYD through sport participation, it is important to ensure that the physical setting of the sport activity is developmentally appropriate (Côté et al., 2014). One aspect of sport settings which may be particularly important to PYD is the structure of competition. All sport participants strive to win, as winning and competition are fundamental elements in all sport settings, regardless of sport or level; however, it can either lead to social destruction or positive personal development, depending on how it is envisioned and implemented (Shields & Bredemeier, 2009). When winning is not the exclusive aim of the participant, competition can be mutually enjoyable and helpful in improving sport skills and fulfilling one’s need for challenge and excitement (Shields & Bredemeier, 1995).
Shields and Bredemeier (2009) further suggest that two separate types of competition exist that help to delineate its positive and negative aspects. First, “true” competition is based on a shared understanding of the striving for excellence, which serves the mutual interest of all participants. In this case, athletes still strive to win the game or race, and defeating an opponent is considered an internal goal of the game; however, the meta-goal of competitive sport contests is striving for excellence (Shields & Bredemeier, 2010). In fact, Shields and Bredemeier (2009) view competition as a special oppositional form of cooperation between opponents where each pushes the other as they together strive toward personal excellence. On the other hand, decompetition occurs when athletes seek to demonstrate their superiority over opponents, and thus it only serves the interests of winners as enjoyment is gleaned through extrinsic rewards. Decompetitors view competition as a war, and opponents as enemies to be defeated, rather than respected partners in the pursuit of excellence. These opposing views on competition align closely with motivational climate, which reflects an individual’s perceptions of the sport setting and can be operationalized as either task or ego-oriented (Ames, 1992). A task-oriented motivational climate encourages mastery, effort, and self-referenced improvement, which is similar to the notion of “true” competition. On the other hand, an ego-oriented motivational climate emphasizes interpersonal competition and other-referenced improvement, which shares similarities with decompetition. These constructs have been widely studied in sport, and overall, task and ego-oriented motivational climates are associated with positive and negative athlete outcomes, respectively (Duda & Balaguer, 2007).

This perspective on competition and decompetition is also critical in consideration of recreational sport settings and PYD. Recreational settings are more likely to be representative of “true” competition rather than decompetition because defeating the opponent is not the primary
outcome and does not improve the long-term sport status of the participants in the context (Shields & Bredemeier, 1995). Further, since appropriately structured youth sport, characterized by “true” competition, is viewed as a fertile context for character development (one of the 4 Cs; Shields & Bredemeier, 1995), it may also help to facilitate other PYD outcomes as well. Thus, future research should examine how recreational sport settings that foster “true” competition by not focusing on standings relative to others, or the long-term consequences of winning can facilitate PYD (i.e., the 4 Cs) in young athletes.

In addition to the structure of competition, the sport setting can also be understood in terms of the way in which it aligns with the National Research Council and Institute of Medicine’s (NRCIM, 2002) setting features, which are a set of contextual features that should be present in programs that aim to facilitate PYD. Specifically, four of the features are related to the physical environment or setting: 1) physical and psychological safety, 2) appropriate structure, 3) opportunity for skill building, and 4) integration of family, school, and community efforts (Côté et al., 2016). Previous research has developed sport-specific examples of these setting features (Côté, Strachan, & Fraser-Thomas, 2008) and has explored their presence within elite youth sport contexts (Strachan, Côté, & Deakin, 2011). Overall, the setting features provide a useful framework through which to evaluate the structure of youth sport development programs.

While it is clearly important to investigate the structural characteristics of youth sport settings, it may also be advantageous to understand the cultural values which underlie these contextual factors. Stemming from a holistic ecological perspective on athlete development, Henriksen and colleagues (2010a; 2010b; 2011) conducted a series of case studies that explored the role of environmental factors in the success of various high performance sport organizations. In this work, environmental factors were examined at both the micro (e.g., training setting) and
macro (e.g., influence of sporting bodies) levels. A prominent element of the micro-environment that emerged from Henriksen and colleagues’ research was the culture of the sport organizations. In fact, Henriksen and colleagues (2010a) developed the environmental success factors model, which describes organizational culture as a key element in the effectiveness of a sport environment. To this end, Henriksen and colleagues drew upon Schein’s (1990; 2010) work, who defined organizational culture as:

A pattern of basic assumptions, invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore is to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 1990; p. 111).

In line with this definition, Schein (1990; 2010) posits that culture can be understood at three levels which vary in the degree to which they are visible to outsiders. At the most superficial level are artifacts, which are readily observable phenomena that you can see, hear, and feel. While artifacts are easily observed, they are difficult to decipher without a deeper understanding of the cultural aspects that guide these observable manifestations. The next level is espoused values and beliefs, which may include an organization’s ideology or mission statement. These values and beliefs are often (but not always) congruent with a culture’s artifacts. For example, an elite sport team may have a mission statement which values teamwork and camaraderie, but in response to poor performance, the team’s social dynamic may be rife with dissent and conflict. Over time, certain values and beliefs undergo a transformation where they become unconscious assumptions, bolstered by the group’s social experiences. For example, if the elite sport team enjoys continued success, they may over time internalize the shared belief in
the importance of team work and camaraderie to their success. This is an example of the third
and final level of Schein’s model of organizational culture: basic underlying assumptions. These
assumptions are beliefs or values which have become internalized by all members of an
organization to the extent that they may be taken for granted and are largely unconscious.

The organizational culture of sport organizations has previously been studied by other
researchers; however, much of this work has focused on high performance sport settings (e.g.,
Pink et al., 2014), and has adopted an etic perspective whereby the culture of the sport
organization is studied by external observers (Maitland, Hills, & Rhind, 2015). Given the
inherent difficulty of interpreting the deeper levels of culture (i.e., values and beliefs and basic
underlying assumptions), Maitland and colleagues (2015) advocated that further research in this
area should utilize emic methods such as case studies (e.g., Henriksen et al., 2010a; 2010b; 2011;
Pink et al., 2014) and ethnography. Henriksen and colleagues (2010a; 2010b; 2011) note that
each sport environment is unique, and as such, researchers should move beyond high
performance sport and investigate the culture of organizations from other sport contexts.

**Quality relationships.** The final dynamic element that helps to explain changes in PYD
outcomes is quality social relationships. In consideration of the previous two elements, it appears
that all three should be present for PYD to occur. Young athletes may be engaged in a
developmentally appropriate activity that is structured in a conducive manner, but PYD is
unlikely to occur unless these athletes engage in positive, meaningful relationships with the other
individuals in their environment. In particular, it appears that athletes’ relationships with
coaches, parents, and peers all have vital implications on their experiences and development
through sport (e.g., Keegan, Harwood, Spray, & Lavallee, 2009; Turnnidge et al., 2012). For
example, it has been widely shown that coaches’ interpersonal styles can have a major influence
on coach-athlete relationships, and ultimately, athletes’ performance, participation and personal
development in sport (e.g., Vella, Oades, & Crowe, 2011). Parents also play a pivotal role as
they are largely responsible for children’s initial socialization into sport (Wuerth, Lee, &
Alfermann, 2004), and their involvement in sport can serve as either support or pressure in their
children’s athletic development (e.g., Dorsch, Smith, & Dotterrer, 2016). As young athletes
progress through their development, peers become increasingly important as friendships in sport
can augment enjoyment and commitment (e.g., Weiss & Smith, 2002), while peer interactions
can also help to facilitate the development of social skills (e.g., Holt, Tamminen, Tink, & Black,
2009). Overall, it is apparent that the quality of the relationships formed in sport are tantamount
to youth’s overall experiences and development.

**Personal assets: The 4 Cs.** The PAF contends that when each of the three dynamic
elements are structured appropriately, youth’s participation in the resultant sport context should
lead to growth in the 4 Cs (Table 2-1), which are viewed as desirable outcomes of youth sport
participation (Côté & Gilbert, 2009). Interestingly, research has begun to examine athletes’
perceptions of the 4 Cs in relation to observed behaviour. Two recent studies have investigated
the link between these PYD outcomes and observed coach behaviour using systematic
observation. Allan and Côté (2016) studied the relation between the emotional tone of coaches’
behaviour and athletes’ perceptions of the 4 Cs. The results of their study found that athletes of
goaches who were calm and inquisitive reported more prosocial behaviour and less antisocial
behaviour toward opponents than athletes of coaches who conveyed a more negative and intense
emotional tone. Erickson and Côté (2016b) adopted a longitudinal approach in their investigation
of the intervention tone of coaches’ behaviour in relation to athletes’ developmental trajectories
over the course of a season. Interestingly, Erickson and Côté found that coaches used more sport
specific interaction with athletes who scored the lowest on the 4 Cs and more non-sport specific interactions with athletes who scored higher on the 4 Cs. These studies provide critical insight into the important role of coaches’ on PYD in sport. However, we also know that youth sport experiences and development are shaped by the differential effects of multiple social agents (e.g., Keegan et al., 2009), rather than the coach alone. Thus, there is a need to better understand how the full spectrum of athletes’ social interactions are linked with PYD outcomes.

The research on observed athlete behaviour, specifically, is scant in comparison to the sizeable number of studies on coaches. However, there exists great potential in applying systematic observation to the study of athlete behaviour in youth sport (Murphy-Mills et al., 2011). Several studies have examined observed athlete behaviour in relation to performance outcomes (e.g., Lausic, Tenenbaum, Eccles, Jeong, & Johnson, 2009; Lecouteur & Feo, 2011), while others have recently begun to explore how observed athlete behaviour is associated with PYD outcomes in different sport contexts. In their study on social status (i.e., connection) and athlete behaviour among competitive adolescent volleyball players, Vierimaa and Côté (2016) found that lower status athletes less frequently engaged in interactions with their teammates and coaches than their higher status peers. Erickson and Côté (2016a) studied interpersonal interactions in an informal sport play setting and found that athletes with greater perceptions of competence tended to take on a leadership role and spent more time engaged with their peers in organizational behaviours. Overall, these two studies highlight the utility of using systematic observation to uncover the behavioural manifestation of PYD in sport. However, one must also remember that social interactions are constrained by the nature of the sport activity and environment in which they take place. Erickson and Côté (2016a) focused on peer interactions exclusively due to the nature of informal sport play, while Vierimaa and Côté (2016) examined
athletes’ interactions with both coaches and peers during highly structured competitive volleyball training sessions. Organized competition represents an important middle ground between these two contexts, as it is organized and includes the presence of many key social agents (e.g., coaches, teammates, opponents), but it can be more unpredictable than training sessions, and thus researchers may be more likely to observe salient social interactions that unfold in the heat of the moment that may not otherwise occur during training. Observing athlete behaviour in this critical environment would yield insight regarding the specific behavioural characteristics of PYD outcomes that occur during recreational sport games.

**Long-term outcomes: The 3 Ps.** Whereas the 4 Cs can be viewed as short-term outcomes, or personal assets, where young athletes can exhibit growth and development over a relatively short period of time (e.g., one season), the 3 Ps (i.e., performance, participation, and personal development; Côté, Strachan, & Fraser-Thomas, 2008) in contrast are conceptualized as long-term outcomes or objectives of sport involvement across the lifespan. Performance refers to the learning of critical motor skills which provide the necessary foundation for sport participation across all contexts ranging from recreational to elite levels. Participation in organized sport and leading a physically active lifestyle is associated with many physical health benefits. Finally, personal development refers back to the notion of PYD. Personal development in this case refers to the notion of contribution, where youth develop into thriving, contributing members of civic society (Lerner, 2004). Despite the prominence of the 4 Cs in sport research, contribution has received very little attention by sport researchers. One recent study explored university student-athletes’ motivations to contribute, and found that their motivations were characterized by a complex constellation of factors, which generally satisfied their personal needs for competence, autonomy and relatedness (Deal & Camiré, 2016). The study of
contribution in sport remains a fertile area, as many questions remain regarding the frequency, nature, and reasons underpinning individuals’ desire to give back.

The PAF (Figure 2-1) provides a dynamic structure that identifies the variables in sport that constitute development and the process by which personal assets such as the 4 Cs and other outcomes are acquired. This framework serves to highlight the dynamic elements and personal assets that should be combined and aligned to design and deliver youth sport programs that promote performance, participation, and personal development.

**Overview of Program of Research**

Broadly, this program of research aimed to develop an in-depth understanding of a successful, sustainable community youth basketball league that has, over 60 years, provided accessible, affordable sport programming aimed at facilitating positive sport experiences, basic basketball skills, and community engagement. Specifically, we considered this league successful in that it is widely regarded in the local community as effective in facilitating long-term participation. For example, the basketball league is extremely popular among local youth who are returning every year to play and is known for having former players return to the league later in life as volunteers. Another public indicator of success that characterizes this program is the civic engagement of its members. In fact, volunteers in this program have received numerous awards including an honorary degree from a post-secondary institution and a nomination for the Order of Canada. We considered the league to be sustainable in that it has been in existence for 60 years, over which time it has continually grown, but has been consistently been run entirely by volunteers, charging only a nominal registration fee.

We intended to understand *why* and *how* the basketball league is successful in creating, sustaining, and enriching a positive youth sport environment. In other words, we aimed to
provide a detailed description of the structure and processes through which the basketball league facilitates PYD. Studies 1 and 2 together provide a rich, thick description of the sport context, while Study 3 explores how athletes’ behaviour during basketball games is related to their perceptions of PYD outcomes.

As a whole, this research program can be conceptualized as a case study, because the league is unique in nature and worthy of in-depth description and exploration (Yin, 2009). Petitpas and colleagues (2005) have advocated for case studies of sport programs in order to illuminate their specific strengths and weaknesses through the triangulation of multiple sources of data. Specifically, we employed paradigmatic case selection (Flyvbjerg, 2006) in that the basketball league was selected on the basis that it appeared to be representative of a successful, enriching youth sport environment. Of course, this decision was based on the league’s public reputation and the research team’s initial perceptions, and would subsequently be confirmed or refuted through the results of the program of research. Case selection was also partly opportunistic in nature as the president and executive board of the basketball league were eager and open to participate in the research project.

**Study 1. Just for the fun of it: Coaches’ perceptions of an exemplary community youth sport program.** The first study of the dissertation is meant to provide a general overview of the sport context from the perspective of current coaches. Coaches from the basketball league were interviewed and asked to describe the structure and perceived benefits that athletes glean from their involvement. Results were analyzed using the PAF (Côté et al., 2014; 2016) as a guiding framework, and ultimately provided an outline which was expanded upon and tested in subsequent studies.
**Study 2.** *The organizational culture of a community youth sport program.* The second study of the dissertation built upon specific themes which were identified in Study 1; specifically, how the culture of the league (i.e., the “setting” dynamic element from the PAF) facilitates a sense of contribution (i.e., long-term personal development) among its members. This study drew upon Schein’s (1990; 2010) work on organizational culture and employed an ethnographic approach, which allowed the first author to develop a detailed, first-hand account of the culture of the basketball league.

**Study 3.** *Positive youth development and observed athlete behaviour in recreational sport.* The third study of the dissertation employed a quantitative approach to measure PYD outcomes (i.e., the 4 Cs) among a sample of athletes from the basketball league, and explored the relationship between athletes’ perceptions of the 4 Cs and their observed behaviour during basketball games. In effect, athletes’ behaviour in this context can be viewed as the manifestation of all three dynamic elements from the PAF, as it is influenced by the nature of the sport activities (i.e., the basketball games), the broader sport setting (e.g., the league culture), and athletes’ social relationships with their coaches and teammates.
Chapter 3

Just for the fun of it: Coaches’ perceptions of an exemplary community youth sport program
Abstract

The purpose of this study was to explore coaches’ perceptions of an exemplary community youth basketball league. Data were collected via semi-structured interviews with 12 volunteer coaches, 6 of whom previously played in the league in their youth. Identified themes related to immediate (e.g., enjoyment), short-term (e.g., confidence), and long-term developmental outcomes (e.g., contribution), as well as social and contextual processes (e.g., social relationships) underpinning these outcomes. Overall, this study emphasizes the importance of ensuring that youth have positive immediate experiences in sport and that accumulated positive experiences result, over time, in lasting effects on athletes’ development.

Keywords: coaching, life skills, positive youth development, youth sport
Introduction

Positive youth development (PYD) is an asset-building perspective on adolescence that suggests that all youth have personal strengths that can be developed (Lerner et al. 2005). One method of facilitating the development of these strengths is through participation in organized, out-of-school activities (e.g., sport). Rooted in relational developmental systems theory (Lerner, 2004a), PYD occurs through mutually influential interactions between individuals and their environment. Thus, it is important to consider the nature of the activities in which youth participate to better understand their potential contribution to PYD.

Even though PYD research has predominantly focused on extra-curricular activities such as after-school clubs (e.g., Lerner et al. 2005), organized sport is also considered a salient social context in which to promote PYD (Fraser-Thomas, Côté, and Deakin 2005). Organized sport may be particularly well-suited to nurturing PYD because it requires high amounts of effort and concentration and occurs regularly over time, while remaining inherently enjoyable (Larson 2000). Furthermore, developmental scientists have generally combined all types of sport participation into a single category (e.g., Zarrett et al. 2009) without considering the various contexts of different youth sport programs, a strategy that fails to reflect the myriad of differences in youth sport programming. Researchers should continue to study the organized sport context in greater detail to examine other salient factors which may influence PYD (Agans and Geldhof 2012).

Researchers in youth sport have, however, begun to examine how different types of youth sport programs affect PYD, including high school sport (e.g., Camiré, Trudel, and Forneris 2009), developmental community sport (e.g., Fraser-Thomas and Côté 2009), as well as sport camp settings (e.g., Jones et al. 2011; McDonough et al. 2013). Overall, this body of literature
supports the view that different youth sport settings are fertile contexts for promoting PYD (Holt and Neely 2011). Although recent studies have examined physical activity-based PYD camps which de-emphasize competition (e.g., McDonough et al. 2013), previous studies have generally investigated developmental or performance-oriented youth sport programs. Consequently, there remains a need to consider comparatively understudied recreational community sport programs (Holt and Jones 2008).

One of the hallmark features of recreational sport is its emphasis on social interaction (Trudel and Gilbert 2006). Because the recreational sport context is less rigidly focused on sport-specific outcomes, there may be more opportunities for interaction with peers, which is important because peers are viewed as increasingly salient social agents and a primary source of competence information and social support in adolescence (Horn, 2004). Further, positive peer relationships (e.g., friendships) have been shown to be beneficial in terms of both sport participation and personal development (MacDonald et al. 2011). Indeed, opportunities for interaction with peers can help to facilitate the development of many personal and social skills (Holt et al. 2008; MacDonald et al. 2011).

There is a need to study how sport programs can be structured to facilitate participation and PYD among youth from disadvantaged backgrounds, as they are most commonly excluded from sport participation (Collins and Kay 2014). It has been suggested that environmental, intrapersonal, and interpersonal factors should all be considered in any effort to promote sport participation among disadvantaged youth (Humbert et al. 2006). School-based sport programs represent fertile contexts for PYD among disadvantaged youth due to their low cost and safe environment (Holt et al. 2012). Interestingly, Holt and colleagues (2012) found fewer developmental benefits in intramural sports compared to sport teams, citing the importance of
structuring a sport environment specifically focused on PYD. PYD-based sport and physical activity programs have indeed been shown to be effective in promoting a wide range of PYD outcomes among disadvantaged youth (e.g., Gould, Flett, and Lauer 2012; McDonough et al. 2013). Although explicitly PYD-focused programs appear to be valuable, there remains a need to identify every day community sport programs whose aims implicitly align with PYD, as they may be more sustainable in the long-term (Turnnidge, Côté, and Hancock 2014). Thus, the purpose of this qualitative descriptive study was to explore coaches’ perceptions of a community youth sport program. Specifically, this study describes how the league is structured, perceived developmental changes among athletes, and the mechanisms through which these changes may occur over time.

**Method**

**Participants**

Institutional ethical approval and participant consent was obtained before beginning data collection. All participants were members of the same basketball league from a midsized city in Ontario, Canada, which was purposefully sampled because of its local popularity and national reputation as a league which typifies many PYD principles. This league has been in existence for over 60 years and is home to almost 500 boys and girls aged 8-14. The league’s mandate is to provide an opportunity to learn basic basketball skills, sportsmanship, and above all else, have fun. The league adopts a holistic approach to athlete development by emphasizing physical, social, and emotional development. For instance, policies stipulate that all players should receive equal playing time. In addition, the league is accessible to a wide range of youth as it is located in a lower income neighbourhood, and charges only a 10-dollar registration fee. Consequently, there is considerable variability in players’ ability levels, as many are completely new to the
sport while others concurrently participate in other club leagues. Boys and girls play in separate divisions, with each team comprised of up to 12 players who are up to three years apart. All teams play one weekly 45 minute game, but standings are not kept and there are no playoffs at the end of the six month season. In these ways, the league can be differentiated from traditional developmental sport programs, which usually have some selection process, and greater costs, travel, and practice time (Trudel and Gilbert 2006). Although there are no practices outside of the weekly games, coaches are expected to facilitate a positive environment and teach fundamental skills and fair play. In addition, coaches are encouraged (but are not required) to arrive early to their own games and to help out in other capacities including officiating and scorekeeping during other league games. The league also has a strong history of past players who are motivated to volunteer with the league as adults (e.g., coaching), and some of whom have since received accolades at the municipal, provincial, and national levels for their service to the community.

Participants were 12 coaches ($n = 6$ male; $n = 6$ female) aged 16-59 ($M = 39.5$ years) with an average of 10.1 years of coaching experience. The participants were sampled from various divisions (both age and gender) of the basketball league to ensure a diverse, yet representative sample. Six of the sampled coaches had previously played in the league as athletes, while five also coached their own children in the league at the time of the interviews.

**Procedure**

Semi-structured interviews were conducted in a location of the participants’ choosing. Participants chose to complete the interviews either in a classroom of the school which hosted the basketball league, or a public coffee shop. All of the interviews were conducted by a team of two researchers who completed comprehensive training in qualitative research prior to the study,
which included pilot interviews with coaches uninvolved in the study. The two interviewers attended weekly games leading up to the data collection to familiarize themselves with the league and to gain rapport with the coaches. Both researchers were present for all interviews, with one interviewer conducting the interview, while the other took detailed notes.

At the beginning of each interview, participants were explained the study rationale and were assured of confidentiality. The interviewers followed a guide which included background, behaviour, opinion, and knowledge questions (Patton 2002). Interviews began with introductory background questions related to demographics, as well as coaching background and philosophy. These questions aimed to enhance rapport and helped to contextualize participants’ responses. The main component of the interview focused on the coaches’ perceptions of the league; specifically, how the league is run (i.e., knowledge questions), what outcomes they believe athletes glean from their participation (i.e., opinion questions), and potential processes through which these outcomes are realized (i.e., behaviour questions). Sample questions include “Please describe what a typical game is like for you”, and “If I was a new player or coach thinking about joining the league, what would you tell me about it?” The researchers used probing questions throughout the interviews to ensure rich, detailed responses (Patton 2002).

Data analysis

All interviews were transcribed verbatim and were analyzed using thematic analysis (Braun and Clarke 2006). Interviews lasted approximately 45 minutes, which yielded a total of 260 pages of transcripts. The first step in the analysis involved systematically reviewing the transcripts and assigning initial codes to meaningful units of data. This stage was inductive in that codes were assigned to reflect the essence of the units of data. The second step involved organizing these initial codes into groups which shared common themes. Afterward, all of the
co-authors met to review and revise this set of initial themes. The authors used both inductive and deductive analysis while reviewing the themes and attempting to create a thematic map, as they considered the findings in light of extant conceptual and theoretical frameworks used to study PYD in sport (e.g., Côté, Turnnidge, and Vierimaa 2016; Lerner et al. 2005). It was determined that the Personal Assets Framework for Sport (Côté, Turnnidge, and Vierimaa 2016) provided an appropriate framework in which to organize the themes because it was flexible and comprehensive, including an array of both PYD outcomes and contextual factors which may underlie developmental changes. Thus, the data was considered and organized in light of the Personal Assets Framework, while the authors remained sensitive to themes that could not be clearly situated within this framework. The resultant thematic map was continually refined by all members of the research team until agreement was reached. The final stage involved defining and naming the themes. Throughout this process, minor refinements to the themes occurred, until clear and concise definitions were identified and agreed upon by the research team.

**Reflexivity and Trustworthiness**

The authors were all active researchers in sport psychology and youth development, and as such shared a general view of youth-driven sport as a potentially positive and valuable developmental activity. The research team purposefully sampled this basketball league because it had a public reputation as a sport program which aligned with much of the literature on youth development in sport. Specifically, this was the first of three studies that the first author conducted with this particular basketball league. Acknowledging the potential influence of these assumptions and biases, the research team employed multiple strategies to ensure methodological rigor and trustworthiness (Sparkes and Smith 2014). Prolonged engagement was used as the researchers attended weekly league games throughout the season, allowing them to gain rapport
with the participants, while also immersing themselves in the league so that they could ask more effective probing questions during the interviews. In addition, member checks were used, whereby the interview transcripts were returned to the participants to review for accuracy, at which point they were also encouraged to expand or clarify on any of their responses. Finally, analyst triangulation was employed as the primary researcher initially coded the data and met with the research team throughout the analysis to ensure that all authors were in agreement regarding the interpretation of the data and the resultant themes.

**Results**

The themes identified from the data were situated within the Personal Assets Framework for Sport (Figure 3-1; adapted from Côté, Turnnidge, and Vierimaa 2016) and are summarized in Table 3-1. The following sections outline each of these areas in greater detail and provide selected quotes to further illuminate and enhance the clarity of the results.

![Figure 3-1](image-url)  
Figure 3-1. Themes integrated with the Personal Assets Framework for Sport (adapted from Côté et al., 2016).
Table 3-1. Overview and description of identified themes.

<table>
<thead>
<tr>
<th>Component</th>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Opportunity to play</td>
<td>Single practice at beginning of season; focus on play through weekly games</td>
</tr>
<tr>
<td></td>
<td>Experiential learning</td>
<td>Athletes develop sport skills through playing rather than explicit instruction</td>
</tr>
<tr>
<td></td>
<td>Youth-driven</td>
<td>Coaches and referees enforce rules and teach basic skills, but athletes are given autonomy to be creative and dictate the play</td>
</tr>
<tr>
<td>Social relationships</td>
<td>Coaches</td>
<td>Opportunities to foster close and supportive relationships with coaches</td>
</tr>
<tr>
<td></td>
<td>Peers</td>
<td>Peer acceptance, new friendships, cooperation, and teamwork</td>
</tr>
<tr>
<td></td>
<td>Family</td>
<td>Participatory tradition within families; many parents coach own children</td>
</tr>
<tr>
<td>Sport setting</td>
<td>True competition</td>
<td>Games are competitive, but no standings are kept, and no playoffs</td>
</tr>
<tr>
<td></td>
<td>Equal and fair play</td>
<td>Equal playing time regardless of game situation; re-balancing of teams mid-season to ensure even competition</td>
</tr>
<tr>
<td></td>
<td>Individualized recognition</td>
<td>Weekly player awards; all scorers published in local newspaper and online</td>
</tr>
<tr>
<td></td>
<td>Unique niche</td>
<td>Distinct yet complementary role to more competitive club basketball programs</td>
</tr>
<tr>
<td>Environmental setting</td>
<td>Affordable</td>
<td>Low cost provides opportunity to for wide range of youth</td>
</tr>
<tr>
<td></td>
<td>Accessible</td>
<td>Location is easily reached by local underserved youth</td>
</tr>
<tr>
<td></td>
<td>Inclusive</td>
<td>Diverse groups of athletes from wide range of demographics and abilities</td>
</tr>
<tr>
<td>Social setting</td>
<td>Community ties</td>
<td>Sense of community; connection with local organizations</td>
</tr>
<tr>
<td></td>
<td>Volunteering and commitment</td>
<td>League is entirely volunteer-based, a strong core of whom have been committed to the league for many years</td>
</tr>
<tr>
<td></td>
<td>Tradition and continuity</td>
<td>History of league and continuity over time cultivates sense of familiarity and family among past and present members</td>
</tr>
<tr>
<td>Immediate experiences</td>
<td>Fun/enjoyment</td>
<td>League slogan is “Just for the fun of it”. Coaches view fun and enjoyment as a real-time outcome that they can readily assess</td>
</tr>
<tr>
<td>Short-term outcomes</td>
<td>Competence</td>
<td>Development of basic basketball skills and knowledge</td>
</tr>
<tr>
<td></td>
<td>Confidence</td>
<td>Self-confidence in one’s abilities</td>
</tr>
<tr>
<td></td>
<td>Connection</td>
<td>New friendships, social skills, leadership, and teamwork</td>
</tr>
<tr>
<td></td>
<td>Character</td>
<td>Sportspersonship and respect for peers, coaches, and referees</td>
</tr>
<tr>
<td>Long-term outcomes</td>
<td>Contribution</td>
<td>Former athletes to give back to league through volunteering</td>
</tr>
<tr>
<td>-</td>
<td>Structural challenges</td>
<td>Limited opportunities for skill development and motivation</td>
</tr>
</tbody>
</table>
Coaches provided a great deal of detail in describing the nature of the sport activities that are played within the basketball league. Primarily, the league is described as an opportunity for youth to “simply play”. Aside from a single practice at the beginning of the season, there is a focus on letting youth learn through weekly organized games. There are no practices or drills, so youth develop sport skills through experiential learning. One coach exclaimed that he enjoyed these aspects of the league: “I like that there’s no practice, I’ll be honest, I like that you just go out and you play… that the kids learn through playing” (C11). These weekly organized games also seem to be largely youth-driven; coaches and referees enforce rules and teach basic basketball skills, but attempt to minimize the pressure placed upon the athletes.

**Social relationships**

The importance of close and supportive relationships between coaches and athletes appeared to be central to the league’s success. Coaches discussed taking advantage of opportunities to get to know their players as not only athletes, but people: “It is a chance to meet them…you meet them through the sport but you can reach into their lives a little bit too…We try and reach the kids beyond the game of basketball” (C06). In addition to coaches, peers also appear to be prominent social agents in the league. Specifically, the league is made up of a diverse group of athletes from different neighbourhoods, schools, and ability levels. However, the coaches help to foster a positive social environment with a high degree of peer acceptance, teamwork, and cooperation. The league also helps to bring diverse groups of peers together to form new friendships:

You have kids of parents who are very high end professionals and then you have kids who really can barely probably afford to pay the $10 to play… the diversity of the kids playing within the team is really pretty amazing because sitting on the bench again you
have this whole range of walks of life . . . what really brings them all together is the sport. I mean this kid doesn’t know that mom and dad are living below the poverty line, this kid doesn’t know mom and dad are physicians . . . and they don’t care, all they care about is that their putting on the same jersey and they’re going out and they’re playing a 45 minute game of basketball and high fiving each other. (C08)

The third and final relationship type is that of the family. Particularly, given the longstanding history of the league, a participatory tradition exists among many families in the league. It is common for multiple generations of family members to participate in the league in various roles; many current coaches were previously players in the past, while they now coach their own children in the league.

**Setting**

Coaches discussed a number of unique elements of the environment in which the league exists. In terms of the sport structure, it was highlighted that the league fosters an adaptive view of competition, whereby games themselves are competitive, but no long-term forms of competition (e.g., playoffs, standings) exist. All coaches also aim to treat the athletes equitably, as playing time is equalized for all athletes, regardless of ability level or game situation. In addition, the unique contributions of each athlete is recognized through weekly player awards for fair play, and games scores published in the local newspaper complete with a full list of scorers. This provides further opportunities for the league to create positive experiences for its athletes, beyond just winning as is described below:

I would say it’s 90% fun, maybe 10% winning because everybody loves to win and nobody likes to feel like they’ve lost, but if they lose I think kids still feel really good about the experience because there’s the player of the week that the kids experience, and
anybody that gets a basket in the game gets their name in the newspaper, there’s so many other positive experiences for the kids within, within the game beyond winning and losing. (C08)

The unique position of the league in relation to other competitive club organizations was also highlighted by numerous coaches. Rather than viewing the recreational focus of the league as a shortcoming in comparison to competitive clubs, coaches highlighted that it could instead be viewed as a unique strength. One coach succinctly described this notion from his own personal experiences as a player in the league:

It starts back from when I was a player, knowing that I could come here and know there was no pressure. I played competitive sports as well but it was just nice to come and not feel any pressure. Or you know, know that you’re not going to be pulled off your line because you’ve done something wrong. So I think that’s the big thing, I think that everybody deserves a chance, and here they get that chance. (C07)

One of the strengths of the league is that it is designed to be both accessible and affordable to a wide range of youth. There is only a nominal 10-dollar registration fee to take part in the league, which was recently doubled from five dollars. Throughout the league’s 60 year existence, it has been hosted (free of charge) at an elementary school located in a low income neighbourhood, in order to make the league as accessible as possible to local youth. Although the league originally targeted local underserved youth, its popularity now attracts a diverse group of athletes from across the city:

You are going to see a picture somewhere of a group of kids all with big smiles on their faces, and they are all going to be different ethnicities, different ages, different genders,
all in a group. And it is so very powerful. The strength of the program is that it is able to replicate that year after year. (C06)

The social structure of the league also extends beyond its inclusiveness and focuses on a strong sense of community. The league is able to continue operating with minimal registration fees because it is entirely volunteer-run. A strong and growing core of volunteers have been passionately involved with the league for decades, and cultivate a strong sense of community among everyone involved. One coach discussed how volunteers truly enjoy helping out:

You are not begging people to volunteer, you are getting volunteers that want to be there and they’re just staying . . . they’ll help out in whatever way I can . . . they are clearly doing it because they like it. They wouldn’t do it for 10 or 15 years if they didn’t like it. (C01)

In addition, the league has developed many beneficial ties with local businesses and organizations who donate money or resources which help to keep the league in operation.

Immediate sport experiences

Although not a part of Côté, Turnnidge and Vierimaa’s (2016) original framework, this section describes athletes’ real-time experiences or immediate outcomes of their sport participation. In contrast to the short and long-term outcomes discussed below, which may not be manifested for months or years, these sport experiences are readily observed and experienced in real time. At its core, the league is designed to provide opportunities for its players to have fun while learning basic basketball skills. This simple mandate was well described by one coach:

Kids are out there having a great time, they’re enjoying themselves, they really don’t necessarily follow their points on the scoreboard or the total points on the scoreboard at
the end of the game, they’ve just gone out, they’ve had a great time, they’re constantly asking can I go back in, can I go back in. (C09)

From the coaches’ perspectives, the simple act or process of playing basketball is what is most enjoyable for athletes, rather than the outcome of a given game.

**Short-term outcomes**

In comparison to the preceding section, short-term outcomes may be realized over a slightly longer period of time (e.g., one season). Competence was the most commonly referenced short-term outcome. All of the coaches discussed how the league intends to foster the development of basic fundamental basketball skills among all athletes. In addition, coaches mentioned that athletes acquire an overall sense of self-confidence in their abilities, both on and off the basketball court. One coach discussed how building competence and confidence can lead to sport opportunities in other contexts: “They need to learn how to make a lay-up, but they have also gained confidence to maybe now go and try out for their elementary [school] team” (C07).

The diverse group of athletes in the league also appears to be conducive to fostering the development of lasting, enriching relationships among teammates. These relationships even seem to transcend the boundaries of the league, as described by one coach:

Now they all know each other when they are playing in high school, there is a face on them and you know who they are. There is a more positive relationship that you have with your opponent . . . they will have that positive interaction of when they used to play together. (C03)

Coaches also try to develop social and leadership skills among their athletes, as exemplified by a coach’s description of the growth of a particular player: “She’s more vocal, she’ll tell the girls on the court ‘be here, do this’ and you can see it, she’s grown up through the
league” (C02). Coaches also discussed how learning to work as part of a team was one of the most important skills that athletes develop, which they can then apply to other aspects of their lives.

The league also appears to instil positive values and preaches sportspersonship in its young athletes. The absence of standings or playoffs aids in coaches’ downplaying of the outcomes of individual games, regardless of whether they are wins or losses. Coaches discussed the importance of respect, respect for the game, each other, coaches, as well as officials. These positive values are imparted through role modelling by coaches and other strategies. For example: “I would designate two players each game, at the end of every game they had to go shake hands with the referee and say thank you” (C07). The coaches staunchly believed that these character values were important to impart within this particular sport context since it is many athletes’ first exposure to organized sport. By providing athletes with a solid base of skills and values, they are better equipped for successful long-term participation in basketball and sport as a whole.

**Long-term outcomes**

Given that this league represents many young athletes’ first and only opportunity to participate in an organized team sport, coaches expressed how it is crucial to nurture athletes’ love for the game, and provide youth with a foundational skill-set for a life time of participation in sport and physical activity. All of the coaches mentioned one over-arching, long-term outcome of participation in the league: Contribution. This notion signifies an internal desire for athletes to give back to their league and the broader community. Players are encouraged to volunteer with the league, and it is common for them to begin coaching once they are too old to play themselves, which is even evident in the present sample since half of the coaches interviewed
previously played in the league as athletes. Since athletes often have a positive experience in the league as players, they want to ensure that future generations have similar opportunities: “I think that is a really important part of it, to give back to them as they gave to you, because the league gave me so much as a young player” (C12). This pervasive selflessness has helped to ensure that there will always be many volunteers to help keep the league running for years to come.

Although there is a strong culture of giving back to the league, coaches also mentioned that this has also lead to them volunteering with other community organizations: “I wouldn’t have gotten involved in United Way if I hadn’t had this as a base. That’s what this league has instilled in me, if there’s an opportunity to give back to the league, I’ll do it” (C05).

**Structural challenges**

Although coaches generally had overwhelmingly positive perceptions of the league, they did identify a number of challenges. All of the coaches acknowledged and agreed with the league’s emphasis on fun, but several coaches also discussed how an overriding focus on fun may come at the expense of athletes’ skill development and motivation. One coach discussed the potential benefits of competition: “A lot of kids are also motivated by competition and that is a good way to help develop skills as well. I think it’s adding up like, a little bit of competition helps. Like, obviously, a balance . . . healthy competition” (C12). Since each team has only a single practice session at the beginning of the season, coaches identified that this affords limited opportunities for instruction and strategizing. This limited contact time with the athletes forces coaches to optimize their interactions with their players, in order to build strong coach-athlete relationships and effectively influence their team’s development. However, overall coaches agreed that while the league may not be perfect, it presented local youth with a tremendously positive sport opportunity, which is well summarized by the following quote:
There are probably as many people who will trash the league. Parents will trash it because it’s not competitive enough, because it is not intense enough, or there isn’t enough instruction. I also think that people who, if they really stopped to think about the whole idea, I think it would really help their kid. But they are so focused on that pathway for their kid and the competitiveness and where they want the sport to take their kid. They miss that message about just letting your kid play a game, and see the joy in them being able to play. (C03)

Discussion

The present study explored coaches’ perceptions of a successful community youth basketball program. In particular, coaches discussed dynamic elements of the sport environment, in addition to the immediate, short, and long-term athlete outcomes associated with participation in the league. Although the findings were generally in line with the Personal Assets Framework for Sport (Côté, Turnnidge, and Vierimaa 2016), a number of unique aspects of the league were identified, which led to the subsequent adaptation of Côté and colleagues’ framework (see Figure 3-1).

Whereas Côté and colleagues (2016) conceptualized the dynamic elements as three separate entities, findings from the present study suggest that sport activities and social relationships are better conceptualized as nested within the broader sport setting. Indeed, features of the setting such as a focus on healthy competition and inclusivity influence both the nature of the league’s games and the relationships among its members. This ecological perspective shares similarities with previous research which has emphasized the salience of community factors in athlete development (e.g., Balish and Côté 2014). In many ways, the league described in the present study aligns with the successful rural sporting community examined by Balish and Côté.
Although the present study examined a specific league in a much larger city, it is similarly made accessible to local youth, has a strong and stable base of volunteers, and is well integrated within the community. This suggests that it may be possible to cultivate community factors which characterize successful small communities, in larger city centers.

Coaches also revealed that, in line with the league’s goal, they predominantly focused on facilitating positive immediate sport experiences, rather than explicitly targeting longer-term developmental outcomes. The league’s primarily goal is to ensure that all players have fun and enjoyable experiences, which is critical since it is many athletes’ first or only exposure to organized sport. This is similar to the sampling years of the Developmental Model of Sport Participation (Côté, Baker, and Abernethy 2007), which suggests that during childhood, youth’s sport participation should attempt to maximize enjoyment. Most sport PYD research identifies a set of tangible developmental outcomes associated with sport participation (e.g., 4 Cs, developmental assets, life skills, etc.); however, the mechanisms through which these outcomes are realized are not well understood (Turnnidge, Côté, and Hancock 2014). Positive immediate sport experiences (i.e., fun experiences) may help explain this relationship, as sustained positive immediate experiences may over time, lead to continued sport participation and development. In addition, it is believed that coaches play an essential role in promoting fun in organized youth sport through creating a positive learning environment for their athletes (Bengoechea, Strean, and Williams 2004; Visek et al. 2015). The simplicity of a focus on fun is also intuitive and can be helpful for coaches in monitoring their own behaviour and effectiveness. Rather than concentrate on long-term developmental outcomes (which may not be readily observable in the day-to-day actions of athletes), coaches could instead simply focus their attention on ensuring that all of their athletes are consistently having enjoyable sport experiences.
Recreational sport contexts are traditionally viewed as opportunities for social interaction, exercise, and enjoyment. However, findings from this study demonstrate that recreational sport can still include a competitive element, and that this may even work to enhance, rather than undermine, athletes’ enjoyment. Indeed, the excitement of competition is often identified as a major source of enjoyment among young athletes (Wiersma, 2001), and the present study suggests that it remains an integral component of the sport, even in recreational contexts. Competition itself may be neither inherently positive nor negative, but it is rather how competition is structured and implemented in a sport setting that determines how it influences athletes. Shields and Bredemeier (2009) suggest that two separate types of competition exist that help to delineate its positive and negative aspects. True competition is a process based on a shared striving for excellence which serves the mutual interest of all participants as they engage in an oppositional form of cooperation (Shields and Bredemeier 2009). In this case, athletes still strive to win the game or race, and defeating an opponent is considered an internal goal of the game; however, the meta-goal of sport contests is striving for excellence. On the other hand, decompetition occurs when athletes seek to demonstrate their superiority over opponents, and thus only serves the interests of winners as enjoyment is gleaned through extrinsic rewards. Decompetitors view competition as a war, and opponents as enemies to be defeated, rather than respected partners in the pursuit of excellence. Thus, since coaches identified that they de-emphasized winning, losing, and long-term competition (e.g., standings, playoffs) but short-term competition remained a prominent component of the league, it appears to be more emblematic of true competition. Interestingly, it is suggested that youth sport settings characterized by true competition are considered fertile contexts for character development (Shields and Bredemeier 1995), thus supporting recreational sport as a context for PYD. Although research has yet to
examine this notion explicitly, it remains a fruitful avenue of future study to further our understanding of the contextual and structural factors underpinning PYD in sport.

Coaches also emphasized the diversity of the league’s athletes. For many, the league represents an introduction to organized basketball, while many experienced others concurrently participate in developmental club leagues. This forces players to learn to interact with new groups of peers, forging new friendships and expanding social networks (Holt et al. 2008). This is particularly critical for the disadvantaged youth participating in the league, as they may not otherwise have many opportunities for social interactions outside of school and family (Holt et al. 2011). This assortment of abilities also allows opportunities for peer-facilitated learning through scaffolding, whereby less skilled players gain skills and expertise from their more highly skilled peers, who consequently develop leadership skills (Balish and Côté 2014).

Finally, the league’s ability to facilitate PYD lies in the pervasiveness of volunteerism and contribution, which is viewed as the ultimate outcome of PYD. Lerner (2004b) suggests that the enhancement of PYD across development results from mutually beneficial relations between an individual and the resources in his or her context over time, which ultimately lead to the individual making positive contributions to oneself, community, family, and society. In the present study, contribution is manifested through former players giving back or contributing to the league through coaching and volunteering. Players are initially encouraged to give back to the league by their coaches, underscoring the importance of supportive adult relationships to PYD (Camiré, Trudel, and Forneris 2012; Lerner 2004b). The ongoing existence and success of the league is predicated on this continued motivation to give back to the league, ensuring that the next generation of young players will have the same positive experiences. Actively encouraging youth to volunteer nurtures their leadership skills and exposes them to opportunities to develop
coaching skills at a relatively young age. This continued involvement has also created a strong sense of community and collective or social identity among league members past and present.

**Limitations and future directions**

The present study relied upon the perceptions of coaches to provide a description of a youth basketball league. Future research should explore the perspectives of other members of the sport environment, including athletes and parents, as each contribute unique perspectives. Although coaches described how they believed that they were able to influence their athletes’ development, there was no actual assessment of developmental outcomes. Thus, future studies should consider a longitudinal design whereby changes in developmental outcomes could be studied over the course of a season. Finally, given the unique characteristics of the league, the generalizability of the findings to other community sport settings may be limited. In particular, it is not evident that the characteristics and perceived benefits of participation in the league would be consistent across other community sport programs. Although the general principles that underlie the success of this model league are consistent with features of sport programs that lead to PYD (e.g., Strachan, Côté, and Deakin 2011), future research should consider other model community sport programs to corroborate the key features of this specific sport context. In doing so, the resultant evidence could be implemented in the development of youth sport programs to optimize athletes’ personal development.

**Practical implications**

The present study has yielded insights regarding the design and implementation of sustainable and effective community youth sport programs. The basketball league developed a culture of contribution through the encouragement of graduating players to stay involved as volunteers. Thus, sport programs should be encouraged to look within when building a base of
volunteers, as previous research suggests that recruiting from within a sport program is indeed an
effective strategy to ensure its long-term sustainability (Hallmann 2015). Additionally,
developing a culture of contribution encourages the realization of the ultimate outcome of
PYD—the development of youth into thriving members of society (Lerner 2004b). This
basketball league also demonstrates that youth sport programs, even those recreational in nature,
can maintain an element of competition without sacrificing athletes’ development or experiences.
Specifically, community sport programs should nurture true competition by downplaying the
outcome (i.e., winning and losing) and emphasizing the process of competing as a means of
fostering athletes’ enjoyment and building of character (Shields and Bredemeier 2009). Overall,
this study presents an encouraging outlook for community sport programs, as it suggests that it
may not be necessary to devote sizeable resources toward explicitly teaching PYD principles or
life skills to be effective. Instead, by simply providing youth with a safe setting in which to
participate in appropriate sport activities and develop supportive social relationships, sport
programs can create positive sport experiences for young athletes, which can, over time, have
long-term implications on personal development.
References


Chapter 4

The organizational culture of a community youth sport program
Abstract

This study explored the organizational culture of a recreational community youth basketball league. While previous youth sport research has examined the culture of high performance sport settings, less is known about the culture that characterizes recreational youth sport programs. Using an ethnographic approach, the first author volunteered as an assistant coach of a 10-11 year-old boys’ basketball team for one six-month season. During this time, data was collected using a variety of approaches including participant-observation, semi-structured interviews, and document and media analysis. Thematic analysis identified themes which were situated at three levels of organizational culture, in line with Schein’s (1990; 2010) theoretical framework. At the most superficial level, prominent cultural artifacts related to the league’s warm and welcoming atmosphere and strong community support. Second, espoused values implied a focus on fun, inclusiveness, and accessibility. Finally, at its foundation the league’s culture is characterized by equally valuing all members’ contributions, giving without expecting a return, and a prevailing sense of family. Theoretically, this study extends our understanding of organizational culture in youth sport. From a practical perspective, the results provide a cultural blueprint of a sustainable recreational youth sport program that may be useful across other youth sport contexts.

*Keywords*: positive youth development, ethnography, coaching
Introduction

Organized sport is widely regarded as an activity from which youth can glean numerous beneficial outcomes ranging from the development of physical capabilities to personal and social skills (Fraser-Thomas, Côté, & Deakin, 2005). Sport is also a popular activity; for example, nearly 75% of Canadian youth are involved in some form of organized sport or physical activity (Canadian Fitness and Lifestyle Research Institute, 2012). However, it has been suggested that over 35% of youth drop out of sport each year (Patriksson, 1988) due to reasons such as a lack of enjoyment, low competence perceptions, and high social pressures (Crane & Temple, 2015). Thus, it is imperative to better understand how we can structure organized youth sport to optimize positive outcomes and mitigate negative outcomes and dropout.

A conceptual framework that aims to identify the elements of youth sport that are associated with positive outcomes is the newly developed Personal Assets Framework (PAF) for sport (Côté, Turnnidge, & Evans, 2014; Côté, Turnnidge, & Vierimaa, 2016). Grounded in developmental systems theories (e.g., Lerner, 2002), the PAF describes the process and mechanisms through which youth sport participation can ultimately lead to adaptive lifelong development in terms of sport performance, participation, and personal development. Côté and colleagues posit that three main dynamic elements together shape youth’s sport experiences and serve as drivers of development: Personal engagement in activities, quality social relationships, and appropriate settings.

First, personal engagement in activities suggests that it is critical that youth are engaged in sport activities that are properly structured and developmentally appropriate (Côté et al., 2014; 2016). In terms of athlete development, youth should be exposed to a diverse mix of sport experiences (both within and across sports) during childhood, prior to specializing in a single
sport or staying involved in recreational sports during adolescence (Côté & Abernethy, 2012). This developmental trajectory provides a mix of practice and play, and adult and youth-led activities, which altogether allow young athletes to benefit from the unique learning environments afforded by the sampling of different types of sport activities (Vierimaa, Erickson, & Côté, 2016).

Second, quality relationships relates to the social aspect of youth sport participation, as young athletes are influenced by a myriad of social agents, including coaches, parents, and peers. For example, it has been widely shown that coaches’ interpersonal styles can have a major influence on coach-athlete relationships, and ultimately, athletes’ performance, participation and personal development in sport (e.g., Vella, Oades, & Crowe, 2011). Parents also play a pivotal role as they are largely responsible for children’s initial socialization into sport (Wuerth, Lee, & Alfermann, 2004), and their involvement in sport can serve as either support or pressure in their children’s athletic development (e.g., Dorsch, Smith, & Dotterrer, 2016). As young athletes progress through their development, peers become increasingly important as friendships in sport can augment enjoyment and commitment (e.g., Weiss & Smith, 2002), while peer interactions can also help to facilitate the development of social skills (e.g., Holt, Tamminen, Tink, & Black, 2009). Overall, it is apparent that the quality of the relationships formed in sport are tantamount to youth’s overall experiences and development.

The third dynamic element pertains to the setting or environment in which a sport takes place, as personal engagement in sport activities and quality social relationships are both constrained by the broader physical and social environment (Côté et al., 2014). For example, research on the birthplace effect has identified how sport environments shape athlete development. This line of research has shown that smaller cities or regions produce greater
numbers of athletes who reach elite levels of competition (e.g., MacDonald, Cheung, Côté, & Abernethy, 2009), remain engaged in sport over long periods of time (e.g., Imtiaz, Hancock, Vierimaa, & Côté, 2014), and score higher in indices of personal development (Fraser-Thomas, Côté, & MacDonald, 2010). While the birthplace effect suggests that city size influences long-term athlete development, it remains unclear why the environments of these smaller cities appear to be particularly conducive to facilitating athlete development (MacDonald et al., 2009). In order to address this question, it may be helpful to draw upon existing case studies which have examined the environments of successful sport organizations.

Stemming from a holistic ecological perspective on athlete development, Henriksen and colleagues (2010a; 2010b; 2011) conducted a series of case studies that explored the role of environmental factors in the success of various high performance sport organizations. In this work, environmental factors were examined at both the micro (e.g., training setting) and macro (e.g., influence of sporting bodies) levels. A prominent element of the micro-environment that emerged from Henriksen and colleagues’ research was the culture of sport organizations. In fact, Henriksen and colleagues (2010a) developed the environmental success factors model, which suggests that organizational culture plays a central role in the effectiveness of a sport environment, which in their case was defined in terms of athletic talent development. To this end, Henriksen and colleagues drew upon Schein’s (1990; 2010) work, who defined organizational culture as:

A pattern of basic assumptions, invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore is to be taught to new members
as the correct way to perceive, think, and feel in relation to those problems (Schein, 1990; p. 111).

In line with this definition, Schein (1990; 2010) posits that culture can be understood at three levels which vary in the degree to which they are visible to outsiders. At the most superficial level are artifacts, which are readily observable phenomena that you can see, hear, and feel. While artifacts are easily observed, they are difficult to decipher without a deeper understanding of the cultural aspects that guide these observable behavioural manifestations. The next level is espoused values and beliefs, which may include a sport organization’s ideology or mission statement. These values and beliefs are often (but not always) congruent with a culture’s artifacts. For example, an elite sport team may have a mission statement which values teamwork and camaraderie, but in response to poor performance, the team’s social dynamic may be rife with dissent and conflict. Over time, certain values and beliefs undergo a transformation where they become unconscious assumptions, bolstered by the group’s social experiences. For example, if the elite sport team enjoys continued success, they may over time internalize the shared belief in the importance of teamwork and camaraderie to their success. This is an example of the third and final level of Schein’s model of organizational culture: basic underlying assumptions. These assumptions are beliefs or values which have become internalized by all members of an organization to the extent that they may be taken for granted and are largely unconscious.

The organizational culture of sport organizations has previously been studied by other researchers; however, much of this work has focused on high performance sport settings (e.g., Pink et al., 2014), and has adopted an etic perspective whereby the culture of the sport organization is studied by external observers (Maitland, Hills, & Rhind, 2015). Given the inherent difficulty of interpreting the deeper levels of culture (i.e., values and beliefs and basic
underlying assumptions), Maitland and colleagues (2015) advocated that further research in this area should utilize emic methods such as case studies (e.g., Henriksen et al., 2010a; 2010b; 2011; Pink et al., 2014) and ethnography. Henriksen and colleagues (2010a; 2010b; 2011) note that each sport environment is unique, and as such, researchers should move beyond high performance sport and investigate the culture of organizations from other sport contexts.

Thus, the purpose of the present study was to explore the organizational culture of a youth basketball league using an ethnographic approach. This study aimed to extend the burgeoning research on organizational culture in sport to a youth context. Youth sport exists in many different forms ranging from competitive high performance sport, to recreational community sport. These contexts may be characterized by different cultures, and thus the present study set out to explore the culture of a recreational community sport league, given the paucity of research in this area (Holt & Jones, 2008). Ethnography was utilized to gather an in-depth, contextualized account of the unique cultural climate of a youth basketball league in Ontario, Canada. We aimed to understand and interpret the culture of the league from an “insider’s” perspective using long-term immersion (Krane & Baird, 2005). An ethnographic approach was appropriate given the inherent difficulty in deciphering deeper aspects of an organization’s culture (i.e., values and assumptions) by external researchers (Maitland et al., 2015).

Method

Participants and Organization

The basketball league in this study was purposefully selected on the basis of its local reputation as a popular youth sport setting which focuses on ensuring that its participants have enjoyable sport experiences. The league itself was founded in 1955 by an elementary school caretaker in Ontario, Canada. Over 60 years, it has grown to its current size of 30 teams and 500
boys and girls aged 8-14. A “just for the fun of it” philosophy underpins all aspects of the league’s structure and day-to-day operations. Aside from a single practice at the beginning of the season, each team plays weekly games, wherein standard basketball rules are upheld and score is kept. However, over the course of the season standings are not tracked, and there are no playoffs at the end of the season. In this way, the league is able to maintain its “just for the fun of it” philosophy through games which retain elements of short-term competition. Finally, a distinctive element of this league is that former players are known to return to the league later in life to volunteer and “give back” to subsequent generations of young athletes. In line with Henriksen and colleagues’ (2010a) environmental success factors model, we have operationalized the league’s success or effectiveness in terms of its continued popularity and positive reputation over the course of 60 years. Through this study, we aim to shed light on how the league’s culture has played a role in its ongoing success.

The present study is one of three which were conducted with this league over a two-year period. The premise for this particular study was originally suggested by the league president during a meeting with the primary researcher which occurred approximately one year prior to data collection, wherein the league president expressed interest in the research team gathering an “insider’s” perspective of the league. Gaining entry and access to the league and its members was thus facilitated by the president who served as a gatekeeper and key informant. The first author initially introduced himself and proposed the study to the league’s coaches and administrators during a pre-season meeting, while the study was also mentioned in the league’s monthly newsletters.

A mix of purposive and snowball sampling were used to identify specific participants who took part in informal (i.e., conversations) and formal semi-structured interviews throughout
the season. The first author made an effort to identify key informants from the league, which included coaches, parents, and volunteers who had been involved with the league for a long period of time in multiple roles (e.g., athlete and coach). This process was assisted by the league president who provided suggestions regarding who he believed met these criteria. Throughout the season, the author attempted to connect with these key informants, while allowing informal conversations with other members of the league to proceed naturally. In this way, we were able to diversify our pool of participants while maintaining a balance between participant and researcher. Specifically, three athletes (aged 10-11) from the first author’s team as well as eight other coaches sampled from around the league consented to participate in semi-structured interviews later in the season. This diverse sample of coaches ranged in age from 25-60 years old ($M = 40$ years), were half male and half female, had between 3-36 years of coaching experience ($M = 15$ years), and four coaches played in the league in their youth.

The first author volunteered as an assistant coach for a team of 12 boys aged 10-11. The first author previously played basketball at the high school level and had experience coaching youth basketball, which aided his ability to effectively adopt a coaching role in this particular setting. The head coach of the team was a 41-year-old male who had 20 years of experience coaching basketball at various ages and competitive levels, had been coaching in the league for seven years, and was also previously involved in the league as a player in his youth. This team participates in an all boys’ division made up of eight teams aged 10-11, and play 18 games over the course of a six-month season.

**Data Collection**

Institutional ethics approval and participant consent was obtained prior to the beginning of the data collection. During the year prior to data collection, the first author attended league
games and fundraisers as an informal means of developing rapport and relationships with key informants (e.g., coaches and volunteers). The following year, the first author volunteered as an assistant coach with a boys’ 10-11-year-old basketball team for a six-month season. As an assistant coach, the first author attended all team games and league events. In this capacity, the first author adopted an overt role (Sparkes & Smith, 2014), where members of the league were made aware of his dual position as both coach and researcher. The first author initially introduced the study to coaches and officials during a pre-season meeting. At the beginning of the season he also met with the athletes and parents from the team in which he was coaching. During this meeting, he explained the nature of the study and answered any questions. Following this meeting, all athletes (and their parents) provided active written consent to participate in the study. Throughout the season, the first author also freely disclosed his dual role in conversations with any potential participants who may have been unaware of the nature of the study.

**Participant observation.** In line with an ethnographic approach, data collection was comprised of a number of different formats. Participant observation made up the largest portion, wherein the first author attended all team events (e.g., practice and games), fundraisers, coach meetings and social gatherings. In total, 80.5 hours of participant observation was conducted over a six-month period. Immediately following each observation (within 24 hours), reflexive field notes were completed. These field notes included reflections on the first author’s personal biases related to his previous knowledge and experiences with the league, in addition to observations regarding the physical setting, and notes about conversations that occurred over the course of that particular observation.

**Semi-structured interviews.** At the end of the season, semi-structured interviews were conducted with eight coaches and four players. An initial pool of potential coaches was
identified by the league president as individuals who have had a long history with the league in multiple capacities. From this list, eight coaches consented to participate in an interview. For the athlete interviews, all twelve players from the first author’s team were asked to participate in a follow-up interview after the season has finished, of which three athletes agreed to participate. All of the interviews were conducted in a location chosen by the participants, which ended up either being in the participant’s home or a private office in the first author’s laboratory. The interviews began with demographic questions, and then focused on participants’ perceptions of the league. Specifically, questions focused on the league’s impact on participants over the course of the season, and more broadly across the lifespan. The line of questioning generally addressed the league culture, and allowed the first author to follow-up on initial themes and ideas that were identified throughout the season. The interviews were also scheduled near the end of the season so that the first author had the opportunity to develop trust and rapport with the participants, which helped to encourage honest, thoughtful responses. On average, the coach and athlete interviews lasted approximately 45 and 25 minutes respectively.

**Document and media analysis.** The first author also procured a large amount of historical documents and media regarding the basketball league. This included news articles, video clips, and memory books that were compiled during previous league anniversaries and after the recent passing of the league’s founder. These books were filled with narratives from current and former league members, some which dated back many decades, and provided critical insight into the league’s cultural evolution over time. In sum, these documents included seven news segments and two memory books which totaled 151 pages of text and images. Additionally, the first author reviewed the league’s Facebook page, which was regularly updated with news and photos, which spur online dialogue among past and present league members.
Data Analysis

Data analysis was ongoing and iterative, in that as data was collected, it was analyzed and reflected upon, which then informed the nature and scope of subsequent data collection. This iterative process facilitated the progressive shift in the scope of the study from initially examining peer relationships and personal development over the course of a season, to specifically exploring the organizational culture of the basketball league. This progressive narrowing is in line with an ethnographic approach (Wolcott, 2008). All forms of data were entered into NVivo 10, which was used for analysis. A thematic analysis (Braun & Clarke, 2006) approach was utilized because of its flexibility and ability to summarize and interpret large datasets (Sparkes & Smith, 2014). The analysis was both inductive and deductive in nature, as the study initially aimed to explore the organizational culture of the basketball league, while also examining how the league’s culture aligned with Schein’s (1990; 2010) conceptualization of organizational culture in the later stages of analysis. In line with Braun and Clarke’s (2006) suggestions, thematic analysis occurred in six main stages. First, the authors immersed themselves in the data which occurred through the data collection process as field notes were continually collected and reviewed. Similarly, all interview transcripts and archival data were reviewed in depth prior to coding. Second, all data was reviewed and initial codes were generated in an inductive fashion. Third, similar initial codes were collated into potential themes. At this stage, analysis shifted from purely inductive to both inductive and deductive as Schein’s (1990; 2010) three levels of organizational culture was used as a theoretical framework to guide the analysis. However, the authors remained flexible and sensitive to themes that may not readily be situated within Schein’s framework. Fourth, these themes were reviewed and re-organized to ensure consistency of codes within each theme, and clear differentiation across themes. At the
fifth stage, the authors continued to refine the themes and develop clear names and definitions for each one. The final stage involved producing the report, which involved selecting the most compelling data extracts and quotes to ensure a rich, thick, and accurate description of the data.

**Reflexivity and Trustworthiness**

The authors were all active researchers in sport psychology and youth development, and as such shared a general view of youth-driven sport as a potentially positive and valuable developmental activity. The research team purposefully sampled this basketball league because it had a public reputation as a sport program which aligned with much of the literature on youth development in sport. Specifically, this was the second of three studies that the first author conducted with this particular basketball league. At the time of data collection for this study, the first author had already spent over one year involved with the league collecting data for other studies and developing rapport with coaches, athletes, and parents. The first author also played organized basketball throughout his childhood and adolescence and had many years of experience coaching youth basketball, experiences which may have influenced his perceptions and behaviour in the present study. Acknowledging the potential influence of these assumptions and biases through data collection and analysis, the research team made several efforts to ensure rigorous, reflexive qualitative research (Sparkes & Smith, 2014).

The first author achieved prolonged immersion within the league which lasted two years in total, including the year preceding data collection when the first author attended league events and developed rapport with players and volunteers. This step was critical to ensure the accurate understanding and interpretation of the league’s culture. Dependability was not a major concern given that the fieldwork took place in a unique time and context. Nevertheless, an audit trail was maintained which clearly outlined each step and decision in the data collection and analysis.
phases. Data were also triangulated through the collection of the first author’s personal observations, perceptions of current coaches and athletes using semi-structured interviews, and historical perspectives through archival data. Immediately following each observation, the first author kept detailed, reflexive field notes which explicitly explored how his past experiences and biases influenced the ongoing participant-observation and data collection. Through the presentation of detailed, rich data which focus on how the league’s culture has changed over time, we strived for naturalistic generalizability, which allows the readers themselves to reflect on the findings and draw their own connections and generalizations to other contexts (Sparkes & Smith, 2014).

Results

Themes that were identified from the data have been organized using Schein’s (2010) model as a guiding framework. The first three sections review themes from each dimension of culture (i.e., artifacts, espoused values, and basic underlying assumptions). The final section pertains to the first author’s own socialization experiences, describes challenges that emerged through this process, and compares his socialization to that of other coaches.

Artifacts

Welcoming atmosphere. From the first author’s initial steps into the school gymnasium, a warm and welcoming atmosphere was readily apparent. The gymnasium itself has become synonymous with the basketball league. At one entrance is a trophy case, which is filled entirely with awards from the basketball league that are given out annually during the lavish banquet and hot dog feast. At the other entrance are framed images dotting the walls with smiling faces from past seasons. Additionally, as part of the 60th anniversary celebrations, a large poster was affixed to a wall near the gym entrance, which was covered entirely with thank you notes and signatures.
from current and former league members. Inside, the facilities themselves are intimate, and epitomize a “small gym experience”. The court itself is smaller than regulation, with little space to move around its perimeter. Seats for spectators are squeezed in along both ends of the court, with the scorer’s table even extending a few inches onto the court, presenting a challenging obstacle for unaccustomed players. Despite its limitations, league members value the gymnasium due to its charm and storied history. Aside from the physical characteristics of the gym space itself, perhaps the next most visible artifact are the smiles on the faces of players, coaches, and parents. As one coach summarized: “What remains with me is the warmth and generosity imbued in that gymnasium: the heart of the place. I will remember the handshakes, the pats on the back, the welcome, the love of the game… the sense of belonging.”

The atmosphere at league events is always light, whether at the registration day or end of year banquet. For instance, the registration day is always a hectic affair, as demand for spots in the league far exceeds availability. Thus, it is common for parents to line up overnight in the school yard, often in rainy and frigid conditions, in order to secure their children’s spot the following morning. However, no matter how long the wait or miserable the conditions, parents are immediately met with the smiling faces of coaches and volunteers who facilitate a smooth registration process. One coach described the impact of his first registration day experience:

This is another reason why we as parents look forward to the game nights as much as the kids. The warm reception I received and felt as I filed through the registration line, sipping my coffee at 5:00am wishing I was still in bed… after being adopted into this league over the last 10 years, I can appreciate why people are driven to come and stand or sleep in the line the day before registration.
The league’s volunteers go out of their way to ensure that everyone feels welcome in the gymnasium, regardless of whether you have been involved for decades or you are a new player arriving for the first time.

**Community support.** A vital component of the league’s continued existence and low cost is its strong ties with local community organizations. Since it is made up entirely of volunteers, it is run on a shoestring budget. The fact that the league is able to provide an enriching sport experience for the nominal cost of $10 per year is indicative of the amount of support the league receives from various community partners. For instance, use of the gymnasium where the league has been held for 60 years has been donated free of charge by a local school board. Raffles are also held before the Christmas holidays and at the end of the season where large numbers of donated prizes are given away as a means of raising money for the league. This community support is most apparent during the annual banquet held at the end of each season. This one-day event welcomes all 500 players, their families, as well as league volunteers and representatives from community partners. The event is comprised of an elaborate surprise opening sketch, an all-you-can-eat hot dog feast, and countless awards and prizes, which are presented by league volunteers as well as local dignitaries. The entire event is also emceed by two local news reporters, which adds to the overall level of professionalism and detail. In summary, it is clear that the league would quickly cease to exist without the continued generosity of its many local sponsors and community members.

**Espoused Values**

**Just for the fun of it.** Central to the values and beliefs held by the league and its members is the “just for the fun of it” philosophy, which is touted in all league advertisements and newsletters. During the pre-season coaches’ meeting, members of the executive board
explained the history behind the philosophy and how it relates to their expectations for coaches. Originally, the league was much more intense and competitive in nature than it is in the present day. The league was still meant to be fun, but there was a much greater emphasis placed on winning throughout the season due to the playoffs and championship at the end of the year. This resulted in many coaches adopting a “Jekyll and Hyde” approach, where they would play all players equally throughout the regular season, but focused on winning at all costs during the playoffs. Many long tenured coaches described this dichotomy as problematic, and it continued to intensify over time. Then, approximately 30 years ago the league reached a tipping point. When parents and coaches became a little too overzealous in a particularly raucous game, the referee stopped the game and instructed all of the adults (including the parents and coaches) to exit the gym so that the players could continue playing the game on their own. Soon after, the league decided to make structural changes, eliminating playoffs and championships, while formalizing the “just for the fun of it” philosophy. Following this short story at the coaches’ meeting, the league executive members explained how coaches were expected to uphold this philosophy, and how it may be different from other sport contexts. One coach mentioned that “it’s important to keep score, but it doesn’t matter who wins or loses”. Indeed, while scores are kept for each game, if a game becomes lopsided the scorekeepers may stop adding all of the winning team’s points so that they do not unduly discourage the trailing team. Additionally, the score is quickly wiped from the scoreboard following the final buzzer in each game. One coach described how this helps to keep competition in perspective: “It’s healthy competition. I know sometimes they don’t add all of the points onto the scoreboard, I get that. But I think it’s important for kids to learn the lesson that you know, you can’t win them all.” Coaches strive to
foster competitive excitement during games, but downplay the outcomes in terms of wins and losses and the team’s record over the course of the season.

While all coaches seem to abide by this philosophy, it is implemented in different ways across divisions. For example, coaches’ described how the dynamic in the graduate boys’ division (12-15 years old) is markedly different from younger age groups. The graduate division is comprised of the oldest group of athletes, many of whom concurrently play basketball at the high school or club level. Thus, the games that are played tend to be more intense and competitive than their younger counterparts. In response, coaches described giving their players more leeway in their intensity and competitiveness, as long as it was done in the true spirit of the league. In contrast, the youngest divisions made up of boys and girls aged 8-9 is run in a different manner and often more closely resembles a basketball clinic rather than organized games. It is not uncommon for coaches and referees to explain rules and teach skills to players from both teams during stoppages in play. At this stage it is most players’ first time playing the sport, so the league aims to instill a solid base of fundamental skills and knowledge.

Overall, regardless of how coaches choose to implement this philosophy across the league’s divisions it is apparent that they are generally successful. Athletes from across divisions emphasized that the league is fun due to the lack of pressure. For many athletes, this is their first exposure to organized basketball, and so the focus on fun rather than winning allows them to develop their skills through experiential learning. Similarly, skilled athletes who also play in other competitive leagues described this opportunity as a chance to relax and have fun with their teammates, often trying out different skills or positions.

It is also apparent that the focus on fun carries over to coaches and volunteers as well. Unlike many other youth sport contexts, games are characterized by continual banter between
coaches, referees, and scorekeepers. This lighthearted joking among the adults serves to model similar behaviour for the young athletes, demonstrating that it is acceptable and encouraged to smile and have fun. Additionally, this humorous atmosphere helps to diffuse tense situations among players or parents. For example, one referee explained how he uses humour to keep the crowd at ease: “If someone starts chirping about a call, I might say ‘is there no hockey game somewhere tonight where you could be instead?’ … You’ve got to diffuse the situation right away rather than let it go and say nothing.” Ultimately, volunteers are putting youth first in their efforts to cultivate enjoyable sport experiences. In the process, this often leads to fun on the part of the coaches as well. One coach explained how being successful in this regard was a rewarding experience: “The greatest reward is the smile from a player who says thanks, or a parent’s handshake after another season saying ‘my child had fun.’”

**Inclusiveness and accessibility.** From its inception, the league has always valued inclusiveness and accessibility. Being run out of an elementary school in an impoverished neighbourhood, the league originally began as a means to keep the local youth off the streets and busy with a safe and constructive activity. Over time, the league continued to grow in size, but it has always maintained the importance of being accessible to any local youth who wished to play. An example of this is the league’s registration fee, which is only 10 dollars per athlete, but was a major point of contention when it was doubled a few years ago from five dollars. While an additional five dollars may seem insignificant relative to the cost of most organized sport leagues, many were concerned that the increased cost would be prohibitive for many local families. Indeed, one coach recounted a story of a young boy who paid his registration fee in quarters that he saved up from his weekly allowance over 20 weeks. However, even though the league continues to pride itself on its accessibility, it also emphasizes inclusiveness in the sense
that it welcomes all athletes and volunteers, not just those from the immediate surrounding community. This creates a diverse group of athletes, some of whom are playing basketball for the first time, while others may also be playing in other basketball leagues at the same time. Thus, each team is comprised of athletes of all ability levels, neighbourhoods, and backgrounds. However, the league’s inclusive nature presents a unique challenge due to its popularity and limited enrollment. As has been described, registration for one of the 500 coveted spots in the league is hectic and leaves many families disappointed if they are not able to secure a spot for their child. Despite the simplicity of online registration, the league has maintained their traditional in-person approach to ensure that all local families have an equal opportunity to register their children, regardless of whether or not they have internet access at home. Nevertheless, the league’s popularity undoubtedly leads to disappointment each year among families who are not able to secure one of the registration spaces and may not be able to afford or access alternative sport programming for their children.

**Basic Underlying Assumptions**

At its deepest level, the league’s culture can largely be traced back to the values first brought to the league by its founder 60 years ago. A number of these assumptions are summarized by the league president:

There are a couple of “Jim” themes that have permeated what we do— we do it for the kids, and no individual is more important than what all of the volunteers do together. I believe the success stems from the importance that Jim has always placed in volunteers doing what needs to be done because it is the right thing to do, with no expectation of remuneration. We have always been cognizant that the purpose of the league is to make sure that the children from the neighbourhood and school have a safe place to play.
In contrast to the artifacts and espoused values which have evolved to varying degrees over the league’s existence, these underlying assumptions have remained consistent and stabilized over time. While the league has grown tremendously in size and become more highly organized compared to its early days of pick-up basketball, the underlying assumptions guiding the league have remained the same. Jim’s vision for starting the league was to have somewhere safe that local youth could go to have fun, while learning the importance of fairness, respect, and hard work. As one of the league’s earliest members explained: “You worked for the glory of the time on the court. There was balance. Respect and school work were important, not just your ability to score.” As the league grew, the growing number of volunteers upheld and internalized these values, and continue to do so today.

**All members are equally valued.** Another assumption that is shared by league members is the notion that all volunteers are equally valued, regardless of experience or role. For example, the league president is one of its longest-tenured volunteers but even he is quick to downplay his importance, instead emphasizing the equal contribution of all members, from youth volunteers who keep score, to the most senior referees and coaches. At the end of the season, the league received an award from a local organization in recognition of its volunteer work in the community. This was also imbued in the first author’s experiences volunteering, because despite his unique dual role as researcher and coach, and being a newcomer to the league, he was treated as an equal and was in no way marginalized by other volunteers. This sense of equality helps the league to attract new volunteers because their efforts are met with an immediate sense of appreciation, rather than being forced to slowly work their way up a hierarchy of roles and responsibilities. For example, one coach described how the contributions of all volunteers are appreciated: “no matter who you are, whether you score keep for an hour or referee for four
nights a week, everyone is treated equally and just as supportive as the next.” In contrast to others who take on many roles over the course of an evening (e.g., coach, scorekeeper, and referee), many new volunteers are only comfortable taking on small roles in the beginning. Rather than push volunteers to take on more responsibilities, the league provides volunteers with the autonomy to set their own boundaries and dictate the extent of their involvement.

**Give without expecting a return.** Through fostering a sense of equality and autonomy among volunteers, the league has aimed to ensure that its volunteers are getting involved “for the right reasons”. This selflessness begins with the league’s founder, who simply described his life philosophy as: “spend 90% of your time doing things for other people and everything will turn out alright.” Despite a constant need for additional support, the league has never provided any sort of compensation to its volunteers, and rather, target volunteers who want to get involved in the league as a means of assisting local youth. Many volunteers are former players who have a strong desire to give back to the league all that they got out of their time playing in the league in their youth. In contrast, other volunteers are parents or grandparents of current players, or are individuals who may be new to the area and simply want to get involved to help out in their community. In line with the league’s inclusive values, all volunteers are welcome; however, the league also makes a concerted effort to specifically target individuals who may stay involved long-term. An over-reliance on parent-coaches who are involved for a few years to coach their own children and then move on is concerning as it creates a lack of long-term continuity. This is critical as the league hopes to maintain consistency over time, so that the core of volunteers running the league for the next generation of youth share the same basic values as league members past and present, and that future seasons continue to be guided by “Jim’s vision”.
**Importance of family.** The generally positive atmosphere and strong social relationships among league members are very clearly suggestive of the shared importance and belief in the league as one big family. As one coach described: “People have the feeling that when you’re part of [the league] you’re a part of a family, a family that you can be a part of for your whole life.” It is indeed common for individuals to maintain a lifelong relationship with the league, and many families have even developed inter-generational participatory traditions. A common trajectory is for individuals to: 1) First attend games cheering on an older sibling, 2) play when they are a little older, 3) give back through volunteering, and 4) enroll their own children when they are old enough to play. One volunteer described the significance of the family aspect:

> It’s nice to come back each season to see the players – from the little ones right up into high school. To see them come back to coach, and then to see them bring their own children in – that’s really nice – to see generations coming back like I did with mine.

This belief in the importance of family is also manifested across other aspects of the league’s culture. For example, the welcoming atmosphere of the league and shared inclusiveness are due in part to the underlying belief in the league as one family. Similarly, in conceptualizing the league as a family, members are more likely to develop strong and enjoyable relationships with their peers.

**Socialization**

This final section pertains to the first author’s perceptions of his socialization into the league and experiences attempting to balance the dual roles of coach and researcher. Even though this study represented the first author’s socialization into the league in a formal coaching role, it is important to consider that he regularly attended league games during the previous season. Thus, he was not entirely a newcomer to the league, and had developed some
preconceptions regarding the league’s culture as an outside observer. This section will therefore specifically emphasize his socialization into a formal coaching role. During the conceptualization of the study, it was decided that the first author would volunteer as an assistant coach, where he would play a supporting role to the team’s head coach, but would not make any significant decisions regarding team dynamics or strategy. It was believed that this more passive role would not unduly disrupt the head coach’s usual coaching style, but would still enable the first author to develop an in-depth contextualized understanding of the team and league culture. While well intentioned, this limited coaching role was initially very challenging to navigate, as the first author struggled with a lack of role clarity. The head coach was supportive and willing to allow him to take on as much or little responsibility as was deemed necessary for the study. After the first few weeks, the first author’s roles and responsibilities were solidified, as he focused on both instrumental (e.g., handing out and collecting jerseys) and motivating (e.g., providing players with positive reinforcement) tasks, allowing the head coach to focus on team strategy and substitution management. This role clarity lead to an increased comfort level for both the first author and his team for the remainder of the season.

A second critical event was the pre-season coaches’ meeting. During this meeting the first author introduced himself and the study to coaches from across the league. The league president and gatekeeper was notably absent from the meeting due to other obligations, which was initially concerning given the vital supporting role that he had played in the study up until that point. However, during the prior season the first author’s presence at league events allowed him to begin to build rapport with many other coaches and volunteers. These coaches became staunch advocates of the ongoing research during this meeting and throughout the data collection. During the meeting, the first author sat with a group of fellow coaches from his
division, who were a tight-knit group and had coached together for many years. The first author was initially concerned that the strong pre-existing relationships among these coaches would make it difficult for him to move beyond his “outsider” status and be viewed as an equal. However, from this initial meeting and throughout the season, all of the other coaches treated the first author with kindness and respect, and he never once felt like his contributions to the league were valued any less than anyone else. This was similarly apparent during the last week of the season, when all of the coaches (first author included) received handwritten thank you notes from the division convenor, who was also the league president. The first author’s note did not downplay his volunteer efforts in light of the research project, but instead focused on his unique contributions to the league. Other coaches mentioned that they have received these notes for many years, and thus this served as a point of vindication that the first author was indeed successful at indwelling and was viewed as a contributing member of the league.

By and large, the first author’s socialization paralleled the processes described to him by other coaches who were also new to the league. For example, two other coaches who recently began coaching in a division filled with long-tenured coaches initially described their socialization and integration into that group as daunting, and a process that occurred slowly over the course of the first season. These two coaches, who were also new to coaching basketball at the time, spent their first season learning from the actions of their peers and determining the proper fit between their own coaching styles and the league’s cultural norms. Much of the light-hearted banter among the other veteran coaches did not immediately transfer over to these novice coaches until the following season, when they felt much more comfortable and trusting of their peers. Overall, it seems as though the strong positive cultural values of the league help to facilitate the socialization of new members. If the other coaches and volunteers were not as kind
and welcoming, it is unlikely that the participant-observation process would have progressed as smoothly as it did.

**Discussion**

Previous studies of organizational culture in sport have focused on high performance sport programs (e.g., Pink et al., 2014). The present study extends this line of research by exploring organizational culture in a recreational community youth sport context, using an emic approach which allowed for a greater depth of cultural understanding than researchers have generally experienced (Maitland et al., 2015). Overall, this study echoes and extends the conclusion of Henriksen and colleagues (2010a; 2010b; 2011) who have highlighted the importance of moving beyond solely individual factors and considering the role of the environment in the study of athlete development. Our findings suggest that the environment, and organizational culture in particular, also appears to be a relevant consideration in recreational youth sport.

Organizational culture often emanates from the impositions of a group’s leader; in a way, culture and leadership can be viewed as two sides of the same coin (Schein, 2010). In the present study, the personal values of the school caretaker and league founder ultimately formed the basic underlying assumptions that are held by all members of the sport organization (Schein, 1983). In any sport organization, this highlights the importance of a strong core group of volunteers who are tasked with creating a positive league culture. In these situations, it is paramount that these core individuals display appropriate leadership behaviours. In the present study, the behaviour of the league founder appears to align with several of the tenets of transformational leadership theory (Bass & Riggio, 2006). In particular, the league founder was well known for being kind and fair, and demonstrated a strong ability to motivate his followers (i.e., volunteers and players).
and enact his clear vision for the basketball league, which has been maintained even after his passing. While it is beyond the scope of the present study, future research should examine how leaders create and change culture in sport organizations.

Overall, the stability and consistency of the league’s culture is a testament to its long history. A clear and coherent set of cultural values has previously been identified as a common characteristic of successful high performance sport organizations (Henriksen, 2010). The league founder’s own personal values slowly embedded themselves into the culture of the organization, while their manifestation slowly evolved over time in response to ongoing changes in the personnel, size, and structure of the league (Schein, 1990). The league’s current emphasis on fun resulted directly from a specific incident 30 years ago, which is in alignment with Schein’s (1990) view that cultural norms are often formed around critical incidents. In this case, the critical incident (i.e., kicking all of the adults out of the gym) was such a remarkable event the organization’s immediate response had a lasting impact on the league’s culture. This further emphasizes the importance of strong leaders in youth sport organizations, as it is important that leaders react to critical incidents in a manner that will have a positive influence on an organization’s culture moving forward.

Central to the league’s culture is their “just for the fun of it” philosophy. Coaches and volunteers revealed that their focus on fun is complemented by a nuanced approach to competition. The league tailors its competitive environment to suit the specific context of each individual division in terms of the intensity of competition, and the relative emphasis placed on the process (i.e., shared striving for excellence) and outcome of competing (i.e., defeating your opponent; Shields & Bredemeier, 2009). Interestingly, several aspects related to the league’s approach to fun and competition (e.g., sportspersonship, learning and improving, trying hard)
have previously been identified as some of the most important aspects of fun youth sport experiences (Visek et al., 2015). Through the league’s approach to facilitating fun, they are able to create sport activities that meet the developmental needs of players of all ages and ability levels. Notably, this aims to ensure that all of the players have positive experiences and remain engaged in the league and sport in general in the future (Côté et al., 2014; 2016).

The salience of family in the league’s culture echoes the findings that were observed in a previous ecological study of talent development in a youth soccer club (Larsen et al., 2013). Larsen and colleagues found that a pervasive belief in a soccer club as one big family underpinned other aspects of the club’s culture, and ultimately, the club’s success in developing well-rounded athletes. This focus on family echoes the PAF and the salience of quality social relationships (Côté et al., 2014; 2016). If sport organizations are able to cultivate environments where members view each other as valued family members, then it may be more likely that positive social interactions will occur among those individuals (Côté et al., 2016). In general, while the present study focused specifically on understanding the culture (i.e., setting) of a sport organization, it is clear that it has also lead to a greater understanding of the league’s sport programming and social relationships, ultimately supporting the inter-relatedness of the three dynamic elements of the PAF (Côté et al., 2014; 2016).

Influenced by Henriksen and colleagues’ (2010a) environmental success factors model, the success of the league in the present study was defined in terms of its local popularity and positive reputation as a youth sport program. A by-product of this success is the prevalence of former players who return to give back to the league and community. Through this study, it was uncovered that an underlying aspect of culture driving this process is a shared belief in giving without expecting a return. This belief was shared by both volunteers who are new to the league
as well as former players who are motivated to give back to ensure that future generations can benefit from similarly positive sport experiences. This aligns with the notion of generalized reciprocity, which involves doing something without any expectation of remuneration; but rather, with the implicit belief that at some point in the future the favour will be repaid (Putnam, 2000). From this perspective, coaches and volunteers may get involved with the league as a means of accruing social capital. Putnam (1995) describes social capital as the mutual trust, cooperation, and reciprocity that result from social interactions. The continued accumulation of social capital facilitates collaborative work among members of a given social network (e.g., sport organization; Putnam, 1995). Sport is indeed regarded as a means through which social capital can be accumulated, as the social relationships established through sport involvement may predispose an individual toward other forms of community engagement (e.g., Harris, 1998). For example, Perks (2007) found that among a representative sample of Canadians, youth sport participation was positively associated with community engagement in adulthood and across the lifespan. This lends support to the success of the league in the present study in terms of its ability to bridge youth sport participation and community development. Future research should continue to explore why and how youth sport participation leads to contribution for certain individuals.

Ethnography remains an underutilized methodological approach in sport psychology (Krane & Baird, 2005), but the present study adds to the growing list of ethnographic sport research which demonstrates its utility. This study also extends the growing body of literature on organizational culture in sport from high performance to a recreational youth sport context. Future research should continue to explore organizational culture in youth sport using emic methods so that we can better understand the cultural elements of successful organizations across various contexts. In doing so, we will gain a greater understanding of the role of the broader
sport setting through which sport activities are played, which can be used to continue to optimize youth’s sport experiences. Even though the organizational culture described above is unique to that specific basketball league, its key cultural assumptions warrant consideration in other youth sport contexts. Namely, youth sport organizations should always prioritize the needs of the athletes themselves, and when possible surround these youths with coaches and other adults who share the desire of ensuring a positive and enriching sport experience for all athletes. If youth sport organizations are built upon these sound and coherent cultural values and assumptions, then they are more likely to structure sport activities and cultivate social relationships which will further promote holistic athlete development.
References


Chapter 5

Positive youth development and observed athlete behaviour in recreational sport
Abstract

Objectives: Competence, confidence, connection, and character are regarded as outcomes of positive youth development (PYD) in sport. However, the specific athlete behaviours associated with different PYD profiles are not well understood. Thus, the purpose of this study was to investigate the relationship between athletes’ observed behaviour during sport competitions and their perceptions of PYD outcomes.

Design: Cross-sectional study with systematic behavioural observation

Method: Sixty-seven youth athletes from 20 recreational basketball teams were observed during basketball games near the end of their season, and the content of their behaviour was systematically coded. Athletes also completed measures of the 4 Cs (competence, confidence connection, and character). A person-centered analysis approach was used to examine the relationship between PYD profiles and observed behaviour.

Results: A cluster analysis identified two homogenous groups of athletes characterized by relatively high and low perceptions of confidence, connection, and character. A MANCOVA revealed that after controlling for gender and years of playing experience, the high responders group engaged in more frequent sport communication with their coaches.

Conclusions: Results feature the critical role of coach-athlete relationships in the developmental experiences of young athletes, and highlight the importance of considering the broader social environment in which sport takes place.

Keywords: youth sport, coaching, systematic observation
**Introduction**

Positive youth development (PYD) is a strength-based perspective on adolescence that views youth as resources to be developed, rather than problems to be solved (Damon, 2004). Essentially, the PYD perspective contends that all youth have personal strengths that can flourish and be promoted (e.g., Lerner, Dowling, & Anderson, 2003). The PYD approach first took root in developmental psychology approximately 20 years ago, and the majority of studies have investigated how youth’s participation in various forms of extra-curricular activities can influence important developmental outcomes (e.g., Lerner et al., 2005). Researchers have suggested that effective PYD programs tend to be characterized by the provision of leadership opportunities, an emphasis on the development of personal and life skills, sustained and caring youth-adult relationships, and a supportive and empowering environment (Lerner et al., 2012; Roth & Brooks-Gunn, 2003). Some have argued that organized sport may be a particularly fruitful context for the development of PYD (Fraser-Thomas, Côté, & Deakin, 2005; Larson, 2000). As a result, the PYD approach has gained considerable popularity among sport researchers over the past decade (see Holt, 2016; Holt & Neely, 2011 for reviews), leading to a proliferation of research across various sport contexts using several different conceptual frameworks.

One of the most dominant PYD frameworks across both developmental and sport psychology is the 5 Cs, popularized by Lerner and colleagues (2005). Lerner et al. posit that PYD occurs when youth exhibit growth in five distinct areas: Competence, confidence, connection, character, and caring. As youth develop in these five key areas over time, this can ultimately lead to a sixth C—contribution, whereby youth become thriving members of society who contribute to themselves, their families, and communities (Lerner, 2004). Following a
review of the sport literature, Côté and colleagues (2010) advocated for combining character and
caring when studying PYD in a sport context, due to conceptual overlap among these constructs
in the extant sport literature. Using this collapsed 4 Cs framework, Vierimaa and colleagues
(2012) conducted a subsequent review of literature and proposed a measurement toolkit using
existing instruments, which assess the manifestation of the 4 Cs within a sport context. Based
upon this approach (Côté et al., 2010; Vierimaa et al., 2012), each of the 4 Cs can be defined as
follows: Competence reflects athletes’ skill level or ability in a given sport; confidence refers to
athletes’ belief in their abilities to be successful in a given sport; connection is an umbrella term
which comprises quality relationships among the social actors in a sport environment (e.g.,
coaches, teammates, etc.); finally, character refers to respect, responsibility, and ultimately
engaging in appropriate moral behaviours.

Recent studies have begun to apply this 4 Cs toolkit in sport research, demonstrating its
utility to measure changes in PYD outcomes over time. Specifically, these studies have
investigated the link between the 4 Cs and observed coach behaviour using systematic
observation. For instance, Allan and Côté (2016) studied the relation between the emotional tone
of coaches’ behaviour and athletes’ perceptions of the 4 Cs. The results of their study found that
athletes of coaches who were calm and inquisitive reported more frequent prosocial behaviour
and less antisocial behaviour toward opponents than athletes of coaches who conveyed a more
negative and intense emotional tone. Erickson and Côté (2016b) adopted a longitudinal approach
in their investigation of the intervention tone of coaches’ behaviour in relation to athletes’
developmental trajectories over the course of a season. Interestingly, Erickson and Côté found
that coaches had more sport-specific interactions with athletes who scored the lowest on the 4 Cs
and more personal interactions with athletes that scored the highest on the 4 Cs. These studies
provide critical insight into the important role of coaches’ on PYD in sport. However, we also know that youth’s sport experiences and development are shaped by the differential effects of multiple social agents (e.g., Keegan, Harwood, Spray, & Lavallee, 2009), rather than the coach alone. Thus, there is a need to better understand how the full spectrum of athletes’ social interactions are linked with PYD outcomes.

The research on observed athlete behaviour, specifically, is scant in comparison to the sizeable number of studies on coach behaviour. However, there exists great potential in applying systematic observation to the study of athlete behaviour in youth sport (Murphy-Mills, Bruner, Erickson, & Côté, 2011). Several studies have examined observed athlete behaviour in relation to performance outcomes (e.g., Lausic, Tenenbaum, Eccles, Jeong, & Johnson, 2009; Lecouteur & Feo, 2011), while others have recently begun to explore how observed athlete behaviour is associated with PYD outcomes in different sport contexts. In their study on social status (i.e., connection) and athlete behaviour among competitive adolescent volleyball players, Vierimaa and Côté (2016) found that lower status athletes less frequently engaged in interactions with their teammates and coaches than their higher status peers. Erickson and Côté (2016a) studied interpersonal interactions in an informal sport play setting and found that athletes with greater perceptions of competence tended to take on a leadership role and spent more time engaged with their peers in organizational behaviours. Overall, these two studies highlight the utility of using systematic observation to uncover the behavioural manifestation of PYD in sport. However, one must also remember that social interactions are constrained by the nature of the sport activity and environment in which they take place. Erickson and Côté (2016a) focused on peer interactions exclusively due to the nature of informal sport play, while Vierimaa and Côté (2016) examined athletes’ interactions with both coaches and peers during highly structured competitive volleyball
training sessions. Organized competition represents an important middle ground between these two contexts, as it is organized and includes the presence of many key social agents (e.g., coaches, teammates, opponents), but it can be more unpredictable than training sessions, and thus researchers may be more likely to observe salient social interactions that unfold in the heat of the moment that may not otherwise occur during training.

Thus, the purpose of this exploratory cross-sectional study was to investigate the relationship between athletes’ observed behaviour during sport competitions and perceptions of PYD outcomes (i.e., the 4 Cs). Specifically, we aimed to uncover differential PYD profiles based on athletes’ responses on measures of the 4 Cs, and subsequently examine observed behavioural differences across these groups, in essence investigating the behavioural manifestation of PYD during sport competitions. Given the exploratory nature of this study and limited existing empirical evidence, no specific hypotheses were put forth.

Methods

Participants

Participants for the present study were 67 athletes from 20 teams in a single recreational basketball league in Ontario, Canada. Athletes ranged in age from 11-15 ($M_{age} = 12.42; SD = 1.29$), were predominantly male (68.7%), and had between 1-9 years of previous basketball playing experience ($M = 2.73; SD = 1.96$). All study participants and their parents provided active written consent prior to data collection. The study procedures were approved by the general research ethics review board at the first author’s university.

The basketball league is recreational in nature, and aside from a single practice at the beginning of the season, participants’ involvement is entirely made up of weekly games. Despite the competitive nature of these weekly competitions (e.g., scores are kept), no long-term
competitive elements are emphasized (e.g., standings, playoffs). Rather, all players receive equal playing time and the league strives to ensure that all players have fun, regardless of ability level. Additionally, the league is entirely volunteer-run and attracts a diverse mix of local youth by virtue of its low cost ($10 registration fee).

**Procedure**

All of the participants’ teams were observed at two time points during the last month of their season. At each time point, all of the participants’ teams were audio and video recorded using two high-definition video cameras and a parabolic microphone. One camera was set up on a tripod with a static wide-angle perspective to capture both team benches. The other camera was situated at center court and actively tracked the on-court action during play. The parabolic microphone was used to supplement the cameras’ built-in microphones to aid in capturing athletes’ verbalizations. The first time point served as pilot data and to acclimate the participants and coaches to the presence of the research team and equipment, while audio and video recorded during the second time point was retained for analysis. Immediately following the second time point, all of the participating athletes completed a battery of questionnaires that measured the 4 Cs (i.e., competence, confidence, connection, and character).
Measures

4 Cs data. Desirable athlete outcomes were measured using the 4 Cs toolkit, which is comprised of instruments that assess each of the 4 Cs: Competence, confidence, connection, and character (Vierimaa et al., 2012). This toolkit was developed through a review of the sport literature and represents a collection of previously validated instruments that measure youths’ perceptions of the 4 Cs within a sport context. With all instruments, participants were instructed to base their responses on their present team environment. For further discussion of the selection of these instruments and their psychometric properties, see Erickson and Côté (2016b) and Vierimaa et al. (2012).

Competence. Athletes’ perceptions of their competence in sport was measured using the Sport Competence Inventory (SCI; Vierimaa et al., 2012), which expanded upon a single-item measure originally developed by Causgrove Dunn, Dunn, and Bayduza (2007). The SCI measures athletes’ self-perceptions of their competence in sport using three items that assess technical, tactical, and physical skills. Athletes rate their own competence in these areas based on a 5-point scale ranging from “not at all competent” to “extremely competent” and a composite score is calculated from their responses. The present sample demonstrated adequate internal reliability (Cronbach’s α = .82).

Confidence. The self-confidence subscale of the Revised Competitive State Anxiety-2 (CSAI-2R; Cox, Martens, & Russell, 2003) was used to assess athletes’ confidence in sport. This measure is composed of five items that are rated on a 4-point scale ranging from “not at all” to “very much so”. The question stem was modified to target trait sport confidence instead of state sport confidence (i.e., indicate how you generally feel; Vierimaa et al., 2012). In the present sample, Cronbach’s α was .86.
Connection with coach. In the present study, the connection dimension intended to assess athletes’ relationships with both their coaches and teammates. Thus, Jowett and Ntoumanis’ (2004) Coach-Athlete Relationship Questionnaire (CART-Q) was used as a measure of athletes’ connection with their head coach. The CART-Q is made up of 11 items that assess coach-athlete relationship quality using a 7-point scale ranging from “not at all” to “extremely”. The mean response across all 11 items was used as an overall measure of coach-athlete relationship quality. The CART-Q demonstrated adequate internal consistency in the present sample (Cronbach’s α = .96).

Connection with teammates. The Youth Sport Environment Questionnaire (YSEQ; Eys, Loughead, Bray, & Carron, 2009) was administered as a measure of athletes’ connection with their teammates; specifically, it assessed athletes’ perceptions of team cohesion. This instrument contains 18-items which assess athletes’ perceptions of task and social cohesion based on a 9-point scale ranging from “strongly disagree” to “strongly agree”. In the present sample, Cronbach’s α ranged from .89 (task cohesion) to .91 (social cohesion).

Character. The Prosocial and Antisocial Behaviour Scale for Sport (PABSS; Kavussannu & Boardley, 2009) was used as a measure of character. The PABSS is a 20-item scale which measures the frequency in which participants engage in various types of moral behaviour using a 5-point scale ranging from “never” to “very often”. In the present study, composite measures of prosocial behaviour (α = .78) and antisocial behaviour (α = .82) were calculated and each demonstrated adequate reliability. The antisocial behaviour items were reverse-coded such that higher scores implied less frequent antisocial behaviours.

Observational data. An adapted version of the Athlete Behaviour Coding System (ABCS; Vierimaa & Côté, 2016) and Observer XT software (Noldus, Trienes, Hendriksen,
Jansen, & Jansen, 2000) were used to code the video-recorded observational data. The ABCS was originally designed to code athlete behaviour in youth volleyball training sessions and intended to provide an exhaustive categorization of athlete behaviour in that particular context (see Vierimaa & Côté, 2016 for additional detail on its development). The ABCS is comprised of eight main content categories: Prosocial communication, sport communication, directive communication, general communication, engaged, non-cooperative/disruptive, antisocial communication, and uncodable. The ABCS was designed as a continuous coding system, meaning that these categories are intended to capture every second of athletes’ behaviour during practice or competition. To pair with each content category, the ABCS also captures the target of each interactive behaviour (e.g., coach or teammate) as well as a set of contextual codes which describe different aspects of a volleyball training session. Due to the inherent differences between volleyball training sessions and basketball competitions, some changes were made to the coding system. First, the social context dimension was replaced with a location dimension, which codes whether an athlete was on the court, on the bench, or out of view at a specific point in time. Second, minor modifications were made to the content dimension, which involved combining directive communication with its parent sport communication category, as well as refining the definitions and examples of each category to more accurately reflect the sport setting in the present study. Finally, a ball possession dimension was added to measure the frequency and duration in which each athlete has possession of the basketball during play. Further discussion of these categories, along with the rest of the ABCS can be found in the coding manual (Appendix G). Due to the detailed nature of the coding process with the ABCS, a one-hour video segment for a single athlete requires 2-3 hours of coding. Thus, coding all 67 athletes in the present study required approximately 140 total hours of coding.
Using this coding system, several measures of athlete behaviour were derived for the present study (Table 5-1). Even though the coding process allows for the measurement of both frequency and duration, the present study focused solely on the frequency in which specific categories were activated over the course of a 40-minute game. Specifically, seven measures were the focus of analysis, which included the ball possession dimension and six specific combinations of content and target codes: Prosocial communication with coaches, prosocial communication with teammates, sport communication with coaches, sport communication with teammates, general communication with coaches, and general communication with teammates. Each measure is comprised of a content category (e.g., prosocial communication) and a target (e.g., coach) with whom that specific interaction is shared. For example, “sport communication with coaches” describes specific, individualized communication between an athlete and his/her coach. Collectively, these measures comprise the most common interactive behaviour states observed across all athletes. While other content categories (e.g., antisocial communication), targets (e.g., referees), and combinations of both were coded, they were observed infrequently across a small subsample of participants, and were therefore excluded from analysis.

Table 5-1. Description of coding categories.

<table>
<thead>
<tr>
<th>Category</th>
<th>Targets</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball possession</td>
<td>None</td>
<td>Athlete is clearly in possession of the basketball.</td>
<td>An athlete is dribbling the basketball up the court.</td>
</tr>
<tr>
<td>Prosocial communication</td>
<td>Coaches or teammates</td>
<td>Communication that is clearly positive in nature, and can be in response to a desirable event.</td>
<td>Verbal (e.g., “great job!”) and/or non-verbal (e.g., high fiving a teammate) in nature</td>
</tr>
<tr>
<td>Sport communication</td>
<td>Coaches or teammates</td>
<td>Communication that is related to the sport, and can be organization, technical, or tactical in nature</td>
<td>A coach providing an athlete technical feedback during a time-out.</td>
</tr>
<tr>
<td>General communication</td>
<td>Coaches or teammates</td>
<td>Communication that is unrelated to the sport.</td>
<td>Two teammates talking about something that happened at school.</td>
</tr>
</tbody>
</table>
Coder Training and Reliability

Two trained research assistants (RAs) aided the primary researcher in the adaptation of the coding system for the present study. Following an initial introduction and review of the coding system and Observer XT software, the research team engaged in several rounds of test coding whereby each individual would independently code a specific segment of video and then the RAs and primary researcher would meet to discuss any questions and compare performance. Minor refinements were made to the coding system as necessary, and this process was repeated with randomized video segments until no new issues arose. At this point, reliability testing was conducted whereby each RA was required to meet a minimum of 80% agreement on a ten-minute video segment when compared to a “gold standard” of coding completed by the primary researcher (Erickson & Côté, 2016b; Vierimaa & Côté, 2016). Each RA successfully reached the reliability threshold after approximately 60 hours of training, at which point one was selected based on availability to aid the primary researcher in coding videos for analysis.

Data Analysis

All analyses were conducted using IBM SPSS Statistics Software (version 23). This study incorporated a person-centered data analysis approach, as it aimed to uncover groups of athletes with relatively homogenous developmental experiences, and then investigate potential group differences in regard to their observed behaviour during competition. As such, data analysis was comprised of two main phases: 1) A cluster analysis using measures of the 4 Cs, and 2) a multivariate analysis of covariance comparing the clusters from phase 1 on measures of observed athlete behaviour.

Following initial data screening, all 4 Cs measures were rescaled such that each questionnaire could contribute a cumulative maximum of five points to the cluster analysis.
Thus, all questionnaires were standardized to a 5-point scale, while the subscales of the YSEQ and PABSS were each standardized to a 2.5-point scale. This standardization was necessary to ensure that each construct received equal weighting in the subsequent cluster analysis (Everitt, Landau, Leese, & Stahl, 2011). A $k$-means cluster analysis was conducted using these standardized 4 Cs measures in order to identify naturally occurring groups of cases. In other words, athletes were grouped in order to maximize within-group similarity and between-groups differences. A range of cluster solutions were examined and the optimal solution was determined based on their silhouette coefficients, which can be used as a measure of clustering validity (Rousseeuw, 1987). Follow-up independent samples $t$-tests were conducted to analyze specific group differences. In the second phase of data analysis, the pre-determined clusters of athletes were compared based on measures of their observed behaviour. After data screening, a MANCOVA was performed to assess potential group differences on each of the seven measures of observed behaviour. A covariate analysis was conducted to control or adjust for the effects of gender and years of playing experience. In the event of a significant MANCOVA, follow-up tests would be conducted to determine specific group differences using a Bonferonni-corrected alpha value to adjust for multiple comparisons.

**Results**

**Descriptive Statistics and Bivariate Correlations**

Means and standard deviations for all variables, in addition to bivariate correlations between all variables are shown in Table 5-2. Statistically significant small to medium strength correlations exist between several variables. In general, small to medium positive correlations were observed between confidence, coach-athlete relationship quality, task cohesion, and prosocial behaviour. Coach-athlete relationship quality was also positively correlated with social
cohesion. Among the observational variables (measures 10-16), ball possession was moderately and positively correlated with playing experience, competence, and antisocial behaviour.

Prosocial communication with coaches was negatively correlated with prosocial communication with teammates and positive correlated with sport communication with coaches. Prosocial communication with teammates was also positively correlated with both sport and general communication with teammates. Sport communication with coaches was also positive correlated with both sport communication with teammates and general communication with coaches.

General communication with coaches and teammates were moderately, positively correlated with one another. Finally, years of playing experience was positive correlated with confidence, coach-athlete relationship quality, ball possession, and sport communication with coaches and teammates.
Table 5.2. Descriptives and correlation matrix for all questionnaire and observational variables

<table>
<thead>
<tr>
<th>Measures</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Playing exp.</td>
<td>2.73</td>
<td>1.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Competence</td>
<td>3.99</td>
<td>.78</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Confidence</td>
<td>3.33</td>
<td>.57</td>
<td>.35**</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. C-A rel. quality</td>
<td>5.55</td>
<td>1.30</td>
<td>.27*</td>
<td>-.16</td>
<td>.42**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Task cohesion</td>
<td>5.99</td>
<td>1.98</td>
<td>.09</td>
<td>.22</td>
<td>.30*</td>
<td>.41**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Social cohesion</td>
<td>3.93</td>
<td>2.07</td>
<td>.12</td>
<td>.01</td>
<td>-.06</td>
<td>.27*</td>
<td>.26*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Prosoc. behaviour</td>
<td>3.28</td>
<td>.74</td>
<td>.11</td>
<td>.07</td>
<td>.28*</td>
<td>.36**</td>
<td>.21</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Antisoc. behaviour</td>
<td>4.37</td>
<td>.52</td>
<td>-.23</td>
<td>-.24</td>
<td>-.03</td>
<td>.23</td>
<td>.20</td>
<td>-.03</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Ball possession</td>
<td>23.98</td>
<td>16.84</td>
<td>.32**</td>
<td>.31*</td>
<td>.21</td>
<td>.03</td>
<td>.04</td>
<td>.07</td>
<td>.10</td>
<td>-.33**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Prosoc. coach</td>
<td>.82</td>
<td>1.20</td>
<td>-.03</td>
<td>.18</td>
<td>.03</td>
<td>-.18</td>
<td>-.10</td>
<td>.12</td>
<td>-.15</td>
<td>-.13</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Prosoc. team</td>
<td>2.85</td>
<td>3.19</td>
<td>.17</td>
<td>-.10</td>
<td>.02</td>
<td>.21</td>
<td>.14</td>
<td>.10</td>
<td>.18</td>
<td>.01</td>
<td>.13</td>
<td>-.29*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Sport coach</td>
<td>2.68</td>
<td>2.53</td>
<td>.42**</td>
<td>.09</td>
<td>.53**</td>
<td>.47**</td>
<td>.25*</td>
<td>.23</td>
<td>.31*</td>
<td>-.00</td>
<td>.18</td>
<td>.26*</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Sport team</td>
<td>2.14</td>
<td>2.41</td>
<td>.40**</td>
<td>.15</td>
<td>.12</td>
<td>.11</td>
<td>-.06</td>
<td>.16</td>
<td>.22</td>
<td>-.05</td>
<td>.31*</td>
<td>-.01</td>
<td>.33S*</td>
<td>.36**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Gen. coach</td>
<td>.25</td>
<td>1.15</td>
<td>.18</td>
<td>-.06</td>
<td>.11</td>
<td>.21</td>
<td>.04</td>
<td>.07</td>
<td>.32*</td>
<td>.12</td>
<td>.12</td>
<td>.21</td>
<td>.30*</td>
<td>.34**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Gen. team</td>
<td>4.39</td>
<td>5.26</td>
<td>.11</td>
<td>.11</td>
<td>-.05</td>
<td>-.08</td>
<td>-.18</td>
<td>.26*</td>
<td>.01</td>
<td>-.22</td>
<td>.00</td>
<td>.16</td>
<td>.30*</td>
<td>.15</td>
<td>.41**</td>
<td>-.10</td>
</tr>
</tbody>
</table>

Note. Playing exp. = playing experience; C-A rel. quality = coach-athlete relationship quality; Prosoc. behaviour = perceived prosocial behaviour; Antisoc. behaviour = perceived antisocial behaviour; Prosoc. coach = prosocial communication with coach; Prosoc. team = prosocial communication with teammates; Sport coach = sport-related communication with coach; Sport team = sport-related communication with teammates; Gen. coach = general communication with coach; Gen. team = general communication with teammates.
4 Cs Data: Cluster Analysis

Data were initially screened for violations of normality, heterogeneity of variance, and the presence of outliers. Missing data were addressed using pairwise deletion, which is viewed as an acceptable approach in cluster analyses (Everitt et al., 2011). A set of $k$-means cluster analyses were conducted using the 4 Cs measures of competence, confidence, connection (i.e., coach-athlete relationship quality and task and social cohesion), and character (i.e., prosocial and antisocial behaviour). Two, three, and four cluster solutions were run, but a two cluster solution emerged as optimal because it produced the highest silhouette coefficients ($m = .31$), which indicate the best fit in terms of tightness within each cluster and separation between clusters (Rousseeuw, 1987). Qualitative analysis of each cluster solution also suggested that the two cluster solution presented the most theoretically interpretable solution given the mean 4 Cs scores of each cluster. Screening of the data grouped by cluster revealed four potential univariate outliers. The two cluster solution was run both with and without the outliers (removed pairwise). Removal of the outliers had no effect on the cluster membership of the four outlier participants, and as such the outliers were retained.

The resultant two cluster solution was further validated using follow-up independent samples $t$-tests for each 4 Cs measure entered into the cluster analysis, with a Bonferroni-corrected alpha value of .007. Descriptive statistics for each cluster on the 4 Cs are presented in Table 5-3. The results of the $t$-tests show significant differences in the scores for confidence ($t(63) = 4.00, p = .000$), coach-athlete relationship quality ($t(60) = 12.62, p = .000$), task cohesion ($t(65) = 4.19, p = .000$), and prosocial behaviour ($t(59) = 3.04, p = .004$). Based on these differences, clusters 1 and 2 are hereafter labelled “high responders” and “low responders” respectively.
Table 5-3. Descriptive statistics by cluster on all questionnaire and observational variables.

<table>
<thead>
<tr>
<th></th>
<th>Cluster 1: “High Responders” (n = 46)</th>
<th>Cluster 2: “Low Responders” (n = 21)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Competence (out of 5)</td>
<td>3.98 (.78)</td>
<td>4.00 (.79)</td>
</tr>
<tr>
<td>Confidence (out of 4)</td>
<td>3.50 (.46)*</td>
<td>2.95 (.62)</td>
</tr>
<tr>
<td>Coach-athlete relationship quality (out of 7)</td>
<td>6.25 (.64)*</td>
<td>3.82 (.79)</td>
</tr>
<tr>
<td>Task cohesion (out of 9)</td>
<td>6.60 (1.75)*</td>
<td>4.65 (1.84)</td>
</tr>
<tr>
<td>Social cohesion (out of 9)</td>
<td>4.28 (2.12)</td>
<td>3.14 (1.75)</td>
</tr>
<tr>
<td>Prosocial behaviour (out of 5)</td>
<td>3.45 (.71)*</td>
<td>2.85 (.65)</td>
</tr>
<tr>
<td>Antisocial behaviour (out of 5)</td>
<td>4.42 (.45)</td>
<td>4.26 (.65)</td>
</tr>
<tr>
<td>Ball possession</td>
<td>25.70 (18.77)</td>
<td>20.22 (11.03)</td>
</tr>
<tr>
<td>Prosocial communication with coaches</td>
<td>.72 (1.01)</td>
<td>1.03 (1.54)</td>
</tr>
<tr>
<td>Prosocial communication with teammates</td>
<td>3.29 (3.41)</td>
<td>1.91 (2.49)</td>
</tr>
<tr>
<td>Sport communication with coaches</td>
<td>3.38 (2.64)*</td>
<td>1.15 (1.35)</td>
</tr>
<tr>
<td>Sport communication with teammates</td>
<td>2.18 (2.55)</td>
<td>2.07 (2.13)</td>
</tr>
<tr>
<td>General communication with coaches</td>
<td>.35 (1.37)</td>
<td>.05 (.25)</td>
</tr>
<tr>
<td>General communication with teammates</td>
<td>4.48 (5.54)</td>
<td>4.22 (4.69)</td>
</tr>
</tbody>
</table>

Note. Ball possession and communicative categories refer to the mean frequency in which each behaviour was observed during a 40-minute game.

* p < .007.

**Behavioural Data**

Basketball games ranged in length from 40 to 50 minutes; thus, all behaviour measures were standardized to a 40 minute basketball game. Ball possession scores were also adjusted according to the amount of time each athlete spent on the court over the course of a 40 minute game. Initial data screening detected three univariate outliers which were greater than 3.29 standard deviations from the mean (sport communication with coaches, sport communication with teammates, and general communication with teammates). As such, a log(x+1)
transformation was applied to all behaviour variables, at which point all of the variables fell within an acceptable range. The transformed variables were used in all subsequent analyses; however, raw descriptives are presented in Table 5-3 for ease of interpretation. No multivariate outliers were detected using Mahalanobis distances.

A MANCOVA was conducted to examine differences between high and low responders on the seven behavioural measures, while controlling for the effects of gender and playing experience. Both gender (Wilks’ λ = .44, F(7,57) = 10.51, p = .000, partial η² = .56) and playing experience (Wilks’ λ = .58, F(7,57) = 5.89, p = .000, partial η² = .42) showed significant main effects. There was also a significant main multivariate effect of cluster group on behaviour after controlling for both gender and playing experience (Wilks’ λ = .74, F(7,57) = 2.81, p = .014, partial η² = .26). Upon visual inspection of the descriptive data in Table 5-3, the high responders group scored higher than the low responders on all observed behavioural categories except prosocial communication with coaches. Follow-up analyses of variance indicated a significant difference for sport communication with coaches (F(1,63) = 10., p = .004, partial η²=.14), while no other significant differences were observed for ball possession (F(1,63) = .18, p = .68, partial η²=.00), prosocial communication with coaches (F(1,63) = .38, p = .54, partial η²=.01), prosocial communication with teammates (F(1,63) = 2.24, p = .14, partial η²=.03), sport communication with teammates (F(1,63) = 1.63, p = .21, partial η²=.03), general communication with coaches (F(1,63) = .43, p = .52, partial η²=.01), and general communication with teammates (F(1,63) = .57, p = .46, partial η²=.01).

**Discussion**

The present study explored the relationship between youth athletes’ perceptions of the 4 Cs and their observed behaviour during recreational basketball games. A cluster analysis
revealed two homogenous groups of athletes (i.e., high and low responders) based on relatively high and low perceptions of confidence, coach-athlete relationship quality, task cohesion, and prosocial behaviour. Findings suggested that the high responders group more frequently engaged in sport-related communication with their coaches than their low responders counterparts. The results of this study present numerous implications for both coaching and youth development through sport, which are discussed below and broadly relate to the unique context in which the study took place.

Interestingly, the present findings provide mixed support for the previous work of Erickson and Côté (2016b), who conducted a longitudinal study of athlete development and coach-athlete interactions. Erickson and Côté found that coaches spent more time providing positive evaluation/encouragement (i.e., prosocial communication) and discussing mental skills with athletes (i.e., sport communication) who scored lower on the 4 Cs, and more time discussing non-sport related matters (i.e., general communication) with athletes who scored higher on the 4 Cs. While the “low” and “high” clusters described by Erickson and Côté (2016b) differ slightly from those in the present study, the findings from the present study demonstrated that the high responders engaged in more frequent sport communication with their coaches. It should also be noted that in line with Erickson and Côté (2016b), high responders in the present study also engaged in more frequent general (non-sport related) communication with their coaches. However, this was not significant, which may be partly due to the relative infrequency and wide variability of this behaviour across the sample. These findings may be partly explained by considering the nature of the sport activities being observed. Erickson and Côté (2016b) observed volleyball training sessions, while the present study observed basketball games. Thus, it is possible that while coaches may aim to provide less skilled players additional
encouragement and instruction during training sessions, this effect may washout during competition when coaches are more focused on the game itself. Coaching is indeed a context-specific process, and previous research has highlighted significant differences in coaching behaviour across training and competition (Smith, Quested, Appleton, & Duda, 2016). The relative infrequency of general (non-sport related) communication with coaches (compared to sport communication) in the present study may also be explained by the supposition that during games, coaches’ behaviour is primarily task-oriented (e.g., Smith & Cushion, 2006). Together, these studies re-affirm the important role of the youth sport coach in relation to athlete development, and that the nature of coach-athlete relationship must be considered in light of the sport activities (e.g., training vs. competition) in which these social interactions take place (Vella, Oades, & Crowe, 2011).

The overall finding that high responders (who are characterized in part by higher perceptions of their relationship with their coaches) engaged in more frequent sport communication with their coaches supports previous research in the area of coach-athlete relationships. It is well known that interpersonal communication is a primary channel for developing coach-athlete relationships through the transmission of trust, respect, and concern (Lavoi, 2007b). In this sense, evidence of coach-athlete interactions can be a behavioural manifestation of a high quality coach-athlete athlete relationship. Indeed, athletes describe close and adaptive coach-athlete relationships in terms of warm, trusting and positive communication (LaVoi, 2007a), and effective coaches often engage in frequent, and consistent patterns of behaviour with their athletes (e.g., Turnnidge, Côté, Hollenstein, & Deakin, 2014). More broadly, these findings also provide further support for how coaches’ behaviour influence PYD outcomes among athletes (e.g., Vella, Oades, & Crowe, 2013), as communication with coaches was
associated with not only coach-athlete relationship quality, but a wide range of other PYD outcomes as well.

It is also important to remember that athletes’ perceptions and behaviour are shaped by the environment in which their sport takes place. While some of the differences between training and competition have already been discussed, it is also worth considering the fact that the present study focused on a unique basketball league that was recreational in nature, but also solely exposed athletes to games rather than training sessions. In contrast, most other observational studies of coach and athlete behaviour have investigated competitive club programs (e.g., Erickson & Côté, 2016b; Vierimaa & Côté, 2016) or informal sport play (Erickson & Côté, 2016a). The basketball league’s focus on fun and equal playing time, and the observed characteristics of the high and low responders provide support for Visek and colleagues’ (2015) innovative study on the fun integration theory in youth sport. In the present study, there were no differences across clusters in terms of performance-based indicators such as competence and ball possession. Instead, self-confidence and indicators of perceived and observed social relationships with coaches and teammates emerged as most salient. These social factors mirror many of the dimensions that Visek et al. found were most central to fun youth sport experiences (e.g., positive coaching, being a good sport, team friendships). This suggests that while the development of sport skills and competence is important, it is not a requirement for the creation of an enriching youth sport environment. Instead, sport programs for children and youth should focus on facilitating quality social relationships among both youth and adults, as social relationships are considered one of the most influential elements of the youth sport environment (Petitpas, Cornelius, van Raalte, & Jones, 2005).
It is also noteworthy that athletes’ perceptions of cohesion, and in particular social cohesion, were relatively low across the entire sample. Recreational sport is generally viewed as a context for fun, enjoyment and social interaction. However, the nature of the sport environment and limited contact time may have been detrimental to the development of peer relationships and perceptions of team cohesion. Donkers, Martin, Paradis, and Anderson (2015) found that task, but not social cohesion predicted enjoyment and commitment among recreational children’s soccer players. Thus, it is not surprising that both clusters showed higher perceptions of task cohesion in the present study given that teams only meet once a week to engage in a 40-minute basketball competition (a task-oriented activity). Indeed, Carron and Brawley (2008) posited that in sport teams, task cohesion usually develop first, followed by social cohesion, which is supported by both the present findings as well as those of Donkers and colleagues (2015). Even though the present study examined a recreational basketball league, athletes’ limited contact time with teammates was during a performance-oriented activity, during which they usually arrived immediately before tip-off, and left shortly afterward. This may have suppressed the development of social cohesion due to fewer opportunities for non-sport related socialization (Donkers et al., 2015). This yields key implications for youth sport programming, as these findings highlight the importance of creating opportunities for peer interactions (both task and social in nature) in order to help facilitate the development of friendships and cohesion.

The fact that neither perceptions of competence nor ball possession emerged as significantly different across clusters is also a point worthy of discussion. Indeed, past research has consistently shown a positive relationship between physical competence and indices of positive peer relationships, as sport can act as a social currency to facilitate relationships among peers (Smith, 2007). This is further supported by recent observational studies linking competence
with social status in competitive youth volleyball (Vierimaa & Côté, 2016), and observed peer interactions in informal sport play (Erickson & Côté, 2016a). Again, these disparate findings may be explained in relation to the fact that the basketball league in the present study emphasized equal playing time and enjoyment for all athletes regardless of ability level. In doing so, they may have effectively mitigated the relative importance of athletes’ competence. While non-significant, the results show a general overall trend of the high responders engaging in more frequent prosocial, sport, and general communication with their teammates, providing some further support for the earlier suggestion regarding the importance of facilitating social interactions among teammates.

Given the exploratory nature of this study, there are several limitations and future directions to consider. First, in this cross-sectional study athletes’ perceptions of the 4 Cs were used as a grouping variable to predict measures of observed behaviour. However, the actual directionality of this relationship remains unclear. For example, do more frequent interactions with coaches lead to a stronger coach-athlete relationship, or is the opposite true? Ultimately, it is likely a reciprocal relationship in that individuals’ personal traits and sport experiences may influence their behaviour, and their experiences over the course of the season may also shape their social interactions (Erickson & Côté, 2016a). Future research should adopt longitudinal designs in order to attempt to further clarify this relationship. Second, given the inherent difficulties in observing athlete behaviour in a naturalistic setting on a continuous basis, the coding system used in this study was relatively simple, focusing on general content categories and the frequency in which they were observed. Future studies should move beyond the sole observation of the content or “what” of athlete behaviour, and also consider more nuanced aspects of such as emotional tone (e.g., Allan & Côté, 2016) or motivational climate (e.g., Smith
et al., 2015). Additionally, it would be advantageous for follow-up studies to take advantage of emerging dynamic systems-based analytical approaches which allow for the analysis of the patterning and sequencing of observed behaviour, rather than just their frequency or duration (Murphy-Mills et al., 2011).

Overall, the present study identified two groups of recreational youth athletes who were characterized by relatively high and low perceptions of confidence, coach-athlete relationship quality, task cohesion, and prosocial behaviour. The high responders group also engaged in more frequent sport-related communication with their coaches. Together, these findings re-affirm the importance of certain features of the coach-athlete relationship in the developmental experiences of young athletes, and highlight the consideration of the particular setting (e.g., game, practice, recreational, competitive) in which youth sport takes place.
References


http://dx.doi.org/10.1123/jpah.2013-0180
Chapter 6

General Discussion

Overall, this program of research aimed to provide an in-depth exploration of the structure and developmental outcomes associated with a unique community youth sport program. Studies 1 and 2 used qualitative approaches to describe the league as a whole from the perspective of current coaches (Study 1) and explore the league’s culture using ethnographic methods (Study 2). The third and final study used systematic observation to examine the relationship between athletes’ perceptions of PYD outcomes (i.e., the 4 Cs) and their observed behaviour during basketball competitions.

Study 1 presented a descriptive picture of the basketball league using the PAF (Côté et al., 2014; 2016) as a framework to situate the findings. The themes generally aligned with the pre-existing structure of the PAF, with two main exceptions. First, the results indicated that two of the dynamic elements (activities and relationships) were better conceptualized as nested within the sport setting, rather than all three at the same conceptual level. Second, coaches emphasized the importance of having fun and ensuring that athletes have positive immediate experiences. As a result, the PAF was adapted (Figure 3-1) to include these immediate experiences, which may in turn over time mediate changes in distal developmental outcomes.

An additional theme from Study 1 related to the perceived tendency of former players to return to the league later in life as coaches or volunteers. This theme of “contribution”, in concert with the culture of the league was explored in Study 2 using an ethnographic approach. Study 2 described the culture of the league in terms of its welcoming atmosphere, supportive community, focus on fun, accessibility, and inclusiveness, and at its core, shared beliefs in equality, family, and giving without expecting a return. These themes provide important insight regarding the
cultural values that may encourage former players to return to the league to give back as coaches and volunteers, and further highlight the area of contribution in sport as one that is ripe for further research. This study also introduces Schein’s (1990; 2010) model of organizational culture as a lens through which to study the “setting” component described in the PAF.

The third and final study in this line of research measured the 4 Cs, or short-term PYD outcomes as described in the PAF, and examined their association with athletes’ observed behaviour during basketball games. A cluster analysis revealed the presence of two groups of athletes characterized by relatively high and low perceptions of confidence, coach-athlete relationship quality, task cohesion, and prosocial behaviour. The “high responders” group engaged in significantly more sport-related interactions with their coaches, while they also showed a general overall trend of more frequent interactions with both coaches and teammates. These findings highlight the important role of the coach in athletes’ development.

Unsurprisingly, a commonality that emerged across all three studies was the league’s emphasis on fun. Indeed, its “just for the fun of it” philosophy guides its current structure and operation. In terms of the nature of its sport activities, a focus on playing weekly games rather than practices echoes research which suggests that youth find games more fun than drills and other training activities (Strean & Holt, 2000). Study 1 also found that the combination of the league’s sport activities and the competitive environment created a sport context conducive to the development of character (Shields & Bredemeier, 2009). Through emphasizing the process of competition (i.e., short-term competition) and downplaying long-term outcomes (e.g., winning or losing) the league is able to structure an environment which retains elements of competition, but remains true to its “just for the fun of it” philosophy.
Several aspects related to the league’s approach to fun and competition from Studies 1 and 2 (e.g., sportspersonship, learning and improving, trying hard) have previously been identified as some of the most important aspects of fun youth sport experiences (Visek et al., 2015). Furthermore, in the third study, the two clusters were differentiated based on self-confidence and indicators of perceived and observed social relationships with coaches and teammates. These factors mirror several dimensions that Visek et al. found were most central to fun youth sport experiences (e.g., positive coaching, being a good sport, team friendships). While the development of sport skills and competence is important, it is not a requirement for the creation of an enriching youth sport environment. Instead, sport programs for youth should focus on facilitating quality social relationships among both youth and adults, as social relationships are considered one of the most influential elements of the youth sport environment (Petitpas et al., 2005). The league’s approach to fun enables the creation of sport activities that meet the developmental needs of players of all ages and ability levels. Importantly, this aims to ensure that all of the players have positive experiences and remain engaged in the league and sport in general in the future (Côté et al., 2014; 2016).

The results of this line of research paint a relatively positive portrayal of the basketball league. Indeed, the dissertation generally supports the presupposition of the basketball league as “successful” and “sustainable”. However, it is important to review the results of these studies from a critical perspective and bring to light potential limitations related to the league. For example, in Study 1 coaches highlighted a number of structural challenges that have arisen through their coaching experiences. Many of these challenges related to the limited contact time between athletes and coaches, given the single game that each team plays on a weekly basis. Coaches perceived that this limited contact time, coupled with a focus on fun often comes at the
expense of skill development. Previous research has found that many coaches share this perceived conflict between skill development and fun (Garcia Bengoechea & Strean, 2004), and Strean and Holt (2000) suggested that coaches need to make an explicit effort to mesh both to optimize youth’s sport experiences and development.

While not mutually exclusive, the relative balance between fun and skill development is dependent on the goals of the specific sport context. In this dissertation, the basketball league explicitly emphasized that fun took precedence over skill development. Through discussions with coaches and league members in Studies 1 and 2, it became clear that the league prioritized fun because the majority of its athletes are new to the sport (or organized sport in general), and thus it is crucial to ensure that these individuals have positive experiences, in order to provide a foundation for lifelong participation in sport and physical activity. Indeed, young athletes often cite “fun” as a primary motive for participation in team sports, and a lack of fun as a reason for sport withdrawal (Petlichkoff, 1992; Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993).

This focus on fun reaffirms the importance of early sampling and diverse sport experiences for youth. Indeed, research has continued to demonstrate that sampling different sports is associated with higher levels of performance, participation, and personal development (e.g., Côté & Vierimaa, 2014). In terms of PYD, there appears to be a positive relationship between both the breadth (i.e., diversity of activities) and intensity (i.e., contact time) of extra-curricular activities and PYD outcomes (Hansen & Larson, 2007; Zarrett et al., 2009). Thus, in order for youth to maximize the benefits that they accrue from their sport involvement, they should seek out diverse experience both between and within sports, and engage in these activities over sustained periods of time.
The limited contact time afforded to athletes in the league may also limit their ability to develop new peer relationships, as most athletes arrived in the gym immediately before games and left immediately afterward. This notion is supported by Study 3 which found that all athletes had relatively low perceptions of social cohesion, which is echoed by other recreational sport research (Donkers, Martin, Paradis, & Anderson, 2015). Interestingly, this finding conflicts with themes that were identified in Study 1, where coaches described the basketball league as a way for athletes to expand their social networks and develop new friendships with teammates. Taken together, the results of all three studies suggest that the social relationships nurtured through the league’s tight-knit family culture may emerge more slowly over time, and due to the annual remixing of team rosters, a single season may not provide enough opportunity for athletes to develop friendships or a sense of social cohesion with all of their new teammates. Furthermore, the results from Study 1 suggest that these peer relationships exist not only among teammates, but with opponents as well, as coaches described how athletes relished the opportunity to play against teammates from a school or club team, or simply interact with classmates outside of the school context. These ways through which the league appears to nurture peer relationships in spite of the limited contact time affirms the importance for youth development programs to integrate family, school, and community efforts (NRCIM, 2002).

**Strengths and Limitations**

The program of research as a whole addressed an important gap in the PYD literature in terms of the relatively understudied recreational sport context (Holt & Jones, 2008). Rather than relying on a single methodology or form of data collection, this program of research employed both qualitative and quantitative methods which allowed for a well-rounded depiction of the social phenomena being studied. This facilitated the triangulation of multiple sources of data and
integration of converging themes and results across studies. The systematic observation method applied in Study 3 importantly allowed for the measurement of observed athlete behaviour, as athletes have seldom been the primary focus of observational research in youth sport (Murphy-Mills et al., 2011). This lead to the refinement of the Athlete Behaviour Coding System (Vierimaa & Côté, 2016) and put forth some initial behavioural characteristics that may be associated with different PYD profiles.

Even though the case study approach enabled an in-depth description of the basketball league, this can also be viewed as a limitation in that the findings are context-dependent and may not be immediately generalizable to other contexts. For example, Study 2 demonstrated that the league’s current culture has evolved over 60 years, and thus it may not be possible to replicate exactly in other contexts. However, it has been argued that the generalizability concerns with case study research are overblown (Flyvbjerg, 2006), and that case studies which provide rich descriptions allow readers to develop their own naturalistic generalizations (Stake, 2006).

There were also a number of challenges related to data collection. Particularly in Study 3, the sample size was constrained due to a seemingly low level of investment on the part of participants and their parents. Perhaps due to its low cost, many families seemed less invested in the league relative to other extra-curricular activities, and as a result, this lead to inconsistent attendance across the season. This created challenges in collecting completed consent forms from athletes’ parents, and also ensuring that athletes were present for both the observational and questionnaire components of data collection. In addition, the small size of the gymnasium meant that there were limited areas to set-up the camera equipment. The less than optimal camera set-up lead to the occasional occluded view due to players or spectators standing in the way, and also limited the detail in which particular behaviours could be coded. Despite these challenges, the
data collection process provided many valuable lessons regarding naturalistic field-based research in the unpredictable context that is recreational youth sport.

**Future Directions**

Since this dissertation examined a relatively understudied sport context, there are several pertinent directions for future research. A case study approach was useful to develop an in-depth description of the basketball league using multiple forms of data. In line with previous case studies of effective talent development environments in sport (Henriksen et al., 2010a; 2010b; 2011), future research should examine other youth sport programs which effectively facilitate PYD in order to identify converging social and contextual characteristics which emerge across studies. The analyses in Study 3 were unable to account for potential team-level effects due to a small sample size and lack of intact teams. Future research should try to recruit larger samples of intact teams, which would potentially allow for multilevel modeling analyses to account for the nested nature of athletes within teams. This sampling approach would also enable the use of social network analysis (e.g., Lusher, Robins, & Kremer, 2010) to study the development of peer relationships across teams and seasons. Finally, a contribution to the literature from this line of work is the suggestion that positive immediate experiences (i.e., enjoyment) may mediate changes in PYD outcomes. Future studies should attempt to quantitatively measure and test the relationships between the dynamic elements and immediate experiences, personal assets, and long-term outcomes as a means of validating the structure of the PAF (Côté et al., 2014; 2016).

**Implications**

The structure of this unique league provides a set of established guidelines for the development of a sustainable community sport program focused on ensuring athlete enjoyment and positive overall athlete development. It is known that youth from disadvantaged
backgrounds (e.g., low SES) are most commonly excluded from organized sport (Collins & Kay, 2014), which is problematic because disadvantaged youth are likely to gain the most from the PYD benefits of sport programs (Walsh, 2008). Thus, sport administrators need to prioritize the affordability and accessibility of sport programming to ensure that all youth have the opportunity to participate in organized sport.

This dissertation has highlighted the importance of considering each of the dynamic elements (i.e., activities, relationships, and settings) in the design of youth sport programs. However, all too often, an emphasis is placed on one of these elements in isolation. For example, recent sport medicine studies have brought increased attention to the early specialization debate as data has suggested a link between early specialization in a single sport and increased injury risk (e.g., Feeley, Agel, & LaPrade, 2015). By manipulating the activities element, it may be possible to mitigate the injury risk associated with sport participation, but in order to optimize athletes’ physical and psychosocial development, one must also consider the social relationships surrounding the activity and the setting in which it takes place.

The ultimate goal of this line of research was to develop a detailed understanding of the processes through which a unique recreational basketball league facilitates PYD. By combining multiple converging methodological approaches, these studies yielded a rich description of the many social and contextual factors which characterize this sport context. The results emphasized the league’s focus on fun and enjoyment, a culture that works to facilitate contribution, and the importance of adaptive social interactions with both teammates and coaches. It is hoped that this body of work can provide a foundation for subsequent research on PYD in recreational sport, and support for the continued use of novel methodologies in this area of study.
References for General Introduction, Literature Review, and General Discussion


doi:10.1371/journal.pone.0154275


project introduction and Year 1 findings. *Qualitative Research in Sport, Exercise and Health, 5*, 214-244.


Appendix A

Study 1: Letter of Information and Consent Form
COACH LETTER OF INFORMATION AND CONSENT FORM

Title of the study: Examining Youth Development in Sport

The purpose of this study is to examine how different coach behaviours affect youth’s development in sport. Specifically, the goal is to understand how the different ways coaches interact with athletes during practices leads to athletes’ experiences in sport. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen's policies.

In Part I of the study, each athlete and coach will complete a questionnaire related to his/her experience in the sport program (i.e., on a specific team with a specific coach). Over the course of two-three months, multiple practices and competitions in that sport setting will then be videotaped. As a coach, you will be wearing a microphone to record any talking. The videotaped sessions will then be watched by the principal investigators to understand the different coach-athlete interactions (i.e., patterns and sequences of coach/athlete interactions). Individual clips from the videos may also be used in a later part of the project. In Part II of the study, the coaches will be asked to participate in interviews concerning their experience with the sport program (i.e., coaching style, coaching philosophy and sport experience). These opinions will be kept completely anonymous and confidential. There are no known or foreseeable risks involved by participating in this study.

This is part of a research study for which Jean Côté is the primary researcher. Information collected from coaches will remain completely confidential. For the entire study, all information collected will be kept in a locked filing cabinet by the primary researcher. Items will be available to the primary researcher and his research team. As a reminder your participation in this study is completely voluntary and you can decide to stop participating at any point without explanation or consequences. Should you decide to withdraw from participation, information collected to that point will be destroyed. Although there is no financial compensation it is anticipated that your information will help us to better understand the positive developmental experiences of youth sport participation.

The study is only interested in the information collected for the entire group and so all participants’ individual responses will never be known, keeping individuals identity secure. While the information collected may be presented at academic conferences and published in relevant academic journals, anonymity and confidentiality of all participants will be maintained.

Any questions about study participation may be directed to Dr. Jean Côté at 613-533-6000 x79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.
Jean Côté, PhD
Primary Investigator
Director and Professor
School of Kinesiology and Health Studies
Queen’s University
Kingston, ON
(613)533-6000 x 79049
jc46@queensu.ca

Joan Stevenson, PhD
Chair
General Ethics Review Board
Queen’s University
Kingston, ON
(613)533-6288
stevensj@queensu.ca
PARTICIPANT CONSENT FORM - COACH

I have read the information letter and understand that this study requires the athletes I coach to complete a questionnaire regarding their experiences in our specific sport setting (i.e., on this specific team, with me as a coach). I also understand that part of this study involves the videotaping of multiple practices and competitions in order to examine interactions between coaches and athletes. In addition, I understand that I will be asked to participate in an interview concerning my experience with the sport program (i.e., coaching style, coaching philosophy and sport experience).

I have been informed that my confidentiality will be protected throughout the study, and that the information I provide will be available only to the primary researcher and his research team. While the results of this study may be presented at academic conferences and/or in academic journals, I am aware that any results will be presented for the group only (i.e., no individual data will ever be reported) – thereby maintaining my anonymity. Similarly, the videotaped practices and competitions will only be viewed by the primary researcher and/or his research team and only for the purpose of data analysis – they will never be shown at conferences or in any other presentation. Lastly, the interview content will only be used by the primary researcher and/or his research team and only for the purpose of data analysis – they will also never be shown at conferences or in any other presentation.

I understand that my participation in this research project is completely voluntary and that I reserve the right not to answer any question(s) I do not feel comfortable with. I also recognize that I may stop participating at any time without explanation or consequence. I understand that any data collected up to that point will be destroyed.

Finally, any questions I have about this research project and my participation have been answered to my satisfaction. I understand that I am invited to contact the primary researcher and/or the General Ethics Review Board should any further questions or concerns about this research project or my participation.

I consent to participate in this research project.

________________________________________
Name of Participant                                        Signature

Date

128
Appendix B

Study 1: Interview Guide
Interview Guide

Part A: Coaching Background

1. Introductory comments
   a. Introduce interviewer and purpose of study
   b. Confidentiality
   c. Use of data, reasons for audio-recording and notes
   d. General focus of questions
2. Coaching background and demographics
   a. How long have you been coaching?
   b. How did you get involved with coaching in this program?
   c. What other types of coaching experience do you have?
3. A coach’s philosophy is often viewed as a key building block to successful coaching.
   a. How would you describe your philosophy of coaching basketball?
   b. What, if any, changes have you observed in your philosophy over time?
   c. What emphasis or balance do you place on winning vs. fun?
      i. What has influenced this emphasis?
      ii. Conflicts that have arisen and their resolution
4. Successful coaches display many different types of coaching styles. Some are calm and laid back while others “Get in your face.”
   a. How would you describe your coaching style?
   b. If I was at one of your game’s, what types of things would you do that would demonstrate your coaching style?
5. What has influenced the development of your coaching philosophy and style?
   a. Former coaches? Professional coaches?
   b. How does your own philosophy and style compare to that of your fellow and past coaches?

Part B: Experiences with the Program

1. If I was a new player or coach thinking about joining the [program], what would you tell me about the [program]?
2. I am interested in learning about your day-to-day experiences with the team. Please describe what a typical game is like for you.
   a. What happens?
   b. What do you do?
   c. Who do you talk to?
   d. What do you think about?
   e. How do you feel?
3. One of the unique aspects of the [program] is that many former players re-join the organization to volunteer as coaches.
   a. Why did you decide to volunteer as a coach with the [program]?
   b. What aspects of the [program] influenced your choice to join/volunteer with this program over others?
   c. Particular social influences? (e.g., peers, past coaches, etc.)
d. Structural characteristics of the program?

4. How have your experiences with the program changed with your transition to a coaching role?

5. We are interested in understanding what you have learned since you have joined the [program].
   a. What skills have you learned?
   b. What goals have you achieved?
   c. What is the most important thing you have learned since you started?

6. From your perspective, I am interested in better understanding what the main goals of this program are.
   a. What skills do you want your athletes to develop?
   b. How do you develop these skills?
   c. What other types of things do you want the athletes to experience and learn?

7. What aspects of the [program] have had the greatest impact on you?
   a. Coaches?
   b. Parents?
   c. Teammates/peers?

8. In thinking about all of your experiences with the [program], what types of changes do you see or feel about yourself which have resulted from your participation?
   a. Feelings about self?
   b. Aspirations?
   c. Interpersonal skills/relationships?
   d. Academic performance?
   e. Changes in your athletes?

9. Now that you have told me a lot about your experiences with the [program], I would like to give you the opportunity to talk about what you like and dislike about the [program].
   a. What do you like about the [program]?
   b. Biggest strength of the program?
   c. What do you dislike?
   d. Suggestions for improvement?

10. Concluding comments and thank you
   a. Additional comments that we didn’t address?
Appendix C

Study 2: Letters of Information and Consent Forms
Title of the study: Exploring the dynamics of peer relationships in recreational youth sport

The purpose of this study is to investigate how peer relationships influence athletes’ personal development in sport. Specifically, the goal is to explore how peer relationships change and influence athletes’ personal development over the course of a season on an adolescent basketball team. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen's policies.

If you volunteer to participate in this component of the study, you will be asked to engage in a one-on-one interview with the primary researcher at the end of the season. During the course of the interview, you will be asked to reflect on your coaching style and the relationships among your players. The interview should take about 1 hour to complete. The interview will take place (a) over the phone (b) over SKYPE or (c) in person at the location of your choice, either at the interviewer’s office or in a private room at your team’s gymnasium (while other co-workers are present in the building).

There are no known or foreseeable risks involved for participating in this study. There will be no deception used in this study. Participation is voluntary and you can withdraw at any time.

This is part of a research project for which Matthew Vierimaa is the primary researcher. The results from this study will be published and presented at conferences; however, your identity will be kept confidential. Although we will report direct quotations from the interviews, each interview participant will be given a pseudonym (false name), and all identifying information will be removed. All the information provided through the interviews will be confidential and will be stored by in a controlled-access location (e.g., locked office, password protected files) in the School of Kinesiology and Health Studies at Queen’s University. As a reminder, participation is completely voluntary and should you wish, you may withdraw from the study at any time, for any reason, without explanation or consequences by contacting the primary researcher, Matthew Vierimaa. Any information collected up to the time you withdraw from the study will be destroyed.

With your permission the interviews will be used to help improve coach behaviours within the youth sport environment. If you decide that you would like to be a part of this study, please complete the attached form. Any questions about study participation may be directed to Matthew Vierimaa at 613-453-9157 or 5mv5@queensu.ca or his supervisor Jean Côté at 613-533-6000 x79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.
COACH CONSENT FORM – INTERVIEW

I have read the information letter and understand the purpose of this study and my involvement in this study.

I have been informed that my confidentiality will be protected by the researcher to the maximum extent possible; however, team members and their parents involved in the study (and perhaps other individuals who have knowledge of the league) may make assumptions based on the circumstances described. I have been assured that the researcher will protect my anonymity as much as possible by using pseudonyms at all local and academic presentations and in all written materials.

I understand that my participation in this research project is completely voluntary and that I reserve the right not to answer any question(s) I do not feel comfortable with. I also recognize that I may stop participating at any time without explanation or consequence. I understand that any data collected up to that point will be destroyed.

Finally, any questions I have about this research project and my participation have been answered to my satisfaction. I understand that I am invited to contact the primary researcher and/or the General Ethics Review Board should any further questions or concerns about this research project or my participation.

I consent to participate in this research project conducted by the School of Kinesiology and Health Studies at Queen’s University.

Name of Participant: ____________________________
Signature: ____________________________
Date: ____________________________

Please indicate if you wish to receive a summary of the study findings: [] Yes  [] No

Matthew Vierimaa, MSc
Primary Investigator
School of Kinesiology & Health Studies
Queen’s University
Kingston, ON
(613)453-9157
5mv5@queensu.ca

Jean Côté, PhD
Lab Supervisor
School of Kinesiology & Health Studies
Queen’s University
Kingston, ON
(613)533-6000, ext. 79049
jc46@queensu.ca

Chair of the General Research Ethics Board
Queen’s University
Kingston, ON
(613)533-6081
chair.GREB@queensu.ca
You are invited to participate in a study entitled ‘Exploring the dynamics of peer relationships in recreational youth sport’. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen's policies. Please read this form carefully and feel free to ask any questions you may have.

**Purpose and Procedures**

The purpose of this project is to better understand how young athletes get along with the teammates on their basketball team. As young athletes, we want to learn directly from you, the experts! If you choose to participate in this study, you acknowledge that the primary researcher (the assistant to your coach) will be keeping notes about conversations he has with members of the team and things that he notices about how team members interact with one another. These instances will be limited to organized team events and games (e.g., in the gym during weekly games). All of this information will be kept confidential and anonymous and will never be shown to your teammates or coach.

**Potential Risks**

Participation in this study presents no anticipated risks.

**6.1.1 Potential Benefits**

As a participant, you will be helping to make important research contributions that will help to better structure youth sport programs so that all young athletes have positive experiences in sport.

**6.1.2 Data Storage and Confidentiality**

All data will be securely stored in a locked office at Queen’s University. The data from this study will be published and presented at conferences; however, your identity will always be kept confidential and we will assign you a code name when appropriate.

**6.1.3 Right to Withdraw**

You may withdraw from the study for any reason, at any time, without penalty of any sort to you or your teammates by contacting the principal investigator, Matthew Vierimaa (613-453-9157 or 5mv5@queensu.ca). You do not have to answer any questions that you are uncomfortable with. Due to the nature of the data, not all of the information collected up until the time you withdraw can be destroyed, but all possible identifying information will be removed from this data.
6.2 Questions

Any questions about study participation may be directed to Matthew Vierimaa at 613-453-9157 or 5mv5@queensu.ca or his supervisor Jean Côté at 613-533-6000, ext. 79049 or jc46@queensu.ca. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.

Matthew Vierimaa, MSc  Jean Côté, PhD  Chair of the General Research Ethics Board
Primary Investigator  Lab Supervisor  Research Ethics Board
School of Kinesiology  School of Kinesiology  Queen’s University
& Health Studies  & Health Studies  Kingston, ON
Queen’s University  Queen’s University  (613)533-6081
Kingston, ON  Kingston, ON  chair.GREB@queensu.ca
(613)453-9157  (613)533-6000, ext. 79049
5mv5@queensu.ca  jc46@queensu.ca

6.2.1 Consent to Participate

I have read and understood the description provided above. I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I consent to participate in the study described above, understanding that I may withdraw this consent at any time. A copy of this consent form has been given to me for my records.

____________________________________________  ____________________________
Signature of Participant  Date

____________________________________________  ____________________________
Signature of Researcher  Date
You are invited to participate in a study entitled ‘Exploring the dynamics of peer relationships in recreational youth sport’. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen's policies. Please read this form carefully and feel free to ask any questions you may have.

**Purpose and Procedures**

The purpose of this project is to better understand how young athletes get along with the teammates on their basketball team. As young athletes, we want to learn directly from you, the experts!

If you volunteer to participate in this study, you will be asked to participate in a one-on-one interview with the primary researcher at the end of the season. During the course of the interview, you will be asked to reflect on how you get along with your teammates, and how your teammates have influenced your sport experiences. The interview should take about 1 hour to complete. The interview will take place at the location of you and your parent’s choice, either at the interviewer’s office or in a private room at your team’s gym (while other family members or co-workers are present in the building).

**Potential Risks**

Participation in this study presents no anticipated risks.

**6.2.2 Potential Benefits**

As a participant, you will be helping to make important research contributions that will help to better structure youth sport programs so that all young athletes have positive experiences in sport.

**6.2.3 Data Storage and Confidentiality**

All data will be securely stored in a locked office at Queen’s University. The data from this study will be published and presented at conferences; however, your identity will always be kept confidential and we will assign you a code name when appropriate.

**6.2.4 Right to Withdraw**

You may withdraw from the study for any reason, at any time, without penalty of any sort by contacting the principal investigator, Matthew Vierimaa (613-453-9157 or 5mv5@queensu.ca). There will be no team related effects associated with withdrawal. You do not have to answer any
questions that you are uncomfortable with. Any information collected up to the time you withdraw from the study will be destroyed.

6.3 Questions

Any questions about study participation may be directed to Matthew Vierimaa at 613-453-9157 or 5mv5@queensu.ca or his supervisor Jean Côté at 613-533-6000 x79049 or jc46@queensu.ca. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.

Matthew Vierimaa, MSc  Jean Côté, PhD  Chair of the General Research Ethics Board
Primary Investigator  Lab Supervisor  Research Ethics Board
School of Kinesiology  School of Kinesiology  Queen’s University
& Health Studies & Health Studies  Kingston, ON
Queen’s University  Queen’s University  (613)533-6081
Kingston, ON  Kingston, ON  chair.GREB@queensu.ca
(613)453-9157  (613)533-6000, ext. 79049
5mv5@queensu.ca  jc46@queensu.ca

6.3.1 Consent to Participate

I have read and understood the description provided above. I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I consent to participate in the study described above, understanding that I may withdraw this consent at any time. A copy of this consent form has been given to me for my records.

_________________________ ________________________
Signature of Participant Date

_________________________ ________________________
Signature of Researcher Date
Appendix D

Study 2: Interview Guides
Revised Interview Guide: Coach

Opening questions

The opening questions will ask the participant about their coaching experiences.

I’d like to begin today by first getting a sense of your coaching background and how you got started in coaching.

1. How old are you and how long have you been coaching?
2. How did you get involved in coaching?
3. Do you coach in any other leagues or sports?
4. Did you play basketball when you were younger?
   a. In [name of league]?
   b. Highest level?
5. If any, can you tell me about what coaching credentials you have?
6. How would you describe your coaching philosophy?
7. Have you had any life experiences that have contributed to your coaching style?

Transition questions

Transition questions will provide a link to the upcoming key questions (Morgan & Krueger, 1998). The planned transition questions will include:

8. Suppose I was an athlete who was thinking about joining your league… what would you tell me about it?
    a. Suppose I was an athlete who was thinking about joining your team, what would you tell me about your team?
9. Please tell me about what a usual game night is like for you.
   - Please describe how you interact with your players.
   - I’d like to hear some examples of some difficult situations among the players on your team? Describe what happened and what you did.
   - How do you see your tasks/roles during games?
   - Do you have any other interactions with players outside of game night?

Key questions

Several key questions will serve as the focal points of the interview.

10. We are very interested in how the league is run and what makes it unique:
    - Please describe how and why you first got involved with the league.
    - How would you compare this league to other local basketball programs?
    - In your opinion, what are the strengths and weaknesses of the league?
    - What is your perception of the league’s “Just for the fun of it” motto?
      o What sort of influence, if any, does this have on your coaching style?
How do you know whether or not your players are having fun?
In your opinion, how does the underlying competitive nature of basketball games (e.g., keeping score, posting scores online) align with the league’s “just for fun” focus?

- What sort of changes do you see in athletes through their participation in the league?
  - As a coach, what sort of things do you do to try and influence these changes?

- Throughout your involvement with the league as a player/coach/volunteer, what sort of changes have been seen in how it is run, and what type of corresponding effects have these changes had on the players?

- One of the unique aspects of the league is its ability to retain volunteers over time, and how players often return to “give back” after their playing days have come to an end.
  - Why do you think the league has been so successful in this regard?
  - (If applicable), why did you choose to stay involved and give back to the league?

- Something that I have noticed throughout the season is that the coaches seem to share a very strong bond with one another, and often seem to be having as much (or more!) fun than the athletes.
  - How would you do describe your relationship with your fellow coaches, and the dynamic among the coaches and volunteers in your division?
  - How does this dynamic in turn, influence your coaching experience, and the experiences of your athletes?

12. One of our key interests is to explore how your players’ peer relationships influence their development and experiences in sport.

- How do the varied backgrounds and ability levels of your players influence how their interactions and relationships with one another?
- What sorts of things do you do or say to facilitate positive relationships among your athletes?
- Can you describe changes you have observed among player friendships over the course of the season?
- Have you had any conflicts on the team this year? If so, how did you deal with the situation(s)?
- What sorts of things do you do or say to facilitate cohesiveness among your athletes?
- Who are the leader(s) on your team? What makes them a leader?

13. What sort of factors do you consider in how you interact with individual players on your team?

14. If you could change something about how you interact with your players, what would it be?
15. If you were mentoring a new coach, what advice would you give them about fostering friendships and team cohesion among players?

**Ending questions**

16. In general, how do you think that your coaching has influenced your athletes’ peer relationships, personal development, and motivation to keep playing?
   
   a. In general, who do you think your involvement as a coach has shaped you and your motivation to keep coaching?

17. If you were tasked with directing the future of the league and money was no obstacle, what (if any) changes would you make to how the league is currently run?

18. Do you plan to return as a coach in the league next season?

19. Is there anything I’ve missed or anything that you think is important that we haven’t talked about?
Revised Interview Guide: Athlete

Introductory Comments

- Introduce myself and the general purpose of the study
- Confidentiality
- Use of data and reasons for audio-taping and note-taking
- Focus and direction of questions

Opening questions

The opening questions will ask the participant for age, previous playing experience, reasons for participating. The planned questions include:

1. What level of basketball did you play last season?
2. How long have you been playing basketball?
3. What is the highest level of basketball that you have competed?
4. What other sports do you play? Do you play in other basketball leagues?
5. Why did you start playing basketball?
6. Why do you play basketball now?
7. Why did you choose to get involved with the [name of league]?

Transition questions

Transition questions will provide a link to the upcoming key questions (Morgan & Krueger, 1998). The planned transition questions will include:

6. Suppose I was an athlete who was thinking about joining your team, what would you tell me about your team and the league in general?
7. What are the good/bad things about playing basketball in this league?
8. What is the best/worst thing that happened this year?
9. Please tell me about what a typical game is like for you.
   - What happens?
   - Who do you talk to?
   - What do you think about?
   - How do you feel?
Key questions

Several key questions will serve as the focal point of the interview and aim to provide a deeper understanding of the athlete’s perceptions of their relationships with their peers (i.e., teammates and opponents).

10. We are interested in learning more about your perceptions of [name of league] and how it is run.

- How does the league compare to other sports/leagues that you also play in?
- How do you feel about the fact that there are no practices?
- What have you learned through playing in the league this season?
- What are your most/least favourite things about the league?
- How do you feel about the fact that there are no standings or playoffs at the end of the season?

11. One of our other key interests is to explore how your relationships with your teammates and opponents have influenced your experiences and development throughout this season.

- What sorts of things do you do or say when you are with your teammates?
- Have you made any friends on your team this year? Do you have any friends on other teams in the league?
- Have you learned anything about making friends through being on the team?
- What characteristics distinguish your friends vs. enemies?
- Have you had any conflicts on the team this year? If so, how did you deal with the situation?
- What have you learned about teamwork through being on the team this year?
- How has your coach influenced your relationships with your teammates?
- Who are the leaders on your team? What makes them (or you) a leader?

Ending questions

11. In general, how do you think your participation in the league has shaped your development and motivation to keep playing?

12. Do you plan to return to the league next season?

13. If you were tasked with directing the future of the league and money was no obstacle, what (if any) changes would you make to how the league is currently run?

12. Is there anything I’ve missed or anything that you think is important about your relationships with your peers that we haven’t talked about?
Appendix E

Study 3: Letters of Information and Consent Forms
PARTICIPANT PARENTAL LETTER OF INFORMATION AND CONSENT FORM

Title of the study: Examining Youth Development in Sport

We would like to ask for your son or your daughter’s assistance with a study that is being carried out by a team of researchers from Queen’s University. The purpose of this study is to examine how youth develop personally through sport. The findings from this project will provide important information to coaches and educators in regard to developing positive personal development in a sport setting and beyond as contributing members of society. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen's policies.

If your son or your daughter volunteers to participate in this study, he/she may be asked to participate in two parts of the study. In Part I, 900 participants will be asked to complete a questionnaire. The questionnaire asks questions about your son or daughter’s sport environment and their sport experiences. The questionnaire should take about 45 minutes to complete. Some of the questions will ask your son or daughter about negative peer influences (e.g., bullying, drinking, drugs), family finances, and/or other forms of discrimination that they may or may not have experienced in sport. They have the right to not answer any questions that they are uncomfortable with and they are invited to contact Telehealth Ontario at 1-866-797-0000 if any of these questions trigger emotional upset.

Part II of the study will involve twelve teams being observed over the course of a three/four month period. Multiple sessions within the sport setting will be videotaped. Coaches and athletes will wear a microphone to record any talking that takes place within the sport environment. The videotaped practices will then be watched by the principal investigator to understand the different coach-athlete interactions and peer interactions (i.e., patterns and sequences of interactions) that occur within sport. Some athletes from these twelve teams may be asked to provide their opinions of their coach’s actions while watching a short video segment of a session. These opinions will be kept completely anonymous and will not be shown to the coach.

There will be no deception used in this study. Participation is completely voluntary and your child will be informed that he/she can withdraw at any time.

This is part of a research project for which Jean Côté is the primary researcher. The results from this study will be published and presented at conferences; however, the identity of your son or daughter will be kept confidential. All the information provided through the questionnaires and observations will be confidential and will be stored by in a locked office at Queen’s University for a minimum of seven years after the completion of the study. As a reminder, participation is completely voluntary and should you (or your son or daughter) wish, he/she may withdraw from all or part of the study at any time, for any reason, without explanation or consequences by
contacting the principal researcher, Dr. Jean Côté. Any information collected up to the time your son or daughter withdraws from the study will be destroyed.

With your permission and your son’s/daughter’s permission, the questionnaires and observations will be used to help improve young athlete development. If you and your son or daughter decides that he/she would like to be a part of this study, please complete the attached form. Also, please ask your son or daughter to read their letter and indicate his/her consent as well. Any questions about study participation may be directed to Dr. Jean Côté at 613-533-6000 x79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.

PARENTS/GUARDIANS PLEASE READ and SIGN YOUR CONSENT

I have read and understood the purpose of this study and my son’s/daughter’s involvement in this study. I am aware that my son/daughter will remain anonymous throughout the study and in any written results of the data collection through participation in this project.

I understand that my son/daughter’s participation in this research project is completely voluntary and that he/she has the right to not answer any question(s) that he/she feels comfortable with. I also recognize that my son/daughter has the right to withdraw from the study at any time without penalty and that any data collected to this point will be destroyed.

Finally, any questions I have about this research project and my son/daughter’s participation have been answered to my satisfaction. I understand that I am invited to contact the primary researcher and/or the General Ethics Review Board should I have any further questions or concerns about this research project and my son/daughter’s participation.

I, ____________________________ give permission to allow ______________________ to participate in the study conducted by the School of Kinesiology and Health Studies at Queen’s University.

Signature ___________________________ Date ____________

Please indicate if you wish to receive a summary of the study findings: [] Yes  [] No

Jean Côté, PhD  
Primary Investigator  
Director and Professor  
School of Kinesiology and Health Studies  
Queen’s University  
Kingston, ON  
(613)533-6000 x 79049  
jc46@queensu.ca

Joan Stevenson, PhD  
Chair  
General Ethics Review Board  
Queen’s University  
Kingston, ON  
(613)533-6288  
stevensj@queensu.ca
PARTICIPANT CONSENT FORM-ATHLETE

You are invited to participate in a study entitled ‘Examining Youth Personal Development in Sport’. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen's policies. Please read this form carefully and feel free to ask any questions you may have.

Purpose and Procedures
The purpose of this research study is to examine the personal development of youth in sport.

If you volunteer to participate in this study, you will be asked to complete questionnaires evaluating your personal experiences in sport. You may also be asked to videotaped during your sport sessions.

Potential Risks
Some of the questions will ask you about negative peer influences (e.g., bullying, drinking, drugs), family finances, and/or other forms of discrimination that you may or may not have experienced in sport. You have the right to not answer any questions that you are uncomfortable with and are invited to contact Telehealth Ontario at 1-866-797-0000 if any of these questions trigger emotional upset.

Potential Benefits
As a participant, you may be making important contributions to the research literature. We cannot and do not guarantee or promise that you will receive any direct benefits from the study.

Storage of Data
The original interview recordings and interview transcripts will be safeguarded and securely stored in a locked filing cabinet at Queen’s University for a minimum of seven years as per University requirements.

Confidentiality
The data from this study will be published and presented at conferences; however, your identity will be kept confidential.

Right to Withdraw
You may withdraw from the study for any reason, at any time, without penalty of any sort by contacting the principal investigator, Dr. Jean Côté (613-533-6000 x79049). There will be no team related effects associated with withdrawal. You do not have to answer any questions that you do not feel comfortable answering. Any information collected up to the time you withdraw from the study will be destroyed.
Questions
Any questions about study participation may be directed to Dr. Jean Côté at 613-533-6000 x79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.

Jean Côté, PhD
Primary Investigator
Director and Professor
School of Kinesiology and Health Studies
Queen’s University
Kingston, ON
(613)533-6000 x 79049
jc46@queensu.ca

Joan Stevenson, PhD
Chair
General Ethics Review Board
Queen’s University
Kingston, ON
(613)533-6288
stevensj@queensu.ca

Consent to Participate
I have read and understood the description provided above. I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I consent to participate in the study described above, understanding that I may withdraw this consent at any time. A copy of this consent form has been given to me for my records.

_________________________  _______________________  
Signature of Participant  Date

_________________________  _______________________  
Signature of Researcher  Date
COACH LETTER OF INFORMATION AND CONSENT FORM

Title of the study: Examining Youth Development in Sport

The purpose of this study is to examine how different coach behaviours affect youth’s development in sport. Specifically, the goal is to understand how the different ways coaches interact with athletes during practices leads to athletes’ experiences in sport. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen's policies.

The study will have each athlete complete a questionnaire related to his/her experience in a specific sport (i.e., on a specific team with a specific coach). Over the course of three-four months, multiple practices in that sport setting will then be videotaped. As a coach, you will be wearing a microphone to record any talking. The videotaped practices will then be watched by the principal investigator to understand the different coach-athlete interactions (i.e., patterns and sequences of coach/athlete interactions). Individual clips from the videos may also be used in a later part of the project. There are no known or foreseeable risks involved by participating in this study.

This is part of a research study for which Jean Côté is the primary researcher. Information collected from coaches will remain completely confidential. For the entire study, all information collected will be kept in a locked filing cabinet by the primary researcher. Items will be available to the primary researcher and his research team. As a reminder your participation in this study is completely voluntary and you can decide to stop participating at any point without explanation or consequences. Should you decide to withdraw from participation, information collected to that point will be destroyed. Although there is no financial compensation it is anticipated that your information will help us to better understand the positive developmental experiences of youth sport participation.

The study is only interested in the information collected for the entire group and so all participants’ individual responses will never be known, keeping individuals identity secure. While the information collected may be presented at academic conferences and published in relevant academic journals, anonymity and confidentiality of all participants will be maintained.

Any questions about study participation may be directed to Dr. Jean Côté at 613-533-6000 x79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.
Jean Côté, PhD  
*Primary Investigator*  
Director and Professor  
School of Kinesiology and Health Studies  
Queen’s University  
Kingston, ON  
(613)533-6000 x 79049  
jc46@queensu.ca

Joan Stevenson, PhD  
*Chair*  
General Ethics Review Board  
Queen’s University  
Kingston, ON  
(613)533-6288  
stevensj@queensu.ca
PARTICIPANT CONSENT FORM - COACH

I have read the information letter and understand that this study requires the athletes I coach to complete a survey regarding their experiences in our specific sport setting (i.e., on this specific team, with me as a coach). I also understand that the second part of this study involves the videotaping of multiple practices in order to examine interactions between coaches and athletes.

I have been informed that my confidentiality will be protected throughout the study, and that the information I provide will be available only to the primary researcher and his research team. While the results of this study may be presented at academic conferences and/or in academic journals, I am aware that any results will be presented for the group only (i.e., no individual data will ever be reported) – thereby maintaining my anonymity. Similarly, the videotaped practices will only be viewed by the primary researcher and/or his research team and only for the purpose of data analysis – they will never be shown at conferences or in any other presentation.

I understand that my participation in this research project is completely voluntary and that I reserve the right not to answer any question(s) I do not feel comfortable with. I also recognize that I may stop participating at any time without explanation or consequence. I understand that any data collected up to that point will be destroyed.

Finally, any questions I have about this research project and my participation have been answered to my satisfaction. I understand that I am invited to contact the primary researcher and/or the General Ethics Review Board should any further questions or concerns about this research project or my participation.

I consent to participate in this research project.

______________________________
Name of Participant

______________________________
Signature

______________________________
Date

152
Appendix F

4 Cs Questionnaire Package
Sport competence refers to one’s ability to successfully perform a certain task in sport. In this form you will be rating the sport competence of both yourself and your teammates in volleyball.

Please answer each question based on how skilled or competent you perceive yourself or your teammates in each of the areas listed compared to all of the athletes that you know. Please answer truthfully, basing your rating solely on the specific area described in each question.

Circle the number that best corresponds to your perceptions. A 5 represents the most competent athlete you know at your age/skill level, while a 1 represents the least competent athlete you know at your age/skill level. Please check the appropriate box when you reach the section where you are rating yourself. Please rate yourself.

Your answers will be kept completely confidential.

In this section, you will be evaluating Athlete A. □ Check box if this is you.

<table>
<thead>
<tr>
<th>Please rate this person’s sport competence in the following areas:</th>
<th>Not at all competent</th>
<th>Somewhat competent</th>
<th>Moderately competent</th>
<th>Very competent</th>
<th>Extremely competent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical skills (e.g., shooting, passing, blocking, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Tactical skills (e.g., decision-making, reading the play, strategy, etc.)</td>
<td>Not at all competent</td>
<td>Somewhat competent</td>
<td>Moderately competent</td>
<td>Very competent</td>
<td>Extremely competent</td>
</tr>
<tr>
<td>Physical Skills (e.g., strength, speed, agility, endurance, etc.)</td>
<td>Not at all competent</td>
<td>Somewhat competent</td>
<td>Moderately competent</td>
<td>Very competent</td>
<td>Extremely competent</td>
</tr>
</tbody>
</table>

Note. Additional copies of the three items above are repeated for each athlete on the team.
A number of statements that athletes have used to describe their feelings in sport are given below. Read each statement and then circle the appropriate number to indicate how you generally feel while participating in your sport.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Very much so</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel self-confident.</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Very much so</td>
</tr>
<tr>
<td>I’m confident I can meet the challenge.</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Very much so</td>
</tr>
<tr>
<td>I’m confident about performing well.</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Very much so</td>
</tr>
<tr>
<td>I’m confident because I mentally picture myself reaching my goal.</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Very much so</td>
</tr>
<tr>
<td>I’m confident of coming through under pressure.</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Very much so</td>
</tr>
</tbody>
</table>

This questionnaire is designed to assess your relationship with your coach. Please answer truthfully. All answers will be kept completely confidential.

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel close to my coach</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Question</td>
<td>Not at all</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------</td>
<td>--------</td>
<td>-----------</td>
<td>-------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I feel committed to my coach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>3. I feel that my sport career is promising with my coach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>4. I like my coach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>5. I trust my coach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>6. I respect my coach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>7. I feel appreciation for the sacrifices my coach has experienced in order to improve his/her performance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8. When I am coached by my coach, I feel at ease</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>9. When I am coached by my coach, I feel responsive to his/her efforts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>10. When I am coached by my coach, I am ready to do my best</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>11. When I am coached by my coach, I adopt a friendly stance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Below is a list of behaviours likely to occur during matches/games. Please think about your experiences while playing your sport and indicate how often you engaged in these behaviours this season by circling the relevant number. Please respond honestly.

<table>
<thead>
<tr>
<th>While playing for my team this season, I…</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gave positive feedback to a team-mate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Criticized an opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Argued with a team-mate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Helped an opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Deliberately fouled an opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>6. Asked to stop play when an opponent was injured</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Verbally abused a team-mate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Encouraged a team-mate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Retaliated after a bad foul</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Helped an injured opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Criticized a team-mate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Gave constructive feedback to a team-mate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Tried to wind up an opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Swore at a team-mate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Congratulated a team-mate for good play</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Tried to injure an opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Intentionally distracted an opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Showed frustration at a team-mate's poor play</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Intentionally broke the rules of the game</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Physically intimidated an opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

The following questions ask about your feelings toward your team. Please CIRCLE a number from 1 to 9 to show how much you agree with each statement.

1. We all share the same commitment to our team’s goals.
   
   1   2   3   4   5   6   7   8   9
   
   Strongly Disagree   Strongly Agree

2. I invite my teammates to do things with me.
   
   1   2   3   4   5   6   7   8   9
   
   Strongly Disagree   Strongly Agree

3. As a team, we are all on the same page.
   
   1   2   3   4   5   6   7   8   9
   
   Strongly Disagree   Strongly Agree

4. Some of my best friends are on this team.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

5. I like the way we work together as a team.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

6. I do not get along with the members of my team.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

7. We hang out with one another whenever possible.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

8. As a team, we are united.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

9. I contact my teammates often (phone, text message, internet).

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

10. This team gives me enough opportunities to improve my own performance.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

11. I spend time with my teammates.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

12. Our team does not work well together.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

13. I am going to keep in contact with my teammates after the season ends.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

14. I am happy with my team’s level of desire to win.

1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
15. We stick together outside of practice.
   1  2  3  4  5  6  7  8  9
   Strongly Disagree          Strongly Agree

16. My approach to playing is the same as my teammates.
   1  2  3  4  5  6  7  8  9
   Strongly Disagree          Strongly Agree

17. We contact each other often (phone, text message, internet).
   1  2  3  4  5  6  7  8  9
   Strongly Disagree          Strongly Agree

18. We like the way we work together as a team.
   1  2  3  4  5  6  7  8  9
   Strongly Disagree          Strongly Agree
Appendix G
Athlete Behaviour Coding System – Coding Manual
ATHLETE BEHAVIOUR CODING SYSTEM (ABCS)
Coding Manual (revised: June 2016)

Overview
The Athlete Behaviour Coding System (ABCS) is an observational coding system designed to continuously code athlete behaviour exclusively in a youth sport context. The ABCS is the result of the adaptation of numerous existing instruments from multiple areas of research including coach-athlete interactions (Erickson et al., 2011), athlete communication and performance (e.g., LeCouteur & Feo, 2011), and developmental psychology (e.g., Rusby, Estes, & Dishion, 1991).

The ABCS has been developed to apply to all youth team sports, but portions of this coding manual contains features that may be specific to basketball (e.g., ball possession or specific examples of behaviour). This iteration of the coding manual has been designed for observation of athlete behaviour during youth basketball competitions.

Dimensions
1 – SUBJECT refers to which athlete is being coded at a given point in time. Each member of a team will be a unique identifying code.

2 - CONTENT refers to the type of behaviours that athletes exhibit. These categories refer to interactive and non-interactive behaviours, and can be verbal, non-verbal, or physical.

2a – CONTENT MODIFIER - TARGET refers to the individual(s) being interacted with in each instance. For each content code, coders specify who (if anyone) the athlete is interacting with (e.g., teammate, opponent, coach, etc.).

2b – CONTENT MODIFIER – DIRECTIONALITY applies to all active communicative codes and describes whether an athlete actively initiated an interaction, and also differentiates between one-way and two-way (i.e., mutual) interactions.

3 - LOCATION refers an athlete’s location at a given point in time.

4 – BALL POSSESSION refers to instances when an athlete is on the court, and where he/she has possession of the basketball.
Coding Procedure

The ABCS has been designed to apply to any youth sport setting, but for the present project will be limited to recreational basketball games. The ABCS is used in conjunction with Observer XT software, which is a computer program that has been designed to code video data using the ABCS. Codes are entered in real-time while viewing the video using a keyboard and numerical pad. For each coded entry, coders specify the subject, content, and any applicable modifiers (e.g., athlete A [subject], prosocial [content], athlete B [target], initiator [directionality]).

Coding sessions will involve coding the continuous behaviour of all members of a team during a 20 minute video clip. It is recommended that coders focus on coding a particular athlete’s behaviour for the duration of the entire segment, and then repeat this process for each subsequent athlete. The amount of time required to code each 20 minute segment in its entirety is high variable, and depends on the size of the team, experience of the coder, and content of the particular segment.

Rules

3 SECOND RULE
This rule applies to the 3 second wait before coding ‘engaged’ or ‘uncodable’ following an active communicative code. The two situations in which it is used are as follows:

- Wait three (3) seconds before coding engaged (content) when changing from any actively communicative code. Code for this behaviour only if it continues past the three (3) second waiting period, at which point you would rewind the video three seconds and begin coding it at its true initiation point. However, if within three (3) seconds another actively communicative behaviour occurs, do not wait to code that behaviour.
- Wait three (3) seconds before coding ‘uncodable’ (content) when changing from any other code. Code for this behaviour only if it continues past the three (3) second waiting period, at which point you would rewind the video three seconds and begin coding it at its true initiation point. However, if within three (3) seconds a different behaviour visibly or audibly occurs, do not wait to code that behaviour.

DEFAULT CODES
For athlete content, target, and directionality, specific behaviour codes are to coded by default if criteria for any other relevant category within the dimension are not met. In other words, use the default codes in the absence of any other codable behaviour:

- Content
  - ‘General communication’ – if interacting with teammates or coaches on the bench or off the court, and no indication is provided regarding the nature of the interaction.
  - ‘Sport communication’ – if interacting with teammates or coaches on the court or while the ball is in play.
- Target – ‘team’
• Directionality – ‘mutual’
• Note: no default categories exist for subject, location, or ball possession dimensions as these must be directly observed

**DIMENSION – SUBJECT**

Since there are multiple participants in all videos (i.e., individual athletes), the coder must specify which athlete’s behaviour is being coded at each point in time. Once assigned a subject ID, athletes must be coded using this same ID for all videos. This will be determined for all athletes on all teams prior to the beginning of coding, and will be referenced by name and physical appearance (e.g., hair colour, clothing, etc.) for each video.

a – Athlete A  
b – Athlete B  
c – Athlete C  
d – Athlete D  
e – Athlete E  
f – Athlete F  
g – Athlete G  
h – Athlete H  
i – Athlete I  
j – Athlete J  
k – Athlete K  
l – Athlete L

**DIMENSION – TARGET**

The target dimension refers to *who* an athlete is interacting with while an actively communicative code is activated. ‘Teammate(s)’ is used in instances where an athlete is interacting with a single teammate or group of teammates. ‘Team’ is reserved for instances where an athlete is interacting with his/her entire team.

A – teammate(s)  
B – team  
C – coach  
D – assistant coach  
E – referee  
F – opponent  
G - other
DIMENSION – CONTENT

11 - Prosocial Communication
Explicit behaviours, including helpful or supportive actions reflecting affection, concern, empathy, cooperation, and leadership.

Notes
- Also includes non-verbal physical behaviours (e.g., high fives)
- E.g., compliments, encouragement, positive reinforcement, helping an injured teammate off the floor
- Group huddles require additional physical (e.g., high five, pat on back) or verbal cues to be coded as prosocial communication
- Includes apologies (e.g., “sorry!”; “my fault!”; etc.), regardless of the context (sport vs. general)
- *Applicable modifiers – target, direction*

Examples
- Team huddles up and high fives in between plays
  - CODE: athlete a – prosocial – team – mutual
- The coach yells: “Nice defense [athlete a]!”
  - CODE: athlete a – prosocial – coach – receiver
- Athlete a walks up to b with her arm clearly outstretched for a high five
  - CODE: athlete a – prosocial – teammate – initiator; athlete b – prosocial – teammate – receiver

Non-Examples
- Team huddles up in between plays, but there are no high fives or physical cues, and the specific nature of their conversation cannot be discerned
  - CODE: athlete a – sport – teammate - mutual

12 – Sport Communication
Discussing any aspect related to the sport (e.g., task, technique or strategy) with coach and/or teammates. Can occur both during and in between play.

Notes
- Modeling is often best cue to distinguish tech/tact from general communication when can’t hear content of interaction
- Can be non-verbal if obvious (e.g., giving teammates signals for the upcoming play)
- *Default code for communication on court*
- If audible and obvious, code calling for ball or signals to teammates during play as sport communication with team
  - If unclear, ignore and code as engaged
  - High threshold – must be very clear/obvious to code short communications during play
If coach is providing individualized technical/tactical instruction, code athlete as well. However, if coach’s instruction is directed to entire team, code athlete as engaged.

Includes organizational behaviour directly related to the sport

**Applicable modifiers – target, direction**

**Examples**

- Athlete a and b are talking to each other during play
  - CODE: athlete a – tech/tact – teammate - mutual

**Non-Examples**

- Athlete a and b are talking to each other while sitting on the bench, seemingly not paying attention to the game
  - CODE: athlete a – general – teammate - mutual

13 - General Communication

Communication unrelated to sport activities. Also used when content of communication between persons is unclear or unknown while on bench or off the court.

**Notes**

- E.g., talking about school, etc.
- *Default actively communicative code if coder cannot hear content of interaction between athletes or coach.*
- Includes organizational behaviours not directly related to the game (e.g., putting garbage away, etc.)
- **Applicable modifiers – target, direction**

**Examples**

- Athlete a and b are chatting about school during halftime
  - CODE: athlete a – general – teammate – mutual (or initiator/receiver)
- Athlete a and b are talking while sitting on the bench during play, details of conversation cannot be discerned
  - CODE: athlete a – general – teammate – mutual (or initiator/receiver)

**Non-Examples**

- Athlete a and b are talking in between plays, details of conversation cannot be discerned
  - CODE: athlete a – sport – teammate – mutual (or initiator/receiver)

14 - Engaged

Engaged in game activities and not directly communicating with peers or coach.

**Notes**

- E.g., on the court, resting during time on bench (while paying attention to the game), etc.
- Default code for anytime athlete is not actively interacting with coach or other athletes unless they actively disrupting practice, ignoring coach instructions, etc. (e.g., code
athlete as ‘engaged’ when coach talking to group, even if athlete may appear to not be looking at coach, unless actively not listening/being disruptive).

- Assumed to be engaged when out of view of camera for short amount of time but still involved in play (e.g., in corner out of view of camera during play)
- 3-second rule in effect before coding for “engaged” from an actively communicative code

**Applicable modifiers – target**

**Examples**
- Entire team warming up together before the game, rotating through various positions
  - CODE: **athlete a – engaged – team**
- Athletes are participating in a warm-up drill in independent groups of three (i.e., each group working on their own)
  - CODE: **athlete a – engaged – athlete b, c, etc.**
- All athletes are sitting down/drinking water during half time
  - CODE: **athlete a – engaged – team**
- Athlete is sitting far away from their teammates during break period
  - CODE: **athlete a – engaged – self**
- Athlete is playing with cell phone by him/herself during break period
  - CODE: **athlete a – engaged - self**

**15 - Non-cooperative/Disruptive**
Not engaged in sport activities and not directly communicating with peers or coach. Behaviour that is non-compliant of coach or athlete’s directions and is disruptive to group activity. Shows disregard for rules and norms of the group.

**Notes**
- E.g., actively disrupting the team, ignoring coach instruction, etc.
- Requires athlete to be in opposition to current activity (e.g., code athlete resting during assigned rest period as ‘engaged’, code athlete standing on the sideline chatting with a friend after being told get on the court as ‘disruptive’).
- Must be very obvious.

**Applicable modifiers – target**

**Examples**
- Athlete a is sitting down using cell phone while rest of team is on court warming-up before a game
  - CODE: **athlete a – noncoop**

**16 - Antisocial Communication**
Blame, criticism, complaint, disapproval or negative emotion toward a person. May be physical (aggressive contact with others), verbal (vulgar language, threats), or non-verbal (body language) in nature.

**Notes**
• E.g., name calling, making threats toward others, pushing a teammate or opponent
• Applicable modifiers – target, direction

Examples
• Athlete a makes a rude comment about athlete b’s performance in a previous game
  o CODE: athlete a – antisoc – teammate – initiator

17 – Uncodable
Instances when an athlete is out of view for an extended period of time, and no assumption can be made about the athlete’s behaviour

Notes
• If athlete is out of view of camera, but their behaviour can be reliably inferred (e.g., in the corner during play), code as ‘engaged’, NOT ‘uncodable’
• E.g., an athlete leaves game early (‘uncodable’ for remainder of practice)
• 3-second rule in effect before coding ‘uncodable’ following an active communicative code

Example
• Athlete a leaves the gym area for five minutes
  o CODE: athlete a – uncodable

Non-Example
• Athlete a is out of view of the camera periodically during play
  o CODE: athlete a – engaged

MODIFIER – DIRECTIONALITY

• Applies to all active communicative codes (i.e., prosocial, sport, general, and antisocial)
• Initiator refers to the individual that begins/initiates a given interaction (e.g., speaking)
  o Initiates the behaviour/communication directed toward the target
• Receiver refers to the individual(s) that are in receipt of the communication of the initiator (e.g., listening)
  o Receives the behaviour communication from the target
• Mutual refers to instances where all parties involved in a given interaction take turns as initiator and receiver (all parties both initiate and receive)
• In one-way interactions, there will always be an initiator and receiver(s)
  o E.g., a coach (the initiator) provides individualized technical feedback to an athlete (receiver) who does not respond to the coach.
• In two-way interactions, there will be an initiator and receiver(s) to begin, but as soon as the roles change, all involved individuals are coded as mutual for the remainder of the interaction
  o E.g., athlete A (initiator) tells a story about school to athlete B (receiver), at which point athlete B responds to athlete A’s story (both mutual)
• If you code an initiator or receiver, make sure to always check that you have also coded the appropriate reciprocal code (e.g., A → B receiver; B → A initiator)
  o This is a good informal check of your work after coding a video segment.
  o UNLESS it is an athlete receiving communication from coach (we don’t code coach behaviour directly)
• It should be clear who the initiator/receiver of a given communication is when viewing the video in real time (i.e., without reviewing the clip in slow motion). If it is unclear or you are unsure who initiated a communication, code all involved athletes as mutual (e.g., a brief high-five during a drill)

**DIMENSION – LOCATION**
21 – On court
• Athlete is one of five members of his/her team playing at a given time.
• Activate code as soon as athlete steps on the court during a substitution.
22 – On bench
• Athlete is sitting or standing near the team bench during play.
• Activate code as soon as athlete steps off the court during a substitution.
23 – Out of view
• Athlete is neither on the court or bench, and may be out of view, sitting with parents, etc.

**DIMENSION – CONTEXT**
97 – On ball
• Athlete is on the court and has clear possession of the ball during play.
• Do not include time spent holding the ball prior to inbounding (code as off ball)
98 – Off ball
• Athlete is on the court but does not have possession of the ball.
99 – Off court
• Athlete is not on the court (e.g., on the bench, gone to the washroom, etc.)
# Athlete Behaviour Coding System

## Summary

<table>
<thead>
<tr>
<th>SUBJECT/TARGET</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a, b, c...</td>
<td>Athlete A, B, C... (subject)</td>
</tr>
<tr>
<td>o</td>
<td>Opponent (target)</td>
</tr>
<tr>
<td>r</td>
<td>Referee (target)</td>
</tr>
<tr>
<td>y</td>
<td>Asst. Coach (target)</td>
</tr>
<tr>
<td>z</td>
<td>Coach (target)</td>
</tr>
<tr>
<td>t</td>
<td>Team (target)</td>
</tr>
<tr>
<td>u</td>
<td>Teammate (target)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ATHLETE CONTENT</th>
<th>Description</th>
</tr>
</thead>
</table>
| 11 – Prosocial Communication | - Verbal (e.g., “good job!”, “sorry, my fault”)
| 12 – Sport Communication | - Sport-related communication
| 13 – General Communication | - E.g., calling for ball, modelling technique for teammate
| 14 – Engaged | - Participating in expected activities
| 15 – Non-cooperative/Disruptive | - In opposition to current activity, but not directly interacting with others
| 16 – Antisocial Communication | - Verbal (e.g., name calling, threats, etc.)
| 17 – Uncodable | - Athlete’s out of view for extended period of time, athlete’s behaviour cannot be inferred |

## Directionality

<table>
<thead>
<tr>
<th>DIRECTIONALITY</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applies to all active communicative codes (i.e., 12, 13, 14, 16)</td>
<td></td>
</tr>
<tr>
<td>1i – Initiator</td>
<td>- Begins/initiates an interaction</td>
</tr>
<tr>
<td>1r – Receiver</td>
<td>- In receipt of initial interaction (e.g., listening)</td>
</tr>
</tbody>
</table>
| 1m – Mutual | - Two-way interaction where both parties act as initiator and receiver
|                   | - Default code for interactions when initiator/receiver are unclear |

## Athlete Location

<table>
<thead>
<tr>
<th>ATHLETE LOCATION</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 – On Court</td>
<td>- One of five players on court during play (even if out of view in near half)</td>
</tr>
<tr>
<td>22 – Off Court</td>
<td>- On bench or off court</td>
</tr>
<tr>
<td>23 – Out of View</td>
<td>- Out of view for extended period of time (e.g., in washroom, left early, etc.)</td>
</tr>
</tbody>
</table>

## Ball Possession

<table>
<thead>
<tr>
<th>BALL POSSESSION</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>97 – On ball</td>
<td></td>
</tr>
<tr>
<td>98 – Off ball</td>
<td></td>
</tr>
<tr>
<td>99 – Off court</td>
<td></td>
</tr>
</tbody>
</table>
Appendix H
Mean duration of observed behaviours
Table 6-1. Mean duration (in seconds) for all observational variables by cluster.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cluster 1 “High Responders”</th>
<th>Cluster 2 “Low Responders”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SD$)</td>
</tr>
<tr>
<td>Ball possession</td>
<td>134.19 (125.36)</td>
<td>82.96 (62.66)</td>
</tr>
<tr>
<td>Prosocial communication with coaches</td>
<td>6.16 (21.87)</td>
<td>3.59 (6.41)</td>
</tr>
<tr>
<td>Prosocial communication with teammates</td>
<td>9.83 (17.21)</td>
<td>3.86 (4.54)</td>
</tr>
<tr>
<td>Sport communication with coaches</td>
<td>36.38 (60.33)</td>
<td>8.53 (15.53)</td>
</tr>
<tr>
<td>Sport communication with teammates</td>
<td>25.69 (69.55)</td>
<td>13.36 (16.84)</td>
</tr>
<tr>
<td>General communication with coaches</td>
<td>3.98 (20.65)</td>
<td>.44 (2.02)</td>
</tr>
<tr>
<td>General communication with teammates</td>
<td>85.29 (126.16)</td>
<td>75.92 (91.82)</td>
</tr>
</tbody>
</table>