PROMOTING POSITIVE YOUTH DEVELOPMENT THROUGH SPORT

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Abstract

A new vision of adolescent development has emerged, termed Positive Youth Development (PYD). PYD is a strength-based approach to developing young people whereby more youth realize their potential to become successful in their adult lives. Sport is a valued activity that can be used as a vehicle to promote physical activity and positive youth development. Sport programs and coaches can nurture the qualities, skills, and attributes necessary for youth to become productive and contributing members of society (Camiré, Forneris, Trudel, & Bernard, 2011). However, between skyrocketing costs, early specialization, and untrained coaches, youth sport and development is in a crisis. This paper explores the different contextual features necessary in promoting PYD. It also provides recommendations for sport programs aimed at promoting PYD.
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1. Introduction

Sport, defined as “an activity involving physical exertion and skill in which an individual or team competes against another or others for entertainment” is the most popular organized activity in which youth engage (Tremblay et al., 2011). Approximately 50% of youth aged 5-17 participate in community, school, or privately run sport programs (Holt & Sehn, 2008). Sport can provide a suitable environment for the holistic development of youth, fostering their physical, intellectual, psychological, and social health. However, youth sport programs, which are specifically designed to develop skills and sport knowledge, and improve performance, are becoming increasingly expensive, are highly specialized, and place too great an emphasis on winning. As a result, injuries, burnout, compromised skill acquisition, and unrealized talent potential of youth athletes are on the rise (Bergeron et al., 2015, Côté & Gilbert, 2009). Sport, once seen as a “training ground for life” is now commonly used as a vehicle for business and entertainment (Danish, Forneris, Hodge, & Heke, 2004). This shift in focus, from developing youth through sport participation, to developing performance expertise, is driving youth away from, and out of, sport. Research in this field has indicated the need for improved sport participation rates, sport retention rates, and sport programs that promote positive youth development (PYD). PYD is an approach used to build healthy, productive, and engaged youth by enhancing their interests, skills, and abilities (Côté & Hancock, 2016; Côté, Strachan, & Fraser-Thomas, 2008). Youth involved in positive sporting environments are less likely to experience feelings of depression, anxiety, anti-social behaviours, smoke cigarettes and other drugs, and more likely to lead a healthy, satisfying, and productive life (Fraser-Thomas, Côté, & Deakin, 2005). As a society, it is
our responsibility to foster positive development in our youth (Côté & Hancock, 2016). This paper aims to examine current trends in youth sport, outline the importance of promoting PYD in organized sport, and provide recommendations for parents, coaches, and administrators to facilitate change.

2. Youth Sports

2.1 Positive Potential Outcomes

It is widely accepted that sport has the potential to accomplish three important objectives in youth development. First, sport provides the opportunity to be physically active and therefore improve physical health (Côté et al., 2008). Physical activity has the ability to improve cardiovascular fitness, muscular strength and endurance, flexibility, and bone structure, ensuring optimal development in children and adolescence (Fraser-Thomas et al., 2005). Aside from the immediate health benefits, regular physical activity across the lifespan decreases the rate of diseases such as cancer, stroke, depression, diabetes, and osteoporosis. This is especially important as sedentary behaviours, obesity, and its associated diseases are on the rise (Fraser-Thomas et al., 2005). Secondly, sport serves as a foundation to learn and develop motor skills (Côté et al., 2008). Skill acquisition in children is best acquired through sport sampling and deliberate play. Sport sampling, also known as early diversification refers to playing multiple sports during childhood. Deliberate play refers to the amount of structure within sport environments. Youth learn best in low-pressure, unstructured situations therefore, it is important to emphasize creativity, effort, and enjoyment in youth sport programs. By doing so, youth develop different skill sets, some of which are
transferable between other sports, activities, and daily life. Lastly, sport has the potential to advance psychological development in youth (Côté et al., 2008). Sport participation has been associated with higher academic performance, where youth athletes report higher school grades, better school attendance, more time spent on homework, greater likelihood of attending college, and increased autonomy and satisfaction in their first job (Fraser-Thomas et al., 2005). In addition, sport participation is thought to develop life skills such as cooperation, discipline, leadership, and self-control in youth athletes. Sport provides the context to improve physical health, develop motor skills, and advance psychological development, however, these outcomes cannot be assumed.

When sport is not appropriately structured, implemented, or delivered, negative outcomes can result.

2.2 Negative Potential Outcomes

The pursuit of an athletic scholarship, national team status, or professional career has reshaped the youth landscape. Youth sport programs are becoming increasingly competitive and elitist (Côté & Gilbert, 2009). Instead of focusing on short-term and inherent enjoyment from sport, many sport programs demand high levels of investment and competition and pressure to win (Fraser-Thomas et al., 2005). Children are specializing at an earlier age, they are dedicating more time towards training and travelling, and the expense of playing is greater than ever before. All these changes are producing negative outcomes in our youth. The IOC reported that health problems are occurring at all levels of youth sport, including overuse injuries, overtraining, and burnout (Bergeron et al., 2015). They also reported that coaches are often undertrained and inexperienced, leading to physical, sexual, and emotional abuse in youth sport.
Camiré et al. (2011) reported 75% of children suffer from emotional abuse within organized sport and that obesity and problem behaviours, such as delinquency, drug use, and sexual behavior, are on the rise. According to the Aspen Institute, there has been an 8% decrease in youth sport enrollment in the past 10 years (Tremblay et al., 2011). Finally, 70% of participants drop out of youth sport programs before high school (Côté & Hancock, 2016). It is important to remember that youth are involved in sport because they enjoy improving skills, learning new skills, being with friends, making new friends, and having fun (Danish et al., 2004). The professionalization of youth sport has taken away from the enjoyment of it. Sport should not be structured with the intent to develop elite youth athletes, rather it should aim to support participation, skill acquisition and psychological development. Negative outcomes are prevalent in organized sport and it is up to parents, coaches, and administrators to promote PYD. If the current approach does not change, it is likely we will continue to see negative outcomes arising from youth sport.

3. Positive Youth Development

Positive youth development (PYD) is a relatively new approach aimed at promoting competent, healthy, and successful youth (Côté et al., 2008; Danish et al., 2004). In the past, youth development has been looked at through a reductionist approach, whereby initiatives are taken to reduce or eliminate negative behaviours (Danish et al., 2004). This new concept, PYD has recently emerged in the field and aims to support and promote positive behaviours (Côté et al., 2008). Roth et al. 1998, defined PYD as the promotion of desirable competencies that lead to positive developmental outcomes for youth (Camiré et al., 2011). Alternatively, Holt et al. 2008, defined PYD as the
engagement in prosocial behaviours and avoidance of health compromising behaviours and future jeopardizing behaviours (Côté et al., 2008). Both definitions look at youth as being potential-oriented, opposed to prevention-oriented (Danish et al., 2004). In the PYD lens, all youth possess strengths that can be cultivated and therefore should be viewed as raw potential to be developed.

3.1 Lerner’s Five C’s

The National Research Council and Institute of Medicine (NRCIM) has outlined four main areas of youth development: physical, intellectual, psychological, and social (Fraser-Thomas et al., 2005). Positive outcomes can be fostered in these areas through the promotion and development of the five desired PYD outcomes; competence, confidence, connection, character, and caring (Bergeron et al., 2015). Lerner’s 5 C’s model is the most empirically supported framework to date (Fraser-Thomas et al., 2005). It is supported by the developmental systems theory in which the more developmental assets an individual possesses, the more likely they are to positively develop, and less likely they are to engage in problem behaviours. The first C, competence, represents a positive view of one’s actions in domain specific areas. For example, physical competence may pertain to sport-specific skills and fitness abilities, whereas intellectual competence pertains to school grades and test scores. The second C, Confidence, is an internal sense of overall positive self-worth and self-efficacy in broad areas. Confidence refers to one’s global self-regard, as opposed to competence, which is domain specific. Connection, the third C, refers to positive bonds with people and institutions where both parties contribute to the relationship. Character pertains to an individual’s respect for societal and cultural rules, including standards for correct
behaviour, a sense of right and wrong, and integrity. Caring, the fifth C, is an individual’s sense of sympathy and empathy for others. The more assets an individual possesses in these categories, the more likely they are to experience positive outcomes. The goal of PYD is to promote positive outcomes through optimizing the potential and capacity of each individual. If each individual develops high levels of the 5 C’s, a sixth C, contribution, is thought to emerge (Zarrett, Lerner, Fay, & Peltz, 2008). By investing in our youth, we anticipate that they will then contribute back to the society by investing in the next generation of youth.

3.2 Current PYD Programs

Sport-specific approaches to PYD do exist. Those that do exist include First Tee Life Skills, SUPER (Sports United to Promote Education and Recreation), Teaching Responsibility Through Physical Activity, and the Hokowhitu Program (Danish et al., 2004). Each program is a spin-off of the original life skills program, ‘Going for the GOAL’. The GOAL program was designed to teach life skills to adolescents to enable a sense of self control and confidence about their future. These skills (goal setting, problem solving, and seeking social support) help youth succeed in different environments and contribute to a positive outlook on life (Danish, Fazio, Nellen, & Owens, 2002). It has been suggested by a number of researchers that adolescents who do not have a positive future outlook are at a higher risk of engaging in health-compromising behaviours (Danish, Nellen, & Owens, 1996). For example, those with negative future expectations are more likely to engage in risk taking behaviors, such as violence and crime, alcohol and drug consumption, unsafe sex, and school dropout. The GOAL program focuses on encouraging adolescents to develop a positive future
outlook early in order to decrease the chances of them engaging in risk taking behaviours (Danish et al., 2002). The life skills program involves training high school students to teach adolescents 6 main life skills over ten weeks. Peer groups are thought to be the most influential on adolescent development because they are more relatable and good role models, therefore top performing high school students are chosen to lead these sessions (Danish et al., 2002). The six main life skills include identifying positive life goals, goal attainment, problem solving, identifying health compromising and health enhancing behaviours, seeking social support, and skill transferability (Danish et al., 1996). The GOAL program has been implemented in a number of different settings across the world. Participants of these programs showed an increase in self-esteem and intrinsic motivation compared to control groups. Furthermore, participants in these programs exhibited improved athletic and academic performance, effective problem-solving and coping abilities, and decreased feelings of depression and anxiety (Danish et al., 1996). Danish, the creator of Going for the Goal, developed a second life skills program, named SUPER (Sports United to Promote Education and Recreation), designed at incorporating and developing life skills in the sport-based setting. SUPER is a peer-led series that incorporates learning physical skills, life skills, and sport skills (Danish et al., 2004). See Appendix C for a detailed explanation of the peer-led series modules (pg.37). So far it has been implemented in several sport and physical activity settings at the middle and high school level. Using sport or physical activity as a medium for promoting positive youth development has been shown to be effective. Some benefits include improvements in physical competence, self-esteem, and intrinsic motivation. In addition, several studies have shown that an increase in life skills is linked
to a decrease in high-risk behaviours (Petitpas, Cornelius, Van Raalte, & Jones, 2005). Sport is a suitable context to enhance youth development when it incorporates the teaching of life skills in an intentional and systematic way. Life skills are similar to physical skills in that they can be learned through demonstration and practice and many of the skills learned in sport are transferrable to other domains (Petitpas et al., 2005). When sport programs have clearly defined goals and strategies they are effective in promoting PYD.

4. Supportive Theoretical Frameworks For PYD

The bioecological systems model serves as a framework to facilitate effective development in youth. It suggests that the nature and context of youth activities are of utmost importance. Sport can provide an optimal setting for development, but relies on the efficacy of program design and adult implementation (Côté et al., 2008). Most sport programs designed to foster PYD are not effective in doing so (Fraser-Thomas et al., 2005). In the past 5 years there has been a significant increase in the number of youth programs but no change has been seen in rates of delinquency, obesity, pregnancy, etc. (Zarrett et al., 2008). PYD through sport is not automatic, it is dependent on several factors that must be considered when planning and designing youth sport programs. Using the bioecological systems theory and principles of PYD and DMSP may serve as a framework to enhance youth development through sport participation (Côté et al., 2008).

4.1 Bioecological Systems Theory

Positive youth development originated from the ecological systems theory of human development. Bronfenbrenner, a developmental psychologist, created this ecological
model in the 1970’s that depicts human development over time (Côté & Gilbert, 2009). This model states that development is shaped by the interactions between the individual and their environment. Four levels of ecological systems were determined to interact with the developing person. They are the microsystem, mesosystem, exosystem, and macrosystem. The microsystem encompasses the relationships and interactions an individual has with her immediate environment, including family, school, and neighborhood (Krebs, 2009). The mesosystem provides the connection between the structures of the individuals microsystem. The next layer, the exosystem defines the larger social system. The individual is not directly involved at this level, but the structures in this level impact their development. Lastly, the macrosystem consists of the overarching pattern of micro-, meso-, and exosystems characteristics of a given culture, subculture, or other broad social context (Krebs, 2009). The four ‘layers’ of environment each have an effect on youth’s development. In 1983, this model was adapted to the Process, Person, Context, Time (PPCT) Model, better known as the Bioecological Model. This new model states that human development occurs through processes of complex, reciprocal interactions between a person and the people, objects, and symbols in their environment (Côté et al., 2008). In this model, Bronfenbrenner suggests the primary interactions and relationships, called proximal processes, are the principal mechanisms in promoting PYD. The sporting environment and the relationships within this environment may positively influence youth development when structured according to the PPCT Model.
4.1.1 Process

The first principle, process, refers to the developmental process from childhood to adulthood. In the sport setting, this requires introducing low organization and low complexity tasks before shifting into highly organized and complex tasks (Krebs, 2009). This progression is very similar to that seen in the developmental model of sport participation (DMSP). The DMSP is a model of athlete development that has been comprehensively researched and refined over the last 15 years (Côté & Vierimaa, 2014). It consists of three different processes, pathways, and outcomes associated with development. The DMSP framework aims to promote and optimize sport participation, elite performance, and personal development from childhood to adulthood (Côté & Vierimaa, 2014). Three different trajectories exist in the DMSP, they are; recreational participation through sampling, elite performance through sampling, and elite performance through early specialization (Côté et al., 2008). The DMSP suggests a systematic progression from deliberate play in various sporting activities to deliberate practice in selected sports from childhood to adolescence (Côté et al., 2008). Recently, there has been a shift in focus from short term and inherent enjoyment to developing elite athletes. As a result, an increase in early specialization and a decrease in unorganized play has occurred (Côté & Gilbert, 2009). This trend is heavily associated with negative outcomes in youth development. Common outcomes include overtraining, injury, burnout, decreased enjoyment, decreased self-esteem, depression, sense of failure, and early withdrawal from sport (Fraser-Thomas et al., 2005). For youth to positively develop physically and psychologically, it is important to emphasize early diversification (sampling). Youth who engaged in early diversification reported the
development of a healthy identity, prosocial behaviour, and a wide range of interpersonal and intrapersonal skills (Côté & Vierimaa, 2014). Sampling a number of sports early on is an indicator of long-term participation, elite performance, and successful personal development (Côté & Hancock, 2016). A second concept, deliberate play, also plays an important role in supporting these physical and psychological development. Deliberate play is described as unstructured sport play designed to maximize inherent enjoyment (Côté et al., 2008). Activities or games that use adapted rules and are loosely monitored such as street hockey and pick-up basketball are examples of this. Deliberate play builds intrinsic motivation through activities that are enjoyable and develop physical competencies. It also increases motor and cognitive experiences important for stressful or high-pressure situations (Côté & Vierimaa, 2014). Together, early diversification (sampling) and deliberate play are the two most important concepts in optimizing youth development.

Three stages of development are depicted in Côté’s DMSP: the sampling years (age 6-12), the specializing years (age 13-15), and the investment years (age 16+) (See Appendix A, Figure A1, pg.32). The different stages within each trajectory are based on the type and amount of involvement in sport (Côté & Gilbert, 2009). The sampling years involve developing a wide range of fundamental movement skills while experiencing sport as a source of fun and excitement. The DMSP proposes that both recreational and elite performance require the same training foundation during the sampling years. Following this, the specialising phase focuses on a small number of sports, whereby sport-specific skills are more important than fun and enjoyment. Lastly, the investment stage requires commitment to one sport at a competitive, high-performance level. A
transition period occurs between each stage whereby a decision is made by the athlete to choose to specialize in one sport or to stay involved at a recreational level (Côté & Vierimaa, 2014). Whether an individual embarks on a recreational or performance path, similar personal developmental outcomes should occur.

Based on the different pathways and stages, seven postulates from the DMSP have evolved and provide recommendations for the design and structure of youth sport programs. Five postulates focus on sport sampling and deliberate play, and two postulates focus on the transition between stages. All 7 postulates have been empirically tested and supported with varying levels of confidence. The essential characteristics that remain supported include early sport diversification, high amounts of deliberate play, child centered coaches and parents, and being around peers (Côté & Vierimaa, 2014). These characteristics provide the optimal environment to encourage positive youth development, participation, and performance. For a full list of the 7 postulates see Appendix A, Table A1, pg.33.

It is important to note that various models of sport exist. The long-term athlete development model (LTAD) developed by Balyi (2002) is currently being implemented in Canada across different organizations and sports. The LTAD aims to promote elite performance and continued participation through enhancing the biological factors of individuals at each stage of their physical growth. The LTAD has been criticized for its lack of longitudinal empirical evidence (Côté & Vierimaa, 2014). Additionally, it is very generalized and descriptive in nature making it difficult to practice. Unlike the LTAD, the DMSP model is psychologically driven and aims to promote personal development as well as participation, performance. The DMSP also incorporates optimal coaching
behaviours and environments to enhance the development of youth. Based on these factors, the DMSP is a more appropriate model to adapt when the goal is to promote PYD through sport.

4.1.2 Person

The next principle, person, suggests the characteristics of the individual plays an important role in their development. These characteristics include sex, age, gender, physical or mental health, and developmental assets. Two different types of developmental assets exist: internal and external. Internal assets represent each athlete’s personal attributes and life skills, such as values and beliefs, commitment to learning, social competencies, and positive identity. External assets represent athletes’ experiences and relationships, including empowerment, boundaries and expectations, and support from coaches, parents, and peers (Côté et al., 2008). These assets have been consistently shown by research to have a protective effect on problem behaviours and negative outcomes (Camiré et al., 2011). Youth with the most assets are more likely to exhibit leadership, succeed in school, and help others, and are less likely to engage in high risk behaviours such as alcohol and drug use, violence, and depression. PYD programs should aim to develop youth’s internal strengths and external support to succeed in life. A full list of the 40 developmental assets can be found in Appendix B, Figure B1, pg.34 along with the Developmental Assets Profile (DAP) used to measure them (Appendix B, Figure B2, pg.35).

4.1.3 Context

Context is the third principle in Bronfenbrenner’s ecological systems theory. The four ecological systems, as in the old bioecological model, serve as the context principle in
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the PPCT (Côté & Gilbert, 2009). This principle integrates the different layers of an individual’s environment and the effect they have on their development. Bronfenbrenner suggests that the setting in which sport practice takes place is very influential on the outcome (Krebs, 2009). The National Research Council Institute of Medicine (NRCIM) developed eight setting features that are necessary to promote positive outcomes through sport. They are physical and psychological safety, appropriate structure, supportive relationships, opportunities to belong, positive social norms, support of efficacy and mattering, opportunities for skill building, and integration of family, friends, and community efforts. First, the NRCIM suggest that physical and psychological safety is essential to promoting PYD. Sport programs need to take place in a safe environment where youth feel encouraged and respected (Côté et al., 2008). Second, settings must provide an appropriate structure with clear and consistent expectations regarding rules and boundaries. Following the DMSP framework, this involves deliberate play and sampling at a young age, followed by transitional periods in which each athlete can choose a path of performance or participation. The third and fourth features involve strong, supportive relationships and meaningful opportunities to belong. Inclusion within the team and coach support in the sport setting will produce both features. Fifth, to promote PYD it is important to encourage positive social norms that include sportsmanship, teamwork, and fair play. The sixth feature refers to supporting youth’s efficacy and the sense of mattering. Coaches can and should empower their athletes and provide them with a sense of autonomy. They should also emphasize technical and tactical skill development to fulfill the seventh feature - opportunities for skill building. Lastly, programs that integrate friends, family, school, and community efforts are more...
likely to promote PYD. These characteristics are consistent with the DMSP, favouring play and inclusion to promote excellence and participation in sport. Youth sport programs intending to promote PYD must aim to support the eight setting features set out by NRCIM. All 8 features need to be present in youth sport contexts for them to be considered positive developmental settings.

4.1.4 Time

The final principle in the ecological systems theory is time. Time is often the most neglected but essential principle. Development is directly influenced by interactions over time and a temporal progression of involvement. Three levels of time exist, they are micro-time, meso-time, and macro-time. Micro-time refers to the frequency of participation, meso-time refers to the continuity of participation, and macro-time refers to progression over time. To be effective, sport participation needs to occur fairly often, over a long period of time, and increase in complexity (Krebs, 2009).

Organized sport can provide an optimal setting for development when the PPCT Model is taken into account. The two most important factors that surface from this model and past literature are coach influence and program design. These two factors alone will contribute to either a positive or negative experience and outcome in sport.

5. The Role of the Coach in Promoting PYD

5.1 Coach Influence

In the sport setting, youth most often interact with, and are most influenced by, the coach (Danish et al., 2004). Coaches of youth athletes play a pivotal role in determining whether sport programs provide opportunities for peak athletic performance, support lifelong participation, and promote positive development (Bergeron et al., 2015).
Unfortunately, most coaches have limited training, knowledge, and education on youth development. According to the Sports and Fitness Industry Association (SFIA) data, less than one-third of coaches are trained in general safety, effective motivational techniques, CPR and basic first aid, and physical conditioning. Coaches are more likely to develop sport-specific skill and tactics in their athletes but they lack the skills to impact personal and social development (Côté et al., 2008). Without trained coaches, it is very unlikely that life skills are being taught in a systematic way. Sport needs to be structured and implemented by trained, caring coaches for PYD to occur (Holt & Sehn, 2008). Bergeron et al., 2015, suggest that sport coaches need to have a deep understanding of the physical growth, biological maturation, and behavioural development of youth to be impactful. Youth development programs are only as effective as the coaches that deliver them. Coaching effectiveness, as outlined by Côté and Gilbert (2009) is the consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes’ competence, confidence, connection, and character in specific coaching contexts. This definition incorporates coaches’ knowledge, athletes’ outcomes, and coaching contexts as the three main variables contributing to effective coaching.

5.1.1 Coaches’ Knowledge

Coaching knowledge is a multi-dimensional characteristic of expert coaches. It involves coaches’ personal behaviours, experiences, and strategies to effectively and successfully meet the demands of coaching (Côté & Gilbert, 2009). The success of a coach includes, but is not limited to, their ability to teach sport-specific skills, create and maintain relationships with others, and learn from one’s own practice (Bergeron et al.,
These skills can be categorized into professional, interpersonal, and intrapersonal knowledge. Professional knowledge refers to sport specific content, paediatric exercise science, injury prevention, and pedagogical knowledge (Bergeron et al., 2015). Interpersonal knowledge is the capability to foster positive relationships with athletes, parents, and others involved. It involves appropriate and effective communication skills with individuals and groups (Côté & Gilbert, 2009). Lastly, intrapersonal knowledge encapsulates one’s capacity to self-reflect. It is important for coaches to critically evaluate themselves and frequently revise their own practices in order to continue to grow. The interaction between these three types of coaches’ knowledge is paramount to building effective coaches and effective coaches are instrumental in the overall development of athletes beyond sport specific skills.

5.1.2 Athletes’ Outcomes

Athletes’ outcomes refer to the variations in athletes’ attitudes, behaviours, or performance that result from different types of coaching (Côté & Gilbert, 2009). There are five key athlete assets that should be the focal point of athlete development. The 5 C’s; competence, confidence, connection, character, and caring, are shown to foster long-term positive effects on performance, participation, and personal development (Bergeron et al., 2015). Coaches able to improve their athletes’ 5 C’s are contributing greatly to the development of sport and society (Danish et al., 2004). Athlete’s level of competence in their sport is the most obvious and researched coaching outcome. It can be measured through a number of different indicators, such as sport-specific technical and tactical skills, performance measures, improved health and fitness, and healthy training habits (Côté & Gilbert, 2009). Coaches also have a crucial role in their athletes’
Besides performance outcomes, sport can and should develop athletes’ confidence, connection with others, character, and caring. An athletes’ confidence is said to be the most important characteristic to develop. Confidence is the belief one has in themselves and their self-identity. The coach-athlete relationship most strongly influences athletes’ confidence and self-worth. Coaches also play a role in their athlete’s connection to others and character development. Connection refers to the relationships an individual creates with their family and within their community. Effective coaches foster character in their athletes by supporting positive bonds, respect, integrity, and responsibility (Côté & Gilbert, 2009). Lastly, caring is the individual’s sense of empathy towards others in their life. The best coaches report the greatest improvement in their athletes in these five areas. Coaches should aim to support all five outcomes in their athletes, regardless of their age and level of competition.

5.1.3 Coaching Contexts

Effective coaching is influenced by the coaching context. Different contextual variables such as athlete age, developmental level, needs, and goals exist (Côté & Gilbert, 2009). There are two distinct forms of coaching based on the competitive level of the athletes; participation and performance. Participation involves short-term goals, enjoyment, and health outcomes, whereas performance involves winning and sport-specific outcomes. These two categories can be further dissected into athlete age and developmental level. As previously alluded to, the DMSP provides a framework for sport at each stage of development. The different stages change based on the type and amount of involvement in sport. All children should experience several sampling years (up to age 12) before having to decide to transition into recreational or competitive sport. Different
populations of athletes have different needs and goals and it is up to the coach to help fulfill these. Although the sporting context may differ, the aim for both is to positively develop each individual athlete. The coaching objectives for developing athletes’ outcomes (i.e. 5 C’s) will be very different depending on the coaching context. Therefore, coaches need to have a very high level of professional, interpersonal, and intrapersonal knowledge. When coaches can integrate their coaches’ knowledge, athletes’ outcomes, and coaching contexts on a consistent basis they can make a positive change to the development of sport and society.

5.2 Coach Training

A key aspect in creating an effective positive youth development program is the selection and training of the individuals responsible for implementing the program. Yet appropriate training is not being provided to the adult leaders in youth sport programs. Many youth sport coaches are untrained parent volunteers. As a result, unhealthy sporting environments exist. The IOC reported that physical, sexual, and emotional abuse are present in youth organized sport. Sport organisations have a moral, ethical, and legal duty to protect children’s health and well-being in sport (Bergeron et al., 2015). Children should not be exposed to threats, abuse, harassment, or discrimination, especially in sport. Finding qualified coaches is becoming a public health concern. Coach training needs to be instituted to make a positive change in the development of our youth. According to Camiré et al. (2012) many coaches assume that coaching at the youth level requires little knowledge or education and that PYD occurs automatically. However, research shows that, as coaches gain more experience, knowledge, and training, they become more efficient at promoting PYD (Camiré, 2012).
Athletes who play for trained coaches have reported more positive outcomes, such as higher levels of self-esteem and increased personal and social skills (MacDonald, Côté, & Deakin, 2010). Researchers suggest affirming, supportive, instructional, and autonomy-supportive coaching behaviours are desirable in youth sport (Conroy & Coatsworth, 2006). Introducing these coaching principles of PYD and promoting a motivational climate prove to be effective ways to modify athlete experiences in sport. A task-oriented climate promotes mastery of skills and achievement of personal standards, and is linked to positive sport experiences (MacDonald et al., 2010). On the contrary, an ego-oriented climate promotes outperforming others and preferential treatment of high skilled athletes and is associated with negative sport experiences. A task-oriented, also known as mastery-oriented, coach climate is shown to be a very strong predictor on PYD (Schaillée, Theeboom, & Van Cauwenberg, 2017). In a sample of 510 youth athletes in team sports, positive experiences involving personal and social skills, goal setting, and initiative were strongly related to a mastery-oriented coach climate. These studies support the need of coach-created motivational climates to promote PYD through sport.

Given that mere participation does not guarantee development, coaches must take the initiative to learn to effectively facilitate PYD in sport. Coach education can occur from a mix of formal training, which includes coaching courses, such as the NCCP, and formal education, such as a Kinesiology degree; non-formal training, which includes attending conferences and seminars; and informal training, which includes previous life experiences, interactions with peer coaches, and information from books and the internet (Camiré, Trudel, & Fomeris, 2014). Generally, a balance between the three
different sources of coach training and education supports positive coach development. Interestingly, coaches’ motivation and willingness or openness to learn is the main determining factor in effective youth sport coaches (Camiré et al., 2014). Therefore, it is important for coaches to be proactive in seeking out learning opportunities to positively impact the development of youth through sport. In summary, coaches need to be able to effectively lead and manage groups, gain respect from participants, create a positive learning environment, effectively deal with problems, understand verbal and non-verbal communication, teach skills, and give feedback (Danish et al., 2004). The two most important factors in youth sport settings are the presence of trained, caring coaches and appropriate program design.

6. Recommendations for change and Future Research

6.1 Program Recommendations

Over 2.2 Million Canadians participate in sport programs yearly. Sport programs should be designed to help athletes learn and develop individual assets and build healthy habits to succeed in different environments faced outside of sport. The development of life skills (i.e. developmental assets) such as communicating effectively, making good decisions, being assertive, and setting goals can all be learned through sport (Camiré et al., 2011). However, not all youth sport programs are created equally, nor do they yield the same developmental outcomes. Several factors play a role in determining the quality of youth sport experiences. Proper planning and designing of youth sport programs must be implemented in order to promote PYD. Policy-makers, sport organizations, coaches and parents are urged to create sport programs that integrate the following program recommendations:
Program Design

1. Remove barriers for low-income families to access sport programs
   - Every child should have the ability to participate in sport, no matter their socio-economic status. Currently, the largest indicator of whether a child participates in sport is the average household income.

2. Introduce grass roots sport programs that emphasize sport (and position) sampling
   - Diversification and variability of structured sport should be encouraged and promoted by parents and coaches to reduce the risk of overuse injuries and burnout and increase motor skill development.

3. Promote deliberate play within and outside organized sport
   - By encouraging children to participate in a variety of unstructured sports they will develop a wide range of athletic and social skills.

4. Increase emphasis on short-term fun and enjoyment while reducing emphasis on competition and winning
   - Youth continue to participate in sport when their overall satisfaction and enjoyment levels are high.

5. Remove early specialization and talent ID/selection before age 12
   - Early specialization is associated with increased rates of dropout, burnout, and injury.

6. Deliver sport programs with appropriate setting and context features
• Coaches should aim to include NRCIM’s eight setting features in line with the DMSP.

7. Focus on promoting personal assets (5 C’s) and mastery orientation
   • Coaches should commit to the psychological development of youth by fostering their athletes internal and external assets.

8. Intentionally teach and practice life skills in different domains
   • Life skills enable adaptive and positive behaviours for the athlete to deal effectively with the demands and challenges of everyday life.

9. Introduce a selection and training process for youth sport coaches
   • Youth sport coach requirements should include a mixture of formal, non-formal, and informal coach training.

10. Provide coach mentorship and education programs
    • Coach education programs should assist coaches in appropriate program design and implementation.

6.2 Future Research

The field of youth athletic development has advanced considerably, but new research and validated practical solutions to effectively improve current practices are important. An area of future research, as identified Petitpas et al., (2005), is to introduce a clear framework for effective sport-based PYD programs and their delivery. The creation of one framework that considers setting features, developmental assets, and developmental paths, and introduces key elements in sport programs that contribute to PYD is desirable. Having one model that has been extensively tested and provides a framework specific to successful sport-based PYD would expand the PYD field and its
outcomes. Secondly, future research should examine reliable and valid ways of assessing coaches’ knowledge and athletes’ outcomes in different contexts. No research to date has introduced context specific differences and recommendations to the PYD framework (Côté & Gilbert, 2009). More research could combine specific coaching contexts (ex. Recreational versus competitive sports and/or team versus individual sport) with developmental stages (ex. Early versus late adolescence) in sport-based PYD. Lastly, future research should examine the role of parents throughout youth development. Parents serve as important role models and have the ability to influence youths’ physical activity, participation in sport, and personal development. According to Fraser-Thomas et al. (2005), youth who have supportive parents that encourage participation and don’t place pressure on winning experience more sport enjoyment. Research examining the family structure and parent behaviours of successful, happy youth will contribute to the path of PYD. Ultimately, PYD through sport is still in its infancy and more research needs to be conducted in order to progress the field.

7. Conclusion

PYD through sport must be deliberately worked towards by coaches, parents, sport organizations, and policy makers (Fraser-Thomas et al., 2005). The International Olympic Committee released a statement on youth athletic development whereby a global goal exists to develop healthy, capable, and resilient young athletes while attaining inclusive, sustainable, and enjoyable participation and success for all levels of individual athletic achievement (Bergeron et al., 2015). The life period of youth is a critical time for development (Holt & Sehn, 2008). Sport is a valued activity that can be used as a vehicle to promote physical activity and PYD. By using sport as a tool for
development, all youth sport coaches can nurture the qualities, skills, and attributes necessary for youth to become productive and contributing members of society (Camiré et al., 2011). Currently, most sport programs are structured to improve performance and in doing so fail to achieve lasting sport participation and personal development (Côté & Hancock, 2016). Sport programs have experienced an increase in early sport specialization, competitiveness and professionalization, competition volume and frequency, injury rate and health problems, and a decrease in rest and recovery (Bergeron et al., 2015). All of these changes have contributed to a number of negative experiences and outcomes in youth. Athletes should be enjoying and benefiting from their sport experience. Each child should be exposed to a diverse athletic and sport experience including early diversification, deliberate play, and fun. By doing so children are more likely to be intrinsically motivated to play sport, whether competitively or recreationally (Côté & Hancock, 2016). When focus is taken away from performance and placed on involvement, long-term effects on an athletes’ participation, elite performance, and personal development occur. Through sports we need to prepare youth to be successful adults. There is a need for more coaches with postsecondary education and coaching experience as these coaches are better equipped to promote PYD. A successful coach is someone who is knowledgeable, provides organized training sessions and technical sessions, and presents opportunities for skill building. Athletes who play for formally and informally trained coaches report more positive outcomes, such as higher levels of self-esteem. Trained, caring leaders and effective program design are the two key components of PYD. The 8 setting features outlined by the NCRIM must be systematically applied to sport settings to assure positive
outcomes. When sport is properly structured and implemented, competent, confident, connected, caring, and character-rich youth are developed. Youth will become positive members of society and hopefully, when they become adults they will promote PYD to the next generation.

7.1 Limitations

There is currently limited research in the field of PYD and in particular, PYD experiences in sport. Approaches to PYD were not developed in the context of sport, they have since been adapted in attempt to mold to the unique features of sporting contexts. By doing so researchers have had difficulty applying valid and reliable measurement tools to the PYD frameworks. Currently, developmental and positive psychology evaluation approaches have been adapted to encompass the sport setting. Lerner’s 5 C’s model is the most empirically supported framework to date. Known for its good psychometric properties and internal consistency, it supports the strength-based approach to youth development. Petitpas et al. (2005) validated the 5 C’s framework for measuring PYD, however no such evidence exists for instructional sport-based PYD programs. Sport is a very applied setting which makes it difficult to control trials. In evaluating the benefits of sport participation, most studies have been correlational, which means that causality cannot be demonstrated. Furthermore, there is very little research evaluating the efficacy and effectiveness of sport-based PYD programs. There is a need to identify the characteristics that represent quality sport experiences. Many researchers have published qualitative studies of PYD through sport but no systematic review exists yet. This information needs to be evaluated, integrated, and synthesized to expand our understanding and level of confidence in promoting PYD through sport.
Once a theoretical framework for PYD through sport is created and empirically validated it can be applied across the globe and measured through specific constructs.

References


https://doi.org/10.1016/j.scispo.2014.08.133


https://doi.org/10.1080/04419057.2004.9674365


MacDonald, D. J., Côté, J., & Deakin, J. (2010). The Impact of Informal Coach Training


Appendix A
Cote’s Developmental Model of Sport Participation

Figure A1 – The three developmental pathways in the DMSP, their differences, and their probable outcomes.

(Côté & Vierimaa, 2014)
Table A1 - The seven postulates associated with the DMSP.

(Côté & Vierimaa, 2014)
## Appendix B

### Developmental Assets — For Adolescents

**Support**
1. Family support—Family life provides high levels of love and support.
2. Positive family communication—Young person and her or his parent(s) communicate positively, and young person is willing to seek advice and counsel from parents.
3. Other adult relationships—Young person receives support from three or more nonparent adults.
4. Caring neighborhood—Young person experiences caring neighbors.
5. Caring school climate—School provides a caring, encouraging environment.
6. Parent involvement in schooling—Parent(s) are actively involved in helping young person succeed in school.

**Empowerment**
7. Community values youth—Young person perceives that adults in the community value youth.
8. Youth resources—Young people are given useful roles in the community.
9. Service to others—Young person serves in the community one hour or more per week.
10. Safety—Young person feels safe at home, school, and in the neighborhood.

**Boundaries & Expectations**
11. Family boundaries—Family has clear rules and consequences and monitors the young person's whereabouts.
12. School boundaries—School provides clear rules and consequences.
14. Adult role models—Parent(s) and other adults model positive, responsible behavior.
15. Positive peer influence—Young person's best friends model responsible behavior.
16. High expectations—Both parent(s) and teachers encourage the young person to do well.

**Constructive Use of Time**
17. Creative activities—Young person spends three or more hours per week in learning or practice in music, theater, or other arts.
18. Youth programs—Young person spends three or more hours per week in sports, clubs, or organizations at school and/or in the community.
19. Religious community—Young person spends one or more hours per week in activities in a religious institution.
20. Time at home—Young person is out with friends “with nothing special to do” two or fewer nights per week.

**External Assets**
21. Achievement motivation—Young person is motivated to do well in school.
22. School engagement—Young person is actively engaged in learning.
23. Homework—Young person reports doing at least one hour of homework every school day.
24. Boding to school—Young person cares about her or his school.
25. Reading for pleasure—Young person reads for pleasure three or more hours per week.

**Positive Values**
26. Caring—Young person places high value on helping other people.
27. Equality and social justice—Young person places high value on promoting equality and reducing hunger and poverty.
28. Integrity—Young person acts on convictions and stands up for her or his beliefs.
29. Honesty—Young person “tells the truth even when it is not easy.”
30. Responsibility—Young person accepts and takes personal responsibility.
31. Commitment—Young person believes it is important to be sexually active or to use alcohol or other drugs.

**Social Competencies**
32. Planning and decision making—Young person knows how to plan ahead and make choices.
33. Interpersonal competence—Young person has empathy, sensitivity, and friendship skills.
34. Cultural competence—Young person has knowledge of and comfort with people of different cultural/ethnic backgrounds.
35. Resistance skills—Young person can avoid negative peer pressure and dangerous situations.
36. Peaceful conflict resolution—Young person seeks to resolve conflict nonviolently.

**Positive Identity**
37. Personal power—Young person feels he or she has control over “things that happen to me.”
38. Self-esteem—Young person reports having a high self-esteem.
39. Sense of purpose—Young person reports that “my life has a purpose.”
40. Positive view of personal future—Young person is optimistic about her or his personal future.

**Commitment to Learning**
21. Achievement motivation—Young person is motivated to do well in school.
22. School engagement—Young person is actively engaged in learning.
23. Homework—Young person reports doing at least one hour of homework every school day.
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*Figure B1 — The 40 Developmental Assets young people need to succeed. External Assets: The supports, opportunities, and relationships young people need across all aspects of their lives. Internal Assets: The personal skills, self-perceptions, and values they need to make good choices, take responsibility for their own lives, and be independent and fulfilled.*

(Search Institute, 1997)
Figure B2 – The Developmental Assets Profile: Measuring young people’s internal strengths and external support, and their growth in these over time.

(Search Institute, 1997)
Table 1. Summary of SUPER Workshops

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Description</th>
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<tbody>
<tr>
<td>Workshop 1</td>
<td>Developing a Team - The program and the peer leaders are introduced. Participants engage in several team-building activities designed to enhance communication and understand each other’s strengths and weaknesses.</td>
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<tr>
<td>Workshop 2</td>
<td>Dare to Dream - Participants learn about and discuss the importance of having dreams for the future. They then identify career/school and sport dreams they have for 10 years in the future. The peer leaders share some of their dreams.</td>
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<td>Workshop 3</td>
<td>Setting Goals (Part 1) - Participants learn the difference between dreams and goals and how to turn a dream into a goal. They identify people who support them in achieving their goals (Goal Keepers) and people who may prevent them from achieving their goals (Goal Busters).</td>
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<td>Workshop 4</td>
<td>Setting Goals (Part 2) – Participants learn the four characteristics of a reachable goal (positively stated, specific, important to the goal setter and under the goal setter’s control). They practice distinguishing goals that are important to the goal setter and goals that are positively stated.</td>
</tr>
<tr>
<td>Workshop 5</td>
<td>Setting Goals (Part 3) - Participants practice distinguishing goals that are specific from ones that are not specific and goals that are under their control from those that are not.</td>
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<tr>
<td>Workshop 6</td>
<td>Making Your Goal Reachable - Participants apply the four characteristics of a reachable goal to their own goals. They set two six-week goals; one for sport and a personal goal.</td>
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<td>Workshop 7</td>
<td>Making a Goal Ladder – Participants learn the importance of developing plans to reach goals (called a Goal Ladder) and make plans to reach the two goals they have set. Making a ladder involves placing the goal at the top of the ladder and identifying six steps to reach their goal.</td>
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<tr>
<td>Workshop 8</td>
<td>Identifying and Overcoming Roadblocks to Reaching Goals - Participants learn how different roadblocks (e.g. using drugs, getting into fights, lack of confidence) can prevent them from reaching their goals. They identify possible roadblocks and learn and practice a problem solving strategy called STAR to help them overcome the roadblocks.</td>
</tr>
<tr>
<td>Workshop 9</td>
<td>Seeking Help From Others - Participants learn the importance of seeking social support when working on goals. They identify people in their lives, a Dream Team, who can provide doing and/or caring help to assist them in achieving their goals.</td>
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<tr>
<td>Workshop 10</td>
<td>Using Positive Self-Talk - Participants learn the importance of identifying their self-talk, how to distinguish positive from negative self-talk and how to identify key positive self-talk statements related to their goals. They then practice making positive self-talk statements.</td>
</tr>
<tr>
<td>Workshop 11</td>
<td>Learning to Relax - Participants learn the importance of relaxation to reduce tension and how to focus and breathe as a means to help them relax.</td>
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<tr>
<td>Workshop 12</td>
<td>Managing Emotions - Participants learn that managing their emotions, both in sport and life, is learning to be smart. They learn and practice a procedure, the 4 R’s (Replay, Relax, Redo, Ready), to help them play smart both inside and outside sport.</td>
</tr>
<tr>
<td>Workshop 13</td>
<td>Developing a Healthy Lifestyle - Participants develop an understanding of the importance of being healthy in all areas of their lives. They also learn how to make changes to insure they are living a healthy lifestyle and are asked to make a commitment to such a lifestyle.</td>
</tr>
<tr>
<td>Workshop 14</td>
<td>Appreciating Differences - Participants identify differences among individuals in the group and determine which ones are important and which ones are insignificant in reaching goals.</td>
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<tr>
<td>Workshop 15</td>
<td>Having Confidence and Courage - Participants understand the importance of believing in themselves and learn how to develop more self-confidence.</td>
</tr>
<tr>
<td>Workshop 16</td>
<td>Learning to Focus on Your Personal Performance - Participants learn what it means to compete against oneself and understand that competing against oneself to attain personal excellence can enhance performance.</td>
</tr>
<tr>
<td>Workshop 17</td>
<td>Identifying and Building on Your Strengths - Participants identify personal strengths and learn how to use the skills associated with these strengths and the skills learned in the program in other areas of their lives.</td>
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<tr>
<td>Workshop 18</td>
<td>Goal Setting for Life - Participants learn that goal setting is a lifetime activity and they set two goals to attain over the next three months. One goal is school related; the other relates to home or community. They assess whether the goals meet the four characteristics of a reachable goal and develop a goal ladder for each goal.</td>
</tr>
</tbody>
</table>

Table C1- A description of the 18 SUPER modules. Each module is approximately 30 minutes in length and implemented by the SUPER student-athlete leaders.

(S Danish et al., 2002)
Table 2. The Sport Observation System

The Sport Observation System

1. How attentive are participants when given instructions or observing demonstration?
2. What happens when participants cannot perform an activity to their expectations?
3. Do participants initiate questions when they do not understand something, or do they wait for someone else to talk first?
4. Do participants initiate conversation with others, or do they wait for someone else to talk first?
5. How do participants respond when they have a good or a bad performance?
6. How do participants respond when others have a good or a bad performance?
7. How do participants respond when someone gives them praise or criticism?
8. Do participants give up when they don’t do well, or do they persist?
9. Do participants compete or cooperate with teammates?

Table C2- Sport Observation System (SOS): Used to understand how youth participate and not just on how well they perform. Implemented by the SUPER student-athlete leaders.

(S Danish et al., 2002)