

EXPLORING THE SPORT EXPERIENCES OF YOUTH WITH PHYSICAL DISABILITIES
THROUGH THE LENS OF POSITIVE YOUTH DEVELOPMENT

AMANDA DN MCKINNON

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Abstract

Research has explored the benefits and challenges associated sport participation among youth with physical disabilities (YWPD), however few studies have attempted to understand how sport participation may facilitate and/or hinder positive development among YWPD. Positive youth development (PYD) is an approach used to understand youth development through sport, however limited research exists among YWPD. To address this gap, the current study explored the experiences of YWPD through a PYD lens to uncover the developmental outcomes associated with organized sport participation and identify factors influencing these outcomes. Individual semi-structured interviews were conducted with YWPD ($n=9$, ages 14-21). YWPD experienced both positive and negative outcomes across physical, social, and personal domains, which were largely influenced by their social environment. These findings begin to shed light on the utility of organized sport as a context to promote positive development among YWPD and may help inform how sport programs can work toward achieving this.

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Chapter One: Literature Review

Physical Activity and Youth with Disabilities

Physical activity (PA) can yield numerous health-related benefits for people of all ages and abilities (ParticipACTION, 2018). Nevertheless, the vast majority of today's youth are insufficiently active; a reality that is especially true for youth with physical disabilities (YWPD) (Baksjøberget, Nyquist, Moser, & Jahnsen, 2017; Law et al., 2006). YWPD show significantly lower PA levels compared to their age-matched peers without disabilities (King, Law, Hurley, Petrenchik, & Schwellnus, 2010; Law et al., 2006; Steele et al., 2004).

Adverse consequences associated with insufficient PA among this population are far-reaching and include: weight gain, mobility limitations, physical deconditioning, fatigue, heightened feelings of dependence, social isolation, and decreased self-esteem (Liou, Pi-Sunyer, & Laferrère, 2005; Murphy & Carbone, 2008). Indeed, there is great value in PA participation among YWPD. However, YWPD encounter unique personal (i.e., negative self-perceptions, attitudes and emotions, secondary health problems, and functional limitations), social (i.e., lack of social support, discrimination, and stigma), and structural barriers (i.e., poorly designed programs, an inability to access appropriate services or program, and a lack of disability-specific knowledge among health-care professionals and service providers); limiting the amount and quality of PA opportunities available to them (Jaarsma, Dijkstra, De Blécourt, Geertzen, & Dekker, 2015; Martin Ginis et al., 2016). Fortunately, there is a growing body of evidence that supports sport as a fertile context to increase PA (Kjønniksen, Anderssen, & Wold, 2009; Marques, Ekelund, & Sardinha, 2016) and promote positive developmental outcomes (Eime, Young, Harvey, Jack, Charity, & Payne, 2013; Murphy & Carbone, 2008; te Velde et al., 2018; Turnnidge, Vierimaa, & Coté, 2012). However, this research has predominantly focused on the

sport experiences of athletes without disabilities (e.g., Fraser-Thomas & Côté, 2009; Fraser-Thomas, Côté, & Deakin, 2005; Holt, 2008). Given the potential for sport to foster PA participation and promote positive outcomes, there is a call for research to further investigate sport participation among YWPD.

Sport Participation among Youth with Physical Disabilities

Compared to other domains of PA, sport offers a rich context for social interaction and companionship; providing YWPD with opportunities to develop friendships and social networks (J. Martin, 2011; te Velde et al., 2018). Specifically adapted sport, which is modified or designed to meet the needs of participants with a disability (e.g., wheelchair basketball), immerses YWPD in a unique environment where they can connect with peers with disabilities (Shapiro & Martin, 2010; Winnick, Joseph & Porretta, 2016). This particular social setting is associated with positive mood and self-perceptions, as well as improved self-confidence and athletic competence (Shapiro & Martin, 2010; te Velde et al., 2018). Since many YWPD have fewer friends and may experience greater levels of social isolation compared to youth without disabilities (Shapiro & Martin, 2010), opportunities to engage in social interactions are particularly important. Furthermore, participating in sport can help YWPD challenge common disability stereotypes (e.g., weak, sick, and disadvantaged) by demonstrating to themselves and to others that they are physically capable, healthy and fit (Taub, Blinde, & Greer, 1999). Participating in sport can also enhance physical fitness (e.g., strength, flexibility, balance, and endurance), mitigate functional declines (Murphy & Carbone, 2008), and reduce the frequency and severity of secondary health conditions among YWPD (Shapiro & Martin, 2014). Finally, YWPD can develop critical life skills from participating in sport, such as responsibility, time management, leadership, and teamwork (Turnnidge et al., 2012). Such life skill development is crucial for YWPD in facilitating their independent and successful transition into adulthood (Kingsnorth, Healy, &

Macarthur, 2007). Taken together, YWPD can benefit greatly from participating in sport—making it all too easy to overlook some of the challenges that can also ensue.

Negative Sport Experiences

YWPD often have limited opportunities to participate in sport—and when they do, they commonly perceive their sport experiences as negative or unenjoyable (Bantjes, Swartz, Conchar, & Derman, 2015; Jaarsma et al., 2015; Orr, Tamminen, Sweet, Tomasone, & Arbour-Nicitopoulos, 2018). Factors that have been shown to hinder the sport experiences of YWPD include social isolation and bullying, exclusion, inaccessible premises, lack of sports aids, and inappropriateness or lack of adapted activities (Orr, et al., 2018, Wickman, 2015). The above factors have been shown to contribute to a need thwarting environment where the need for autonomy, competence and relatedness are seldom met among YWPD (Orr et al., 2018). For example, coaches too frequently thwart YWPD’s autonomy and competence by underestimating their capabilities and making decisions on their behalf (e.g., deciding what activities they can or cannot do; Bantjes et al., 2015). Furthermore, coaches who lack the knowledge, experience and/or ability to adapt activities can unintentionally create environments where safety is compromised and YWPD feel excluded, incompetent, embarrassed or disempowered (Bantjes et al., 2015; Orr et al., 2018). It is common for YWPD to also experience bullying from peers, being treated as “others”, as well as feeling disconnected and excluded (Orr et al., 2018). Such negative experiences can result in maladaptive outcomes (i.e., disengagement, avoidance, and dropout); thus, ultimately jeopardizing the current and future sport participation of YWPD (Orr et al., 2018).

While existing research sheds some light on the potential benefits and challenges associated with sport participation among YWPD, further research is needed to elucidate the processes behind how these outcomes are acquired (Turnnidge, et al., 2012). There is evidence to

suggest that social interactions and relationships may play an integral role in shaping the quality of sport experiences among YWPD (Evans et al., 2018; Martin Ginis, Ma, Latimer-Cheung, & Rimmer, 2016; J. J. Martin & Mushett, 1996; Orr, Tamminen, Sweet, Tomasone, & Arbour-Nicitopoulos, 2018; Shirazipour et al., 2018; Turnnidge et al., 2012). For example, the quality parasport participation (QP) framework conceptualizes optimal parasport participation by suggesting that it can be achieved when elements of challenge (i.e., feeling appropriately tested), mastery (i.e., experiencing competence), autonomy (i.e., perceived independence, having a choice), belongingness (i.e., being part of a group or feeling accepted by others), meaning (i.e., working toward a valued goal or experiencing a sense of responsibility toward others), and engagement (i.e., feeling involved and motivated) are part of the sport experiences of athletes with disabilities (Evans et al., 2018; Shirazipour et al., 2018). Furthermore, this framework suggests that the social environment is among one of the key factors that reinforces quality parasport participation (Shirazipour et al., 2018). With that being said, the following section highlights literature surrounding the influence of parents, peers and coaches on the sport experiences of YWPD.

The Role of Supportive Others in Fostering Positive Sport Experiences among Youth Physical Disabilities

Parents

Parents play a critical role in facilitating youth's sport behaviours (Rhodes & Gustafson, 2006). YWPD tend to rely heavily on their parents for support to facilitate their participation (Jaarsma, Dijkstra, De Blécourt, Geertzen, & Dekker, 2015; J. J. Martin & Mushett, 1996; Shields & Synnot, 2016), which is why parental support is among one of the chief factors influencing sport participation among YWPD (Kowalchuk & Crompton, 2009; Turnnidge et al., 2012).

Parental support can take the form of encouragement (e.g., social support), involvement (e.g., participate with child, role modeling) and facilitation (e.g., provide transportation and financial resources; Beets, Cardinal, & Alderman, 2010). Through the provision of tangible supports (e.g., knowledge and information, providing specialized equipment, transportation, and financial resources), parents create sport opportunities for YWPD that would otherwise be unfeasible (Turnnidge et al., 2012). To further facilitate participation and inclusion, parents advocate for their child by seeking out services, programs and resources, as well as informing others (e.g., coaches, program leaders, volunteers) regarding specific modifications or adaptations (Siebert, Hamm, & Yun, 2017). Of equal importance is the emotional support and encouragement that parents provide (Turnnidge et al., 2012). Through parental support and encouragement, YWPD can develop self-efficacy and a sense of enjoyment and enthusiasm for sport; both of which are factors that positively influence the sport experiences of YWPD and their continued desire to participate in sport (J. J. Martin, 2006).

Peers

Peers can also positively shape the sport experiences of YWPD by providing opportunities to feel accepted, supported, challenged, and motivated (Shirazipour et al., 2018; Turnnidge et al., 2012). Being among peers who share similar experiences and impairments creates a unique support network for YWPD where they are able to socialize, give each other advice, and solve problems together (Shirazipour et al., 2018). These experiences can promote belongingness and self-acceptance by helping YWPD realize that they are not alone (Turnnidge et al., 2012). For example, interacting with peers who have a disability allows YWPD to gain valuable insight regarding different types of disabilities—helping them become more accepting of their own and other’s disabilities and capabilities (Turnnidge et al., 2012). Positive peer interactions also support YWPD’s need for relatedness, which has been associated with

enjoyment and continued sport participation (Orr et al., 2018). Peers can also act as meaningful role models that YWPD look to for encouragement and inspiration (Turnnidge et al., 2012). For instance, seeing individuals with similar or worse impairments can motivate YWPD to push the limits of their physical capabilities; enhancing their confidence and cultivating a sense of mastery (Shirazipour et al., 2018; Turnnidge et al., 2012). Finally, YWPD report that making new friends and having fun together significantly contributes to the quality of their sport experiences (Bantjes et al., 2015; Turnnidge et al., 2012). Experiencing quality friendships and having fun have been shown to predict YWPD's desire to continue playing sports (J. J. Martin, 2006). Importantly, these friendships can permeate to social contexts outside of sport (Turnnidge et al., 2012); a benefit that is underscored by the notion that YWPD often experience fewer social engagements (King et al., 2006). Taken together, positive peer relationships are central in creating a sport environment where individual differences are celebrated (Turnnidge et al., 2012) and feelings of mastery and belongingness are fostered (Canadian Disability Participation Project, 2018).

Coaches

Coaches are key players in facilitating positive sport experiences for YWPD. In fact, outcomes acquired from sport are highly contingent on coach-athlete relationships (Turnnidge et al., 2012). Coaches are handed the important task of creating a supportive, safe, inclusive and challenging sport environment, which can be accomplished by developing positive and trusting relationships with their athletes (Turnnidge et al., 2012). Coaches are also responsible for creating opportunities that enable the personal and physical growth of their athletes. Coaches can bolster YWPD's perceptions of relatedness, competence and autonomy by being receptive to specific needs and abilities, and adapting activities or exercises accordingly (Orr et al., 2018). YWPD articulate that coaches play an important role in supporting their progress, helping them

learn new skills, and achieving mastery experiences within their sport; providing them with a sense of accomplishment and keeping them engaged in sport (Bantjes et al., 2015). Furthermore, coaches' beliefs in their athletes' abilities can enhance self-efficacy and positively influence continued motivation towards sport (Fraser-Thomas & Côté, 2009). This type of support is particularly important for YWPD who often perceive others as having low expectations of their capabilities (Taub et al., 1999). Finally, coaches play a central role in helping athletes develop core life skills (Cronin & Allen, 2018). For example, by creating opportunities for athletes to engage in meaningful experiences within and outside of sport, coaches can help YWPD assert their independence and develop their interpersonal and leadership skills (Turnnidge et al., 2012). YWPD can greatly benefit from these types of opportunities, given that they often develop critical life skills later compared to their peers without disabilities (Kingsnorth et al., 2007).

While this research highlights that parents, peers and coaches may largely influence the quality of YWPD's sport experiences, a paucity of research examines how social relationships and other contextual factors (e.g., physical environment, the type of activity) shape and support YWPD's positive and/or negative development through sport (Turnnidge et al., 2012). There remains a need for research to gain a broader understanding of the outcomes associated with sport participation among YWPD (Bragg & Pritchard-Wiart, 2019) and the processes through which these outcomes may be acquired (Turnnidge et al., 2012) in order to better inform how sport can be structured and delivered to promote positive outcomes among YWPD. Positive youth development (PYD) is an approach that may enhance our understanding of this.

Positive Youth Development: An Approach for Understanding Youth Development Through Sport

Positive youth development (PYD) has emerged as an alternative approach to understanding youth development (Damon, 2004; Holt, 2008). Rather than focusing on

adolescence as a period of “storm and stress” (Holt, 2008), PYD adopts an *asset-building paradigm* that views all youth as having resources to be developed instead of problems to be solved (Benson, 2006). Proponents of PYD research posit that youth’s potential for personal and interpersonal growth (e.g., improved self-esteem, responsibility, initiative, teamwork, and positive social relationships) can be harnessed when engaging in organized extracurricular activities—such as sport (Dworkin, Larson, & Hansen, 2003; Fraser-Thomas et al., 2005; Holt, 2008; Larson, 2000). Adopting this strength-based approach may be valuable in exploring the sport experiences of YWPD, as it challenges the traditionally dominant construct of disability (i.e., medical model; Townsend, Smith, & Cushion, 2015) by conceptualizing sport as a context through which the unique strengths and abilities of YWPD are harnessed and celebrated rather than problematized.

PYD has been used widely to understand the type of developmental outcomes youth can acquire from participating in sport (Fraser-Thomas & Côté, 2009; Fraser-Thomas et al., 2005; Holt & Neely, 2011) and the processes through which these outcomes can be acquired (Holt et al., 2017; NRCIM, 2002; Petitpas, Cornelius, Van Raalte, & Jones, 2005). PYD through sport research among youth without disabilities has identified positive outcomes related to improved self-concept (e.g., positive identity and improved self-esteem), reduced depressive symptoms (Eime et al., 2013; Jones, Edwards, Bocarro, Bunds, & Smith, 2017), higher academic achievement (Holt, 2008), positive social interactions, meaningful adult and peer relationships (Fraser-Thomas & Côté, 2009), as well as heightened feelings of competence and confidence (Jones et al., 2017). Furthermore, sport has been shown to provide youth with rife opportunities to develop important life skills such as initiative, emotional regulation, teamwork, respect, leadership, problem solving, and social skills (Holt & Neely, 2011; Holt, Tink, Mandigo, & Fox, 2008; Larson, 2000). However, studies have also reported associations between youth sport

participation and negative outcomes (Fraser-Thomas & Côté, 2009; Fraser-Thomas et al., 2005; Holt & Neely, 2011), suggesting that developmental outcomes acquired through sport may be contingent on a variety of social and contextual factors. The sport context (i.e., physical and social environment) has gained a lot of attention as an important determinant of the quality of youth's sport experiences (NRCIM, 2002; Petitpas et al., 2005). It has been proposed that a sport context that promotes favorable developmental outcomes is one that creates a sense of belonging among its participants and provides a safe, structured, fun, and challenging environment for youth to develop their skills (NRCIM, 2002; Petitpas et al., 2005). Caring and supportive parents, peers, and coaches have also been shown to play a crucial role in facilitating PYD outcomes (Holt et al., 2017; NRCIM, 2002; Petitpas et al., 2005). Finally, activities and strategies that emphasize life skill development and transfer have been shown to make up an important feature of sport contexts that foster PYD outcomes (Holt et al., 2017; Turnnidge, Côté & Hancock, 2014).

While this research provides insight regarding the utility of sport as a developmental context to promote PYD, relatively limited research exists among YWPD. To our knowledge, Turnnidge and colleagues' (2012) study was the first to examine the sport experiences of athletes with a physical disability through a PYD lens. Their exploratory study revealed positive outcomes related to social connectedness and acceptance, improved self-perceptions, and life skill development (Turnnidge et al., 2012). Furthermore, coach-athlete relationships, peer interactions, and the team environment emerged as important social factors contributing to the quality of YWPD's sport experiences. This study provides initial support for the potential use of PYD as an approach to further enhance our understanding of the sport experiences of YWPD (Turnnidge et al., 2012). However, findings from this study are limited to a single sport (i.e., competitive swimming) and may not translate to other sport contexts (e.g., recreational).

Furthermore, negative experiences were not captured in participants' responses; leaving researchers to question what negative outcomes YWPD may experience from sport and the factors contributing to these outcomes. The current study aimed to address this gap by using Holt and colleagues' (2017) model of positive youth development through sport (Appendix A; Holt et al., 2017) to examine the positive and negative experiences of YWPD across different sports in hopes to a) to expand understanding of the developmental outcomes that YWPD acquire through sport and b) understand the social-contextual processes that influence how these outcomes are acquired.

A Model of Positive Youth Development Through Sport

The present study was guided by Holt and colleagues' (2017) model of positive youth development through sport (Holt et al., 2017). This model is a product of synthesized findings from a recent meta-synthesis investigating qualitative literature in PYD and sport among youth without disabilities (Holt et al., 2017). It is framed within the context of *distal ecological systems* and acknowledges that sport programs (microsystem), and the interactions that occur within them, can influence or be influenced by broader systems (i.e., political, cultural, and economic systems). This model also considers the impact that individual differences (i.e., an individual's traits, gender, ethnicity) may have on the way PYD outcomes are acquired (Holt et al., 2017).

This model suggests that youth sport participation can lead to positive personal, social, and physical outcomes. Personal outcomes associated with sport participation include positive self-perceptions (e.g., confidence and self-esteem), academic achievement, perseverance and hard work, independence and personal responsibility, positive attitudes, stress management, and goal setting (Holt et al., 2017). Social outcomes involve meeting new people and making friends, as well as developing leadership, teamwork, and communication skills. Finally, physical outcomes relate to developing fundamental movement skills and learning skills for healthy active

living (Holt et al., 2017). This model posits that a *positive youth development climate* and a *life skill program focus* are important factors that together may optimize PYD outcomes acquired through sport.

Positive Youth Development Climate (PYD Climate)

A PYD climate refers to the social-contextual factors within a sport environment that enable youth to gain experiences that promote PYD outcomes (Holt et al., 2017). Core concepts related to PYD climate include adult (e.g., leaders/coaches) and peer relationships, as well as parental involvement. This model suggests that strong and empathetic adult relationships, positive relationships with peers, and the supportive involvement of parents can create a positive environment that is conducive to developing PYD outcomes (Holt et al., 2017).

Life Skills Program Focus

Sport programs that adopt a *life skills focus* deliberately integrate activities and techniques within their curriculum that are designed to develop life skills, and in turn, promote PYD outcomes (Holt et al., 2017). A life skills program focus specifically involves providing youth with opportunities to engage in *life skills building activities* and *transfer activities*. Life skills building activities are defined as pedagogical strategies that aim to explicitly teach life skills, whereas transfer activities involve promoting the transfer of life skills learned in sport to other domains (e.g., personal, social, and academic situations; Holt et al., 2017). Examples of life skills building activities associated with promoting PYD outcomes include personal life skills building activities (e.g., establishing high expectations and accountability for behaviour, role-modeling of desired behaviours, use of key words and phrases, autonomy-building and goal setting), and social life skills building activities (e.g., team building, volunteer work, and peer mentoring; Brown & Fry, 2011; Camiré, Trudel, & Bernard, 2013; Camiré, Trudel, & Forneris, 2012; Flett, Gould, Griffes, & Lauer, 2016; Holt, Sehn, Spence, Newton, & Ball, 2012; Olushola,

Jones, Dixon, & Green, 2013; Trottier & Robitaille, 2014; Turnnidge et al., 2012; Walsh, 2007).

Transfer activities involve having deliberate discussions with athletes regarding how skills learned in sport can transfer to various other life situations (Holt et al., 2017).

According to this model, sport environments that encourage strong and positive relationships between athletes and parents, peers, and coaches (i.e. positive PYD climate) and *explicitly teach life skills* through life skills building and transfer activities (i.e. life skills program focus) can promote personal, social and physical PYD outcomes (Holt, et al., 2017). This model also acknowledges the possibility for *implicit learning*, whereby PYD outcomes can be obtained in the absence of a life skills program focus—as long as a positive PYD climate is fostered (Holt et al., 2017).

Although this model is not specific to YWPD per se, it considers key factors that have been shown to largely influence the sport experiences of YWPD. For instance, PYD climate highlights the importance of understanding how parent, peer, and coach relationships impact the experiences and outcomes that youth derive from sport (Holt et al., 2017). This is particularly relevant to YWPD, who rely heavily on these social agents to facilitate positive sport experiences (Canadian Disability Participation Project, 2018b; Turnnidge et al., 2012). Furthermore, this model specifically focuses on understanding the underlying factors that can contribute to life skill development through sport (Holt et al., 2017). This is important for YWPD as they tend to experience fewer opportunities to develop and practice critical life skills (Kingsnorth et al., 2007). Finally, YWPD tend to experience unique challenges related to having a disability such as low self-concept, feeling incompetent (Shields, Murdoch, Loy, Dodd, & Taylor, 2006), functional decline and physical deconditioning (Liou et al., 2005; Rimmer, 2001), as well as social isolation and loneliness (Poulsen, Ziviani, Cuskelly, & Smith, 2007; Rimmer, Rowland, & Yamaki, 2007). As a result, personal, social, and physical PYD outcomes

highlighted within this model may be particularly relevant to YWPD and beneficial for them to acquire through sport.

Purpose

The purpose of this study was to explore the sport experiences of YWPD to:

1. Identify the developmental outcomes YWPD acquire from participating in organized sport.
2. Understand the social-contextual factors that influence/contribute to the acquisition of these developmental outcomes.

Research Questions

- a) What positive and negative developmental outcomes do YWPD acquire from participating in organized sport?
- b) What social-contextual factors influence the sport experiences of YWPD (positive and negative) and how do these factors contribute to PYD outcomes?

Chapter Two: Methods

Participants

This study included nine youth with a physical disability who were enrolled and participating in an organized sport program at the time of recruitment. Participants' demographic information can be found in Table 1. Youth was defined as anyone between the ages of 14-21 years old, which aligns with age limits adopted by the United Nations (Youth: 15-24; United Nations General Assembly, 1981) as well as definitions in disability research (e.g., Leo, Faulkner, Volfson, Bassett-Gunter, & Arbour-Nicitopoulos, 2018). In accordance with the Ontario Human Rights Commission (2016), physical disability included,

any degree of physical disability, infirmity, malformation or disfigurement that is caused by bodily injury, birth defect or illness and, without limiting the generality of the foregoing, includes diabetes mellitus, epilepsy, a brain injury, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or physical reliance on a guide dog or other animal or on a wheelchair or other remedial appliance or device (Ontario Human Rights Commission, 2016).

Finally, a sport program encompassed any organized and adult supervised, competitive or recreational sport activities (Holt et al., 2017), that take place outside of regular school hours (i.e., not physical education class). A broad conceptualization of sport was adopted to include popular and preferred sport activities among YWD such as dance, gymnastics, skiing, martial arts and swimming (Vute & Urnaut, 2009). Inclusion criteria was limited to youth a) between the ages of 14-21, b) who self-identified as having a physical disability, c) whose impairment(s) did not prevent or severely hinder oral communication and/or their capacity to provide informed consent and d) spoke English. Moreover, participants with an auditory impairment were excluded given that data collection involved audio-recorded interviews.

Table 1. *Participant Demographics and Sport Information*

Participant ID	Age (Sex)	Place of Residence	Self- identified Physical Disability	Sport(s)	Level
P1	18(M)	Toronto, Ontario	Blind, Left Side Hemiparesis	Swimming, Goal Ball	Recreational
P2	14(F)	Elliot Lake, Ontario	Cerebral Palsy	Swimming	Competitive
P3	16(M)	Toronto, Ontario	Charcot Marie Tooth Disease	Wheelchair Rugby	National (Team Canada)
P4	15(M)	Markham, Ontario	Paraplegia	Wheelchair Tennis, Adapted Skiing	Recreational

P5	14(M)	Barrie, Ontario	Dyskinetic Cerebral Palsy	Adapted Skiing, Sledge Hockey	Recreational, Competitive
P6	17(F)	Brampton, Ontario	Left Hemiplegia, Cerebral Palsy	Wheelchair Basketball, Track & Field (throwing)	Provincial (Team Ontario) National (Team Canada)
P7	15(M)	Markham, Ontario	Hereditary Spastic Paraplegia	Sit Skiing, Sledge Hockey	Recreational, Competitive
P8	21(M)	Ottawa, Ontario	Cerebral Palsy (mild)	Soccer, Paralympic Soccer	Varsity, National (Team Canada)
P9	18(M)	Ottawa, Ontario	Mild Physical Deformity (upper extremities)	Adapted Ice Hockey, Soccer	Competitive

Recruitment and Sampling Methods

The study recruited participants from across Ontario using a maximum variation purposive sampling method. This sampling method is commonly used to capture an in-depth understanding of a phenomenon (i.e., sport) as it is experienced among different people, in different settings, and at different times (Patton, 1990). Therefore, this method was fitting to explore the unique experiences of a diverse sample of YWPD participating in a broad range of sports.

As part of the recruitment strategy, parents and youth from previous studies (Larocca, Arbour-Nicitopoulos, Latimer-Cheung, & Bassett-Gunter, 2019; Latimer-Cheung, Bassett-Gunter, & Larocca, in preparation), who expressed interest in hearing about future research opportunities, were contacted via email. Participants were also recruited through community organizations within Ontario that: a) support PA and sport participation for people with disabilities and b) reach youth with disabilities or their parents (e.g., Parasport Ontario, Burlington Vipers Wheelchair Basketball Club, Variety Village, Canadian Sport Institute Ontario, the Ontario Wheelchair Sports Association, the Brock Niagara Penguins, the Capital City Condors Adapted Hockey Club, and Holland Bloorview Kids Rehabilitation Hospital). This

was done by connecting with the above organizations (i.e., email and phone call), and requesting to have the study's recruitment information shared through their online platforms (i.e., social media, websites) and posted in their facilities (See Appendix B for recruitment material). Finally, snowball sampling was used to recruit participants by asking parents and youth to invite other members of the study's desired population to participate (Patton, 1990).

Prior to data collection, informed consent was obtained from all participants. If a participant was under the age of 16, participant assent as well as informed consent from a parent or legal guardian was obtained (See Appendix C for consent and assent forms). Participation was completely voluntary, and participants received an honorarium of \$25.00 in the form of an electronic gift card (i.e., Amazon, Indigo, Starbucks, and Tim Hortons).

Procedure

Upon obtaining consent, participants completed an online questionnaire and concept-map (described below). They were also given the option to receive an initial phone call to walk them through the completion of these steps. Once the questionnaire and concept-map were submitted electronically, an individual semi-structured interview was scheduled. Prior to the interview, the first author reviewed responses from the online questionnaire and concept-map to familiarize herself with each participant. The interview consisted of 10 open-ended questions that aimed to understand participants' positive and negative experiences participating in organized sport. All interviews were conducted individually by the first author and were audio-recorded. Participants were given the option to have their parent sit-in on the interview to provide support and assistance. However, parents were encouraged to remain quiet throughout the interview to allow participants to speak for themselves. All procedures were approved by York University's Research and Ethics Board.

Data Collection

Demographics

Participants completed a short online questionnaire via SurveyMonkey (SurveyMonkey Inc., San Mateo, California, USA), where they provided informed consent and were asked to self-report their age, gender, place of residence, education level, and the type and nature (acquired or congenital) of their disability. Participants were also asked to provide information regarding the organized sport(s) they were involved in (e.g., type of sport, name of organization/program, frequency of participation, and level of competition; See Appendix D for participant and sport information questionnaire). Once the questionnaire was completed, data from each participant was extracted from SurveyMonkey and imputed into an Excel document.

Concept – Map

Participants were instructed to create a concept-map that asked them to recall and write-down key thoughts, feelings and experiences related to their sport(s) (See Appendix E for concept – map template). Participants were given a template to fill-out and questions to help guide them through this process. Participants were also encouraged to personalize their map by adding extra boxes, arrows, and ideas. Following the completion of the concept-map, each participant was asked to submit it via email. The purpose of this exercise was to prompt participants to remember significant aspects or experiences related to their sport(s) prior to the interview. The concept-maps were used as a reference during the interview to facilitate discussions with youth but were not used as a form of data analysis. It is suggested that graphic elicitation techniques, such as this one, can help enhance participant reflexivity and take into account differences in individual needs and expressive styles (Bagnoli, 2009), which may have helped facilitate the interview process among YWPD in the current study.

Interview

Participants were given the choice to perform the interview over the phone or using a video chat platform (e.g., Zoom). Although these methods of data collection are arguably different, they both provided a viable means for YWPD to participate in the study. For instance, it allowed participants to decide which interview method best suited their communication needs and preferences. Furthermore, it provided participants with the flexibility to determine a location, date and time that was most appropriate for them. When participants feel safe and at ease in their environment, they are more likely to share their experiences (Iacono, Symonds, & Brown, 2016). Therefore, the rationale for providing participants with the option to choose a preferred interview mode was to facilitate communication and ensure that participants felt comfortable and confident during the interview process; facilitating more telling and detailed accounts of their experiences (DiCicco-Bloom & Crabtree, 2006; Iacono et al., 2016).

The interviews were conducted by the first author. During the interview, participants were presented with a series of 10 structured, but deliberately open-ended questions. The first question served as an “icebreaker” and referred to participants’ concept-map. This question was included to build a rapport with participants and to gain a deeper understanding of the key concepts they chose to highlight within their map (e.g., Can you walk me through the different things that you included in your mind map? Why did you choose to include these things?). The main questions were guided by Holt and colleagues’ (2017) model of positive youth development through sport and explored participants’ positive and negative sport experiences, and the social-contextual factors influencing these experiences. Specific questions referred to significant positive and negative moments that participants experienced within their sport(s), learning experiences, as well as participants’ relationship with coaches, parents and teammates (See Appendix F for the interview guide).

Data Analysis

All interviews were audio-recorded, transcribed verbatim, and manually coded by the first author. Transcribed interviews were compared with original audio-recordings in order to ensure accuracy of transcription (Braun & Clarke, 2006). Furthermore, each participant was sent his/her transcript for review to verify that it reflected what they intended to say. Eight participants responded back and confirmed that their transcripts were acceptable.

Braun and Clarke's (2006) six-step methodology for thematic analysis, as outlined by Nowell et al., (2017), was used to guide the data analysis. This methodology was chosen because it strives to meet Lincoln and Guba's (1985) trustworthiness criteria; credibility, transferability, dependability, and confirmability (Nowell, Norris, White & Moules, 2017). Table 2 provides a detailed description of Lincoln and Guba's (1985) criteria for ensuring trustworthiness in qualitative research (Lincoln & Guba, 1985).

Table 2. *Lincoln and Guba's (1985) Criteria for Ensuring Trustworthiness in Qualitative Research*

Criteria	Description
Credibility (i.e., internal validity)	Reflects the congruence between the researcher's interpretations of the data (i.e., findings) and participants' views
Transferability (i.e., external validity)	Refers to the generalizability of findings to other contexts.
Dependability (i.e., reliability)	Represents the consistency of findings and their ability to be replicated.
Confirmability (i.e., objectivity)	Concerned with establishing a degree of neutrality that ensures the researcher's interpretations of the findings are shaped by the respondents rather than researcher bias, motivation or interest

(Amankwaa, 2016)

The first phase of data analysis consisted of *data familiarization*, during which the first author repeatedly read over the data set while actively searching for meaning and patterns.

Throughout this process, a reflexive journal was kept, documenting theoretical and reflective thoughts, as well as initial ideas for coding. The entire data set (i.e., interview transcripts) was read through once before commencing the second phase: *generating initial codes* (Braun & Clarke, 2006). During the second phase, initial codes were deductively generated using concepts related to PYD climate (e.g., peer, parent and coach relationships), PYD outcomes (e.g., personal, social and physical) and life skills program focus (Holt et al., 2017). Throughout the coding process, a coding manual was kept to systematically organize codes, their content descriptions, and data extracts (Saldana, 2009). This technique was accompanied by reflexive journaling to provide a clear trail of auditable evidence to support the trustworthiness of the data (Nowell et al., 2017). Given the exploratory nature of the current study, the first author was also attentive to alternative concepts, not directly related to Holt and colleague's (2017) model, which were inductively generated throughout the coding process. Once the data were initially coded, the first author began the third phase which involved *searching for themes*. The different codes were sorted into overarching themes and subthemes, and coded data extracts were grouped within said themes and subthemes (Nowell et al., 2017). Once devised, the themes and subthemes were reviewed and their content revised, to ensure they formed coherent patterns that accurately represented the information within the data set (phase 4: *reviewing themes*; Braun & Clarke, 2006). During the fifth phase, the themes were defined and named. The name, definition, and content of each theme was discussed with three experts in the field of PYD, youth sport, and disability research (i.e., co-authors). The sixth and final phase of the analysis involved the write-up of the final report illustrating a conscience, coherent, logical, and interesting account of the data within and across themes (Braun & Clarke, 2006). Once the final report was written and reviewed by an expert in the field of exercise and PA for YWD (i.e., senior author), it was shared with participants via email to obtain their feedback on the findings. Six participants replied and

confirmed that the findings were representative of their experiences, which helped to further substantiate the trustworthiness of the study findings. Table 3 summarizes Braun & Clarke's (2006) six-step methodology for thematic analysis, and outlines strategies that were employed throughout each phase to establish trustworthiness of the current study's findings.

Table 3. *Braun & Clarke's (2006) Six-step Methodology for Thematic Analysis with Descriptions Relevant to the Current Study and Strategies for Establishing Trustworthiness*

Phase	Description	Strategies for Establishing Trustworthiness
Phase 1: <i>Data Familiarization</i>	- Prolonged engagement with the data (i.e., repeatedly reading through the data set) - Actively search for patterns and meaning within the data	Journaling: - Documented theoretical and reflective thoughts as well as initial ideas for coding Member checking: - Transcripts were reviewed by participants for verification
Phase 2: <i>Generating Initial Codes</i>	- Manually code data - Generate initial codes deductively using Holt and colleagues' (2017) model of positive youth development through sport - Keep note of alternative codes that don't "fit" within Holt & colleagues' (2017) model	Journaling: - Documented theoretical and reflective thoughts as well as initial ideas for coding Coding Manual: - Listed codes, descriptions, and data extracts
Phase 3: <i>Searching for Themes</i>	- Sort codes into themes/subthemes - Group data extracts within identified themes/subthemes - House codes/data extracts that don't fit within an identified theme in a "miscellaneous theme"	Journaling: - Notes detailing the development/hierarchies of theme and concepts (i.e., using memos) were kept
Phase 4: <i>Reviewing Themes</i>	- Review and refine themes and subthemes	Peer de-briefing with experts in the field of PYD, youth sport, and disability
Phase 5: <i>Defining and Naming Themes</i>	- Create clear and detailed descriptions for each theme - Create "punchy" and descriptive names for each theme	Peer de-briefing with experts in the field of PYD, youth sport and disability
Phase 6:	- Provide a detailed account of	Peer de-briefing:

<i>Producing the Report</i>	the data within and across themes using participant quotes - Provide critical interpretations of the data in relation to theories, meanings, and implications within the broader literature	- The final write-up was reviewed by an expert in the field of exercise and PA for YWD (last author) Member-checking: - Participant feedback was obtained regarding the final write-up of results
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(Braun & Clarke, 2006; Nowell et al., 2017)

Chapter Three: Results

Outcomes Acquired Through Sport

Youth experienced both positive and negative outcomes from playing sport. These outcomes were categorized into physical, social, and personal outcomes. Furthermore, youth recognized that playing sport enabled them to develop life skills and they were aware of how these skills transferred to various other domains in their lives (e.g., school).

Physical Outcomes

Playing sport provided youth with opportunities to learn and improve on a wide range of physical skills related to their sport (e.g., throwing and catching, swimming strokes). Youth also discussed the importance of being able to see their skills progress and experience “getting better” at playing their sport ($n=5$). As one athlete explained:

We’ve gotten like skilled enough to be able to play games without the teacher being involved as in like serving it. It can just be between us and I think that’s pretty significant because it shows all of the progress we’ve made and the stuff that we’re able to play so I think that’s really fun (*P4, M, Age 15, Wheelchair Tennis and Adapted Skiing*).

To expand, a common source of frustration and discouragement among some of the athletes was feeling held back in their skill development and not being able to see themselves improve or excel ($n=3$). These outcomes were often discussed in relation to experiences where youth felt inadequately challenged (e.g., over or under challenged). As one athlete described:

Because I don't... I love to go forward... I love to move forward, push myself, stuff like that. With them kind of there and the coaches are holding you back because they want you to help teach the younger kids then you can't move forward in your learning, almost (*P6, F, Age 17, Wheelchair Basketball and Track & Field – Throwing*).

Participants discussed numerous physical benefits that playing sport yielded. For example, playing sport allowed youth to keep active ($n=5$), and improve their strength, balance, and flexibility ($n=4$). In some cases, they expressed that playing sport helped improve mobility (walking and wheeling) and mitigate problems associated with their disability ($n=3$). One athlete expressed:

It [swimming] makes me strong, helped with my flexibility....it helped me with my walking as well... and muscle tightening up is one of the problems with cerebral palsy, so it helps for me to not have surgery on my legs (*P2, F, Age 14, swimming*).

Social Outcomes

The most prominent social outcome that youth spoke about was getting to meet new people and make friends through sport ($n=9$). Youth valued the opportunities that sport afforded them to socialize with peers, develop friendships, as well as hangout and play with their friends. As one athlete described:

Making friends was pretty significant. Just to know that other people just like me are out there and uh that compete in sport which was awesome (*P3, M, Age 16, Wheelchair Rugby*).

These relationships fostered feelings of connectedness and belonging among youth, which was illustrated when participants spoke about feeling part of a community, team, or family ($n=7$). A common notion among youth was the realization that they were not alone:

It's just like family almost. Like now that I've known them for like 3, 3 and a half years they feel like family. You know it's like "Oh I'm gonna go see my friend [G]", it's like my family almost. It's like... I dunno, they are like always there for you (*P6, F, Age 17, Wheelchair Basketball and Track & Field—Throwing*).

However, in some cases youth expressed having a hard time connecting and relating to others—particularly peers/teammates without disabilities—which lead them to feeling disconnected, left out, or excluded ($n=3$). As one athlete highlighted:

Certain struggles that I had with normal people that... well they don't understand what disability I have, and they didn't understand what kind of limitations. And uh... you know kind of left out a little bit (*P3, M, Age 16, Wheelchair Rugby*).

Playing sport also afforded youth the opportunity to spend time and connect with family ($n=5$). Whether this resembled playing together or having a family member involved as a coach, assistant, spectator, or participant; sport served as a common ground for youth and their family to connect. As one athlete explained:

I started skiing when I... last year. I fell in love with it. It was something I can do, my brother can do, and my mom can do. I could ski with them; I just needed a little help, but it was so much fun. I can talk about how the snow was so light and we can all relate to how it feels to be outside in the wilderness skiing, socializing, and having the times of our lives (*P7, M, Age 15, Sledge Hockey and Adapted Skiing*).

Finally, the social climate of sport enabled youth to develop teamwork ($n=6$) and leadership skills ($n=4$). They specifically spoke about learning to be a team player, working together, and collaborating with peers, as well as showing respect to their teammates and opponents. As one youth mentioned:

So one of them is basketball, being a team player. So like helping out, encouraging, showing respect. Through basketball you just I dunno, it's a team sport so you learn a lot about working together (P6, F, Age 17, *Wheelchair Basketball and Track & Field – Throwing*).

Furthermore, playing sport allowed youth to assume various leadership roles such as being able to teach and help their peers. Youth also discussed wanting to be a role-model for others and to help educate people about disability and parasport, which was illustrated by this athlete:

As a 21 year old like I feel like I could help people show them like, “ok this is what CP [cerebral palsy] looks like this is what I can tell you about it and there's people like me in this world that you just have to look out for”(P8, M, Age 21, *Soccer*).

Personal Outcomes

Youth spoke about learning to work hard and “never giving up” (n=7). This was highlighted when they talked about setting individual and team goals and the hard work, dedication, and perseverance that was involved in achieving them.

And for track and field, like never give up almost? Is one of the things I've learned. Because sometimes it can be next to impossible to complete or accomplish but really if you practice every day, every week you'll eventually get there. I didn't think I'd be able to throw past 5meters for shot put but now I'm throwing like 7meters like it's not impossible you just have to work really hard towards it (P6, F, Age 17, *Wheelchair Basketball and Track & Field – Throwing*).

Youth also learned to stay positive when faced with adverse situations (n=5). When speaking about challenging or negative sport experiences (i.e., losing a game, a failed attempt, injury), youth revealed the importance of staying calm, thinking positively, being hopeful, and

trying to learn something from their experience. One athlete described, “Like there’s that cliché right in sport like, you learn more when you lose than winning” (P8, M, Age 21, Soccer).

Youth expressed gaining a sense of independence from playing sport because it provided them with experiences to exert their autonomy on the hill, court, ice, or pitch ($n=7$). One athlete expressed feeling independent when skiing because, “It let’s me go down the hill at my own pace, at my own speed in my own area” (P5, M, Age 14, *Sledge Hockey and Adapted Skiing*). Furthermore, independence was bolstered when youth experienced being able to successfully complete drills, perform skills, and play games without needing assistance from others and/or support from assistive devices. Such experiences enabled youth to feel “free” from constraints, to gain a sense of control of over their body and experiences, and it served as a reminder for youth of all the hard work and progress they had achieved in their sport.

Another thing with skiing would be the moment when they took off my tether because before they would always...like the tether is kind of what holds my ski back if I’m going too quickly... too fast... and then pretty much taking that tether off really enabled me to be able to ski independently and like strengthen myself on my own rather than have the like, the physical support as in pulling me back (P4, M, Age 15, *Wheelchair Tennis and Adapted Skiing*).

In keeping with a similar idea, playing sport provided youth with positive experiences related to success of achieving a goal or mastering a skill, winning a game or competition, or making a sport team. From these experiences, youth expressed developing positive self-perceptions (e.g., feeling confident, proud and important; $n=8$) and described feeling competent ($n=9$), empowered, and unstoppable ($n=4$). Furthermore, these feelings seemed to be enhanced when youth completed these achievements independently or when their achievements were recognized by others (i.e., coach, parents). As described by one athlete:

So in sledge hockey you have to use a lot of ab work to get up once you fall over. And I just completed an accomplishment two weeks ago of getting up by myself. - It took a lot of work to do it. I was really focusing on my workout habits to try and accomplish it. I felt great. Once I got up, I felt like I could be a professional player. I felt like no one could get in my way anymore. I felt like I was on top of my disability and nothing could stop me (*P7, M, Age 15, Sledge Hockey and Adapted Skiing*).

However, youth also referred to times where they felt incompetent, embarrassed, frustrated, and discouraged when playing sport. These feelings were discussed in relation to unsuccessful and unenjoyable experiences that often resulted from participating and/or competing on “uneven ground” ($n=4$). As explained by one athlete:

I didn't win anything for the A-champs this weekend because they compared my time to able bodies, so they are still working on it. - It's kind of frustrating because it's not fair. And I can't kick and they can (*P2, F, Age 14, Swimming*).

Despite having these negative experiences, youth expressed that, for the most part, playing sport provided them with positive, enjoyable, and fun experiences ($n=9$). This was echoed by youth's desire for wanting to continue playing sport and/or being physically active in the future. One athlete expressed:

If I can play soccer 'til I'm... I dunno 'til my body disintegrates I would. And if it's professionally... even if it's just Sunday league with my friends like that's enough for me so... just to keep me active and to keep me healthy, that's perfect for me” (*P8, M, Age 21, Soccer*).

Life Skill Development and Transfer

The majority of youth recognized that playing sport provided them with unique opportunities to develop and practice important life skills including teamwork, leadership, social

skills, perseverance, and hard work ($n=8$). This was articulated by one athlete who spoke about how sport can bring “something extra” to the lives of those who play it.

I think like the sport soccer itself brings like other things than just having fun to the everyday life of everyone. And that's every sport. That could be hockey, that could be uh baseball, basketball anything. Like the sport can bring something else to your life, another dimension that you otherwise wouldn't live through if you didn't play the sport (*P8, M, Age 21, Soccer*).

Youth were also aware of how the outcomes they gained from playing sport could be transferred and contribute to their success in various other life situations including school, other sports/gym class, and their future careers ($n=6$). Interestingly, youth did not speak about specific activities or interactions that resulted in them making these associations.

...team player and group working. Because I'm going into ECE [Early Childhood Education] and that's like... ECE is basically like the second teacher of the classroom. You have to get along and work with other teachers to prepare like lessons, to prepare like group centres and stuff like that. So I think knowing how to work with someone and not like argue with them and fight with them constantly, that's gonna help me within school as well (*P6, F, Age 17, Wheelchair Basketball and Track & Field – Throwing*).

Social-Contextual Factors Influencing PYD Outcomes

It became very clear that the outcomes these youth acquired from playing sport were largely influenced by the people who were part of their sport experiences. A common thread linking participants' sport experiences together was the consistent mention of coaches, parents, and peers. Specifically, these individuals provided an important source of support and encouragement, facilitated personal growth and athletic development, and promoted a sense of

community and connectedness among youth. The following account perfectly embodies this notion:

Well you know it influences my sport career significantly... if I had not had a great father, great coaches, and great teammates I would have never wanted to play this sport because you know, it's ya... um they all you know they support me. They help out and make me feel part of a community which is a big part of my playing experience (*P3, M, Age 16, Wheelchair Rugby*).

Provide Support and Encouragement

Coaches, parents (and family), and peers played an important role in creating an environment where youth felt encouraged and supported. Coaches provided an important source of support and encouragement which was illustrated by the way athletes spoke about their coaches and/or instructors believing in them, always being there, and making them feel like they could accomplish anything. As one athlete explained:

I was definitely really scared going up the chair lift, but she [instructor] was there, she's like c'mon suck it up. Like you know it's nice to always have that person who can be there (*P4, M, Age 15, Wheelchair Tennis and Adapted Tennis*).

Parents (and family) played a significant role in facilitating youth's sport participation by assisting with transportation to and from sporting events, providing financial support (e.g., buying special equipment), searching for sport opportunities, and going as far as getting involved as a coach, trainer, or assistant. They also provided an important source of encouragement by being present and engaged during practices, games, or competitions (e.g., attentively watching and cheering).

So my mom introduced me to swimming, used the pool to help me crawl and walk, coached me until this year, introduced the club to a Para swimmer, supports me and

encourages me. My auntie was my first swim coach in Alberta. She took me swimming as a baby with my mom and my brother. My brother encourages me and supports me and he cheered me on when he was swimming. My dad, he is my assistant on the deck for swim meets. He supports me and encourages me (*P2, F, Age 14, Swimming*).

Youth also revealed that their parents' (and family's) unwavering support not only enabled them to play sport, but it fostered a sense of reassurance which allowed them to feel confident in their ability to succeed. As illustrated by one athlete:

They supported me through games, they sat through horrible weather to watch me play. And just like their dedication and their support made me like, "k I'm doing the right thing by playing this sport" because they're not like not showing up you know what I mean? Like they're there coming to games, they're supporting me and stuff like that and that helped me to be like, "ok I can play the sport how I wanna play" cuz I have people behind me that support me regardless" (*P8, M, Age 21, Soccer*).

Finally, youth spoke about how their peers provided an important source of support by cheering them on, celebrating their achievements, and "always being there".

Being part of a team, the positive thing about that is that um is that your friends are there and you always... when you score a goal when being part of a team you get to high five or props and celebrate your goals together and that's always makes me feel happy and very positive (*P9, M, Age 18, Adapted Hockey and Soccer*).

Facilitate Personal Growth and Athletic Development

Coaches and peers contributed to youth's athletic development and personal growth by creating an environment where they felt motivated, challenged, and enabled. Youth described that their coaches played an important role in teaching them new skills, providing them with

guidance and feedback, setting high expectations, and challenging them to be the best that they could be. As illustrated by one athlete:

He helps you fix what you're not doing right and tries to help you get better and push you to your limits. He's a really good one (*P6, F, Age 17, Wheelchair Basketball and Track & Field—Throwing*).

Furthermore, coaches and instructors played a key role in facilitating positive and successful sport experiences. By being attentive to the needs of their athletes, providing help or assistance, and finding different ways to modify activities; they fostered experiences where youth felt enabled, confident, and successful.

They [instructors] can modify if it's too challenging for my left hand. For like for our front crawl for example like instead of just moving, circling both my arms out of the water I can just move my weak hand around in the water. When things get modified it makes it easier for me. Makes me feel like I can do everything everyone else can do (*P1, M, Age 18, Swimming and Goal Ball*).

On the other hand, youth mentioned that coaches and/or instructors hindered their sport experiences when they were unable or unwilling to provide modifications, set low expectations for athletes, or made assumptions about their abilities. Not only did this contribute to unpleasant and unsuccessful sport experiences; it prevented youth from being able to fully participate and/or excel in their sport, and it gave rise to feelings of incompetence, frustration, and discouragement. As one athlete discussed:

Another negative would be when I started with like that first tennis program, they didn't know what to do with me so it was kind of like they were just giving me exercises that they would give to someone who is able bodied which really didn't help me improve and

I was really definitely struggling with that (*P4, M, Age 15, Wheelchair Tennis and Adapted Skiing*).

One athlete expressed feeling like she could do better if her coach set higher expectations and pushed her harder.

They [coaches] think that they... that I cannot do stuff that I can try to do. And they lower the barre of expectations. My mom pushes me harder than my coaches do because they think I can't do it. I think I would do much better if they pushed me harder like my mom does (*P2, F, Age 14, Swimming*).

Peers created an environment where youth felt motivated and challenged. Seeing peers perform skills or achieve goals motivated youth to push themselves, work hard, and take on new challenges.

Well people that umm have my disability that umm... have the same struggles that I do and um seeing them...ya know seeing them is kind of a motivation. They can accomplish such and such and I can do as well so yeah (*P3, M, Age 16, Wheelchair Rugby*).

Furthermore, youth expressed gaining valuable learning experiences from watching and interacting with their peers. Specifically, youth looked to their peers for guidance on how to behave, perform skills, and play the game. Youth also described instances where their peers would help teach them skills and provide them with feedback on how to improve.

Uh like for me well the national team it was a team of men and I was 14 at the time. So, you can't really be a 14-year-old in a men's team. - They [teammates] shepherd me in a way to be more mature, to just realize like ok this is what I'm gonna be in 10-15 years. Like mind as well just work on myself now instead of waiting to like get to that age than then work on myself (*P8, M, Age 21, Soccer*).

Promote a Sense of Community and Connectedness

Developing positive and meaningful relationship with coaches and peers, as well as having parents (and/or family) actively involved in their sport experiences, promoted a sense of community and connectedness among athletes. They often expressed feeling a sense of belonging to something “greater” than themselves, which was illustrated when they spoke about feeling part of a community, team, or family. As one athlete explained, “The important people in my family for my sports are coaches, my friends and my family” (*P9, M, Age 18, Adapted Hockey and Soccer*).

Youth valued when coaches and instructors were kind and relatable, when they expressed an interest in getting to know them, and when they made efforts to connect. In some cases, youth even viewed their coach as a friend or mentor.

I think she’s [instructor] there also as a friend... At our lunch time we kinda sit with her, we chat with her, we talk and we can just... she’s there for us (*P4, M, Age 15, Wheelchair Tennis and Adapted Skiing*).

Peers played a special role in promoting feelings of acceptance and connectedness among youth. By being helpful, open, and inclusive peers created a sport environment where youth felt accepted and valued.

My friend [J] and [A], what’s interesting is that they don’t actually use like wheelchairs or they don’t have disabilities they are both able bodied and they use wheelchairs to play tennis with me and that’s really cool cuz we all get to play together. - And that makes them really cool for being so open to that and not like... not like they feel as if they are taking a spot away from someone, but as they feel like they’re just playing with a friend.

Youth expressed feeling connected when they engaged in shared experiences with their peers like playing and having fun together, as well as experiencing and celebrating each other’s

achievements and success. Interestingly, the majority of youth explained that these feelings were enhanced when their sport experiences included peers also living with a disability. Youth expressed being able to better relate to peers who were “similar to them” (i.e., also lived with a disability) compared to peers without disabilities, which was illustrated by this athlete:

So I met all these people in track and field and basketball I had more in common with them, I felt like I could relate to them and what they’ve gone through their whole life. Their life is so similar to mine. So I dunno, we connected more I think than I would have with anyone else (*P6, F, Age 17, Wheelchair Basketball and Track & Field—Throwing*).

Youth expressed enjoyment in having their parents (or family members) actively involved in their sport experience, because it allowed them to spend quality time together while having fun. As one athlete explained, “Just recently he [dad] bought his own rugby chair and we go to practices together which is really fun” (*P3, M, Age 16, Wheelchair Rugby*).

Overall, coaches, parents/families and peers provided an important source of support and encouragement, facilitated personal growth and athletic development, and promoted a sense of community and connectedness among youth—shaping an environment that enabled YWPD to experience PYD outcomes from sport.

Chapter Four: Discussion

The current project delved into the sport experiences of YWPD with the purpose of uncovering the developmental outcomes that YWPD acquire from participating in organized sport and understanding the social-contextual factors that contribute to these outcomes. The discussion that follows aims to contextualize the study findings within Holt & colleagues’ (2017) model of positive youth development through sport (Holt et al., 2017), and by drawing upon

relevant PYD, sport, and disability literature. The theoretical and pragmatic implications of these findings, as well as future considerations for sport and disability research are also discussed.

Outcomes Acquired Through Sport

Findings from this study revealed that participating in organized sport offered unique experiences (both positive and negative) that enabled YWPD to develop a wide range of outcomes. Consistent with Holt and colleagues' (2017) model and research examining sport participation among YWPD (Turnnidge et al., 2012), participants experienced outcomes across physical, personal and social domains. Though the majority of outcomes discussed by athletes were consistent with previous PYD and sport research, our findings also revealed nuances unique to the sport experiences of YWPD.

Physical Outcomes

Improved physical fitness is a well-known benefit associated with sport participation (Blinde & McClung, 1997; Dallmeijer, Hopman, Van As, & Van Der Woude, 1996; J. Martin, 2011); therefore, it is no surprise that YWPD discussed improvements in their strength, balance, and flexibility from participating in organized sport. The implications of these physical gains are particularly important for YWPD in helping improve and/or maintain their functional ability and physical independence (e.g., perform activities of daily living; Murphy & Carbone, 2008; Rimmer, 2001; te Velde et al., 2018). Indeed, YWPD noted that the physical gains they experienced from sport helped improve their mobility (e.g., walking and wheeling) and mitigate disability-related health problems (e.g., muscle tightening). As such, these findings suggest that participating in organized sport can yield improvements in fitness, which may in turn enhance mobility and physical health among YWPD. Furthermore, these improvements may lead to greater physical independence (Murphy & Carbone, 2008) and enhanced quality of life (Chang, Wang, Jang, & Wang, 2012) among YPWD.

Athletes also highlighted the importance of being able to learn new skills, “see” their skills improve, and experience getting better at playing sport. In fact, many YWPD found that not experiencing improvement or feeling held back in their athletic development became a prominent source of frustration and discouragement. This finding closely aligns with Bantjes et al. (2015) research which similarly found that YWPD articulated the need to feel as if they were progressing, learning new skills, and achieving mastery experiences (Bantjes, Swartz, Conchar, & Derman, 2015). Experiences of improvement or athletic development have the potential to enhance physical competence and feelings of accomplishment and pride among YWPD (Turnnidge et al., 2012), which may provide one explanation as to why participants placed such an importance on being able to experience seeing their skills develop and improve.

Finally, consistent with previous research among YWPD (Buffart et al., 2008) and youth without disabilities (e.g., Marques, Ekelund, & Sardinha, 2016) is the finding that participating in organized sport allowed YWPD to keep active. Many YWPD found value in sport as a means to keep active. This source of PA is important for YWPD because PA participation rates among YWPD remain low (Law et al., 2006; Murphy & Carbone, 2008; Rimmer & Rowland, 2008; Shikako-Thomas, Majnemer, Law, & Lach, 2008; Woodmansee, Hahne, Imms, & Shields, 2016) and physical inactivity is associated with a wide range of adverse health consequences (Liou, Pi-Sunyer, & Laferrere, 2005; Murphy & Carbone, 2008). As such, keeping active is a particularly significant outcome of sport participation among YWPD.

Overall, these findings suggest that organized sport participation among YWPD may act as an effective means to improve physical fitness, develop fundamental movement skills, and promote PA participation. These physical outcomes may help to improve the health and well-being of YWPD.

Social Outcomes

Athletes revealed that participating in organized sport provided them with valuable opportunities to interact and socialize with others, meet new people, and make friends. These findings are consistent with prior research suggesting that sport can provide ripe opportunities for youth to connect and develop meaningful relationships with adults (e.g., coaches and parents) and peers (Eime et al., 2013; Fraser-Thomas & Côté, 2009; Holt, 2008; Turnnidge et al., 2012). Consequently, such experiences have been associated with several positive outcomes among YWPD, including feelings of belonging and acceptance, life skill development (Turnnidge et al., 2012), positive affect (i.e., enjoyment, excitement; Shapiro & Martin, 2010), and sustained PA participation (Bloemen et al., 2015).

In line with the above idea is the finding that YWPD experienced a sense of belonging from participating in organized sport. The YWPD discussed this sense of belongingness in relation to being part of a team, community or family, and not feeling alone. Sport has been shown to foster feelings of belonging among YWPD (Anderson, 2009; Turnnidge et al., 2012), by allowing youth to have a defined place within a group (i.e., team) or community (i.e., sport club or organization), participate amongst similar peers, and engage in shared experiences with coaches, family, and peers (Canadian Disability Participation Project, 2018b; Evans et al., 2018). Belongingness has been shown to foster quality participation among YWPD (Evans et al., 2018; Shirazipour et al., 2018), and may have important implications for promoting PYD outcomes among YWPD.

Consistent with previous research among YWPD (Turnnidge et al., 2012) and youth without disabilities (Cronin & Allen, 2018; Holt & Neely, 2011; Holt et al., 2008), is the finding that organized sport participation promoted the development of teamwork and leadership skills among YWPD. Something interesting to note is that, for the most part, this outcome was

mentioned by YWPD who played team sports (e.g., wheelchair basketball, sledge or adapted hockey). It is believed that the “unique demands of team sport” (Holt et al., 2008, p. 297), such as working together toward achieving a common goal, offers learning experiences through which youth are likely to acquire social life skills (e.g., teamwork and leadership; Holt et al., 2008). This finding suggests that it may be valuable for individual sports programs (i.e., track and field, wheelchair tennis, swimming) to consider incorporating strategies or activities that can promote the development of teamwork and leadership skills (e.g., offering opportunities for peer mentoring and volunteering; Olushola, Jones, Dixon, & Green, 2013), to ensure that YWPD who participate only in individual sports do not miss out on opportunities to learn these skills.

Overall, these findings suggest that participating in organized sport may lead to positive social outcomes among YWPD. Furthermore, these findings emphasize the need for sport programs to facilitate experiences that foster meaningful interpersonal interactions and relationships to promote the development of positive social outcomes among YWPD.

Personal Outcomes

Consistent with Holt and colleagues’ model and previous research among athletes with disabilities (te Velde et al., 2018; Turnnidge et al., 2012) and without disabilities (Eime et al., 2013), is the finding that participating in organized sport promoted positive self-perceptions. Specifically, participants described feeling confident, proud, empowered, and competent when playing sport. Many YWPD linked these feelings to mastery experiences such as achieving a goal, learning a skill, and winning. This outcome may be particularly important for YWPD who tend to experience low levels of self-confidence and perceived competence (Shields, Murdoch, Loy, Dodd, & Taylor, 2006),

which are known barriers to sport and PA participation among YWPD (Bloemen et al., 2015).

Participants also reported developing a greater sense of independence from participating in organized sport. Independence is an outcome that has previously been identified by researchers examining sport participation among YWPD (Turnnidge et al., 2012) and youth without disabilities (Holt et al., 2017). Specifically, participants expressed gaining a sense of *physical independence*, which they described as feeling “free” from constraints and having control over their body and experiences. Such feelings were related to experiences where youth were able to successfully complete drills, perform skills, and play games without needing assistance from others and/or support from assistive devices. Furthermore, having opportunities to be physically independent while playing sport allowed YWPD to feel proud, confident, competent, and unstoppable. These findings support previous research that suggests that fostering mastery experiences (e.g., experiencing success) and autonomy (e.g., having independence, choice and control) are important elements in facilitating quality experiences among YWPD which may, in turn, promote positive outcomes (Evans et al., 2018) and continued sport and PA participation (J. J. Martin, 2006).

In line with Holt and colleagues’ (2017) model is the finding that participating in organized sport allowed participants to learn to push themselves and work hard, never give up, and stay positive (Holt et al., 2017). These outcomes were mostly discussed in relation to experiences where participants were working toward achieving a goal, overcoming a challenging task (e.g., learning a new skills), or coping with a difficult situation (e.g., injury). These findings support research that suggests that when YWPD feel adequately challenged in their sport (i.e., perceive that activities require their best effort, test their limits and push them beyond their comfort zone), they are more likely to have quality experiences (Evans et al., 2018) that may, in turn, promote positive outcomes (Turnnidge et al., 2012). To see that YWPD are experiencing

the “right” level of challenge, it may be important for program providers (e.g., coaches) to seek direct feedback from athletes and their parents. Another potential strategy could be to create an environment that welcomes and encourages open communication between YWPD, parents, and coaches. As such, future research should consider exploring the potential effect of positive interpersonal relationships—specifically effective and open communication between athletes, parents, and coaches—in promoting positive outcomes among YWPD participating in organized sport.

Interestingly, some athletes expressed that disappointing or difficult situations (e.g., failed attempts, losing a game, and acquiring an injury) taught them valuable lessons such as how to improve their performance or the importance of staying positive and never giving up. This finding aligns with Dworkin and Larson (2007), who proposed that negative experiences (e.g., stress) sometimes lead to coping responses that may result in personal growth and positive development (e.g., develop emotional regulation skills; Dworkin & Larson, 2007). Our findings suggest that perhaps valuable learning opportunities could emerge from disappointing or failed sport experiences. As such, there may be value for adult leaders (e.g., coaches, parents) to find explicit ways to help athletes grow and learn from such experiences (Dworkin & Larson, 2007). Research among youth without disabilities has found that engaging in reflective exercises (e.g., planned debriefing sessions and journaling) can help to facilitate athletes’ ability to learn from successful and unsuccessful sport experiences (Bean, Kramers, Forneris, & Camiré, 2018). As such, there may be value in exploring if these strategies could be effective in further promoting PYD through sport among YWPD.

Overall, these findings suggest that participating in organized sport may offer valuable experiences through which YWPD can develop a wide range of positive personal outcomes. Furthermore, the findings suggest that disappointing or unpleasant experiences (e.g., facing a

tough loss) may have the potential to give rise to positive learning opportunities that could, in turn, promote PYD outcomes among YWPD. Future research should explore how sport programs may be able to support YWPD in developing positive coping responses to further promote PYD outcomes. Nevertheless, our findings also suggest that organized sport participation can lead to negative outcomes among YWPD.

Negative Outcomes

Though YWPD generally discussed their sport experiences in a positive light, there were some instances where participating in organized sport contributed to negative outcomes. Athletes described feeling frustrated, discouraged, incompetent, and embarrassed when their ability to progress or successfully participate in sport was hindered. These feelings often occurred as a result of not receiving the appropriate adaptations, or when participants perceived that their abilities were being underestimated (e.g., coaches going easy on them). Previous research has identified a lack of appropriate adaptations and negative attitudes or beliefs of others (e.g., coaches) as prominent factors hindering participation among YWPD (Bloemen et al., 2015; Martin Ginis et al., 2016). Furthermore, such experiences have been shown to thwart perceptions of autonomy and competence among YWPD (Orr et al., 2018), which was also evident in the current study findings. Youth also expressed feeling disconnected, left out, or excluded when they had trouble relating to their peers, and when they experienced difficulties participating in their sport. Similarly, YWPD in previous research have reported having negative sport experiences when their needs for relatedness and competence were not supported (Orr et al., 2018). These findings fill a gap within the current literature (e.g., Turnnidge et al., 2012) by suggesting that organized sport may also act as a context through which YWPD can experience negative outcomes including negative affect (e.g., frustration and discouragement), negative self-perceptions (e.g., incompetence), and feeling disconnected from peers. Furthermore, these

findings seem to highlight the importance of fostering a sense of mastery, autonomy, and relatedness (Orr et al., 2018; Shirazipour et al., 2018), as a potential strategy for enhancing the likelihood that YWPD gain positive experiences and outcomes from participating in organized sport.

In summary, participants in the current study experienced both positive and negative outcomes from participating in sport—though the majority of the outcomes discussed were positive. Interestingly, participants often discussed these outcomes alongside experiences that either fostered or hindered a sense of belongingness, autonomy, mastery, and challenge. These particular experiences share conceptual links with elements from the QP framework (Evans et al., 2018). Indeed, these elements appear to be instrumental in facilitating positive outcomes for YWPD through sport. Consistent with Holt and colleagues' (2017) model and research among YWPD (Martin Ginis et al., 2016; J. Martin, 2011; Turnnidge et al., 2012), social interactions and relationships played an important role in fostering the experiences that contributed to YWPD's positive development through sport.

Positive Youth Development Climate: The Importance of Parents, Peers and Coaches

It is widely recognized that the social environment (i.e., quality of relationships and interactions that occur within the sport environment) plays an important role in facilitating PYD through sport (Côté, Turnnidge, & Evans, 2014; Holt et al., 2017; Petitpas, Cornelius, Van Raalte, & Jones, 2005). Therefore, it is no surprise that findings from this study revealed that YWPD's sport experiences, and the outcomes they gained from those experiences, were largely shaped by their social environment. Contextualizing participants' experiences within Holt & colleagues (2017) model provided insight regarding how parents, peers, and coaches shaped a positive social environment—or PYD climate—that enabled YWPD to experience PYD outcomes from participating in organized sport. Specifically, coaches, parents, and peers

enriched the sport experiences of YWPD by offering an important source of support and encouragement, facilitating personal growth and athletic development, and by promoting a sense of community and connectedness; which, in turn, contributed to the PYD outcomes they acquired through sport.

Provide Support and Encouragement

Athletes highlighted that coaches, peers, and parents acted as important sources of social support by providing words of encouragement (e.g., cheering), believing in them, and “always being there.” There is research among YWPD (Turnnidge et al., 2012) and youth without disabilities (Fraser-Thomas & Côté, 2009) to suggest that supportive coaches can bolster athletes’ perceptions of competence by believing in them and expressing confidence in their abilities. Furthermore, peers can also positively impact the sport experiences of YWPD by providing an important source of social support through encouragement. This type of support has been shown to benefit the sport experiences of YWPD by enhancing their sense of connectedness with peers (e.g., displaying genuine care for each other’s success and accomplishments), as well as by helping them take on challenging tasks and overcome difficult situations (Turnnidge et al., 2012), which was also evident among YWPD in the current study.

Athletes specifically commented about the unwavering support from their parents or family, and how it facilitated enjoyable and successful sport experiences. In line with previous research (Bloemen et al., 2015; Turnnidge et al., 2012), YWPD emphasized their parents’ important role in assisting with transportation and supplying financial resources. Instrumental support has been shown to directly affect YWPD’s access to sport experiences (Canadian Disability Participation Project, 2018b; Turnnidge et al., 2012), which may explain why participants placed such an importance on receiving this type of support from their parents. Furthermore, YWPD valued when parents and/or family members would become actively

involved in their sport experiences as a coach/assistant, participant, or spectator. This type of support not only reassured participants of their ability to participate safely, confidently, and successfully, but it also provided invaluable opportunities for youth to connect with their family and have fun together. These findings support previous research conducted among adults with physical disabilities (Shirazipour et al., 2017) by suggesting that participating alongside parents and/or family members can promote enhanced feelings of belonging and enjoyment.

Overall, the findings resonate with previous research that suggests that supportive adult and peer relationships may promote positive sport experiences among YWPD by enhancing perceptions of competence, belongingness, and enjoyment (Evans et al., 2018; Shirazipour et al., 2017; Turnnidge et al., 2012). As such, future research is encouraged to explore how organized sport programs can effectively leverage support from parents, peers, and coaches to create a PYD climate that promotes positive outcomes among YWPD.

Facilitate Personal Growth and Athletic Development

Coaches and peers contributed positively to participants' personal growth and athletic development by shaping a sport environment that fostered feelings of mastery, challenge, and autonomy. Coaches enhanced participants' sport experiences by setting high and achievable expectations, providing opportunities to learn and improve skills, and by being able and willing to properly adapt activities. All of these actions served to enable YWPD to experience feeling confident, independent and competent. It is well known that coaches hold a particularly important role in ensuring that YWPD are not limited in their ability to participate, compete, and excel in sport (Bantjes et al., 2015). For instance, when coaches or instructors possess the knowledge and ability to properly adapt instruction they can more effectively assess and respond to the needs and abilities of YWPD and create sport experiences that foster a sense of competence and autonomy (Orr et al., 2018; Shirazipour et al., 2018). Furthermore, coaches have

also been shown to bolster positive self-perceptions (e.g., self-confidence and empowerment) among YWPD by setting high expectations for their athletes and by creating safe and enjoyable opportunities for youth to test their limits, develop their skills, exert their independence, and experience success (Shirazipour et al., 2018; Turnnidge et al., 2012). Developing strong, positive coach-athlete relationships may be critically important in helping coaches get to know their athletes' abilities and goals to ensure that expectations are set at a level that is appropriate for YWPD (Participation Project Canadian Disability, 2018a). These findings seem to highlight the importance of ensuring that coaches possess appropriate training (e.g., technical knowledge of the particular sport in addition to disability-specific knowledge) and support (e.g., access to adaptive equipment and support staff), as well as strong interpersonal skills to foster a sport environment that enables YWPD to experience a sense of challenge, mastery and autonomy.

In addition, YWPD spoke about gaining valuable learning experiences from watching and interacting with peers. This finding resonates with previous research that has shown that peers can positively influence YWPD's sport participation (Martin Ginis et al., 2016) by acting as important role models that they can relate to (e.g., who share similar experiences and impairments; Shirazipour et al., 2018) and learn from (Turnnidge et al., 2012). For instance, participants expressed that by watching their peers they gained a sense of motivation and confidence to push and challenge themselves. Previous research similarly found that peer relationships could help strengthen athletes' belief in their capabilities, as well as enhance confidence and determination (Turnnidge et al., 2012). Furthermore, interacting with peers can offer valuable opportunities for peer-mentorship (Evans et al., 2018), which was evident in our study when participants spoke about looking to their teammates for help or guidance. Overall, these findings support previous research (Bantjes et al., 2015; Shirazipour et al., 2018; Turnnidge et al., 2012) by suggesting that coaches and peers may play an important role in facilitating

valuable opportunities for YWPD to acquire new skills and develop their capabilities, and in promoting feelings of autonomy and mastery.

Promote a Sense of Community and Connectedness

Coaches, peers, and parents all played an important role in fostering a sense of community and connectedness within the sport environment. Here, a sense of community refers to when athletes spoke about belonging to something “bigger than themselves” (e.g., a team, family, or community). As such, community aligns with the element of belongingness from the QP framework (Evans et al., 2018); whereas connectedness highlights the strong bonds that were formed between athletes and their coaches, peers, and parents (or family members). Connectedness may promote or reinforce a sense of belongingness (Crisp, 2010), which was evident among athletes in this study.

Coaches and instructors enhanced YWPD’s sport experiences by being kind, relatable (e.g., joking around), and by demonstrating an interest in getting to know and connect with athletes (e.g., discussing school, weekend plans). Previous research suggests that positive, supportive, and caring coach-athlete relationships can strengthen social connection among YWPD (Turnnidge et al., 2012) and promote a sense of belongingness (Canadian Disability Participation Project, 2018a, 2018b), which was evident among YWPD in the current study. Furthermore, there is research to suggest a link between athletic competence and peer acceptance (Jones, Dunn, Holt, Sullivan, & Bloom, 2011); therefore coaches may have indirectly promoted a sense of belonging among YWPD by creating opportunities for them to feel enabled and competent while playing sport. Nevertheless, research among youth without disabilities suggests that strong coach-athlete relationships could have the potential to hinder sport experiences if these relationships cross healthy boundaries (e.g., knowing every detail of athletes’ lives; Fraser-Thomas & Côté, 2009) or if a coach becomes more of a friend than an effective leader (Dworkin

& Larson, 2007). Though this was not evident among YWPD in the current study, it may be valuable for future research to explore how the nature of coach-athlete relationships may facilitate and/or hinder PYD through sport among YWPD.

Consistent with Holt and colleagues' (2017) model and previous research among YWPD (Turnnidge et al., 2012), is the finding that developing strong and positive peer-relationships promoted feelings of belonging. Specifically, YWPD expressed enjoyment in being able to connect with their peers over shared experiences like playing and celebrating each other's achievements together. Interestingly, feelings of belonging were heightened when youth participated amongst "similar peers" (i.e., youth who also lived with a disability) as they could more easily relate to and connect with them. There is evidence to suggest that the composition of peer-groups has the potential to influence the quality of sport experiences among individuals with a physical disability. Specifically, participating amongst peers who share similar experiences and impairments could help foster a greater sense of acceptance and understanding within the sport environment, and thus enhance perceptions of belongingness and reduce feelings of isolation (Canadian Disability Participation Project, 2018b; Shirazipour et al., 2018). This finding supports previous research by highlighting that positive peer-relationships developed through sport may enhance feelings of belonging, especially when YWPD participate amongst other YWPD. Future research may want to consider exploring whether participating in different group settings (e.g., segregated: group composed solely of individuals with a disability, and integrated: group consisting of individuals with and without a disability; Shirazipour et al., 2018) influences the outcomes that YWPD acquire through sport.

Finally, YWPD expressed enjoyment in having their parents and/or family actively involved in their sport experiences (e.g., as a coach, participant or spectator) because it provided them with an opportunity to spend quality time together and to bond over fun, shared

experiences. This finding supports previous research conducted among YWPD that found that parental support and involvement helped contribute to strengthened social connections within the sport environment (Turnnidge et al., 2012). Furthermore, recent research conducted among adults with a physical disability suggests that participating alongside family members could foster quality sport experiences through enhanced perceptions of belonging and engagement (Shirazipour et al., 2017). Therefore, this finding seems to highlight the value of encouraging and supporting parent (or family) involvement in sport to strengthen feelings of connectedness, belonging, and engagement among YWPD (Canadian Disability Participation Project, 2018b; Turnnidge et al., 2012). Although parent involvement is generally assumed to facilitate sport participation, over-involvement may do just the opposite. For example, research exploring organized sport participation among youth without disabilities suggests that parent over-involvement that is characterized by unrealistically high expectations, excessive pressure, controlling behaviours, and criticism (Ross, Mallett, & Parkes, 2015; Sagar & Lavallee, 2010) can contribute to negative sport experiences and outcomes (e.g., developing a fear of failure; Sagar & Lavallee, 2010). Furthermore, overprotective parenting (e.g., “excessive physical or social contact, infantilization, and excessive concern for the child’s well-being”; Holmbeck et al., 2002, p. 97) has been shown to thwart feelings of autonomy, competence, and relatedness among youth (Holmbeck et al., 2002; Van Petegem, Antonietti, Eira Nunes, Kins, & Soenens, 2020). It is also a behaviour that is more commonly exhibited by parents whose child has a disability or chronic illness (Holmbeck et al., 2002). Though these negative experiences did not come up among YWPD in the current study, future research exploring parents’ involvement and/or over-involvement in disability sport may be critical to ensure that the well-intended actions of parents are not misplaced and lead to negative outcomes among YWPD.

Overall, the study findings suggest that parents, peers, and coaches contribute to shaping a PYD climate that is supportive and encouraging, promotes athletic development and personal growth, and fosters a sense of community and connectedness which, in turn, enables YWPD to experience positive development through sport; including life skill development and transfer.

Evidence of Life Skill Development and Transfer Through Sport

Sport provided youth with opportunities to develop and practice a wide range of life skills including teamwork, leadership, social skills, perseverance, and hard work. These findings are in line with earlier work which found that athletes with physical disabilities learned important life skills through sport (Turnnidge et al., 2012). However, findings from the current study contribute additionally to the literature by providing evidence to suggest that sport participation among YWPD could facilitate life skill transfer, which is an essential component of life skill development (Pierce, Gould, & Camiré, 2017). This was evident when participants discussed how the skills they learned through sport (e.g., teamwork and perseverance) contributed to their success in different domains outside of sport (e.g., school, other sports/gym class, future careers).

Interestingly, participants did not elaborate on how they learned to make these associations. By contextualizing these findings within Holt and colleagues' (2017) model, it can be suggested that participants may have developed life skills *implicitly* through sport. Holt and colleagues' (2017) model proposes that PYD outcomes can be developed implicitly (i.e., in the absence of a life skill program focus), as long as a suitable PYD climate is in place (Holt et al., 2017). That is a climate where positive and supportive relationships exist between athletes and peers, parents and coaches (Holt et al., 2017). Indeed, the *implicit approach* to life skill development and transfer through sport is a key area of interest (and debate) within the PYD literature (Bean et al., 2018). This approach suggests that inherent features within the sport context (e.g., competition, rules, social climate) can facilitate life skill development and transfer

without needing these skills to be explicitly taught (Bean et al., 2018). On the other hand, there is also evidence to support the *explicit approach*, which suggests that program providers should deliberately teach life skills to optimize life skill development and transfer through sport (Bean et al., 2018). The current findings challenge this notion and instead suggest that fostering a positive social environment (or PYD climate) might be sufficient to enable YWPD to develop life skills through sport and transfer these skills outside of sport. However, it is important to note the possibility that participants could have been unaware of specific strategies utilized by their coaches or sport program provider to teach life skill development and transfer. As such, explicit learning should not be ruled out and should be further explored in future research. Specifically, future research should consider exploring the perspectives of both athletes and their coaches to gain a more comprehensive picture of *how* life skill development and transfer may be facilitated within the context of disability sport.

The findings from the current study add to the existing literature by suggesting that sport participation can contribute to both life skill development and transfer among YWPD. By situating these findings within Holt and colleagues' (2017) model, it is suggested that life skill development and transfer among YWPD could be facilitated by implicit processes through fostering a PYD climate, for example. However, given the sparsity of research examining life skill development through sport among YWPD (e.g., Turnnidge et al., 2012), and the ongoing debate regarding implicit and explicit processes influencing life skill development and transfer (Bean et al., 2018), further research is needed to explore factors within sport that may contribute to life skill development and transfer among YWPD.

Strengths, Limitations, and Future Research Considerations

A major strength of the current study was the sample's diversity; which allowed us to capture experiences across a wide range of sports (e.g., goalball, wheelchair basketball, rugby

and tennis, adapted skiing, sledge hockey, swimming, track and field and soccer) and levels (e.g., recreational, competitive, provincial and national). Furthermore, findings were drawn from participants' positive *and* negative sport experiences, which helped shed some light on the negative developmental outcomes that YWPD may acquire from participating in sport, and the factors that may hinder their positive development through sport; thus, filling a gap within the current literature (Turnnidge et al., 2012). However, it is important to note that participants within the current study had mainly positive sport experiences. This may be due to the fact that participants had to be enrolled and participating in an organized sport program at the time of recruitment, which may have excluded those who withdrew from sport as a result of having a negative experience. Therefore, future research is encouraged to examine the experiences of YWPD who withdrew from a sport program as this could provide valuable insight regarding the important factors that shape the experiences and outcomes that YWPD derive from sport.

Although the study's findings mainly highlighted the influence of interpersonal factors (e.g., relationships with peers, coaches and parents), it is important to acknowledge that intrapersonal (e.g., psychological factors and secondary health problems), institutional (e.g., accessibility of the built environment and level of knowledge among program providers), community (e.g., accessibility and availability of special equipment and/or program information), and policy (e.g., transportation and costs for participating) factors may have also played a role in shaping the experiences and outcomes that our participants acquired through sport (Martin Ginis et al., 2016). Therefore, to address this limitation we encourage future studies to begin exploring how these factors may facilitate and/or hinder positive development through sport among YWPD. It may be valuable for future research to explore the perspectives of parents and program providers alongside those of YWPD, to gain insight regarding how the availability and accessibility of sport programs (e.g., parents' perspective) and program design and delivery

(e.g., program provider's perspective) may influence the experiences and outcomes that YWPD acquire from participating in organized sport.

Study Contributions

By contextualizing participants experiences within Holt and colleagues' (2012) model of positive youth development through sport (Holt et al., 2017), the current study broadened our understanding of how organized sport participation may contribute to YWPD's positive and/or negative development across personal, social, and physical domains. Furthermore, this study went beyond existing literature that identifies parents, peers, and coaches as key facilitators of quality sport experiences (e.g., Bloemen et al., 2015; Martin Ginis et al., 2016), by describing *how* these social agents shaped a positive climate through which YWPD experienced PYD outcomes. Furthermore, these findings share some conceptual links to Martin-Ginis and colleagues' (2018) QP framework (Evans et al., 2018); thus further highlighting the importance for sport programs to leverage opportunities for YWPD to experience a sense of mastery, challenge, autonomy, and belongingness.

Theoretical and Pragmatic Implications

Theoretically, this study supports prior research (Turnnidge et al., 2012) in suggesting that PYD may be a viable approach for enhancing our understanding of *what* developmental outcomes YWPD acquire from participating in organized sport, and *how* these outcomes may be facilitated and/or hindered by people within their sport environment (e.g., parents, peers and coaches). Since findings from the current study share conceptual links with elements from the QP framework (Evans et al., 2018), future research is encouraged to consider how PYD and the QP framework could be used in conjunction to gain a more comprehensive understanding of how PYD outcomes can be achieved through sport participation among YWPD. Perhaps it may be that when parents, peers, and coaches contribute to sport experiences that foster key components

of quality participation (e.g., belongingness, mastery, autonomy, challenge, meaning and engagement; Evans et al., 2018) they create a PYD climate through which YWPD can experience PYD outcomes.

Pragmatically, these findings suggest that it may be important for sport and PA programs serving YWPD to consider leveraging a positive social climate that is supportive and encouraging, promotes athletic development and personal growth, and creates a sense of community and connectedness. Based on the current study findings, this could be achieved by acknowledging athletes' success and achievement, ensuring that coaches (or instructors) are equipped with the necessary support to deliver a program that meets the unique needs and abilities of participants (e.g., training, support staff, and special equipment), offering opportunities for youth to engage in positive and valuable social interactions with peers (e.g., peer-mentoring), and encouraging and supporting parents and/or family members to become actively involved in their child's sport experiences. The Blueprint for Building Quality Participation in Sport for Children, Youth, and Adults with a Disability (2018) is an evidence-based tool that was developed to inform program builders (e.g., administrators, coaches and policy makers) about strategies that can be used to foster belonging, autonomy, mastery, challenge, engagement, and meaning within the context of sport (Participation Project Canadian Disability, 2018a). Since YWPD from the current study placed an emphasis on experiences that fostered challenge, mastery, autonomy, and belongingness, this tool may provide an important starting point to inform how sport programs can foster quality sport experiences that promote PYD outcomes among YWPD.

Conclusion

The current study explored the sport experiences of YWPD through a PYD lens to understand the outcomes associated with organized sport participation and the social-contextual

factors contributing to these outcomes. Overall, the study findings provide evidence to suggest that organized sport may serve as a context through which YWPD can experience PYD outcomes across personal, social, and physical domains; provided that a positive social climate is fostered. As such, future research should consider examining how sport organizations serving YWPD can effectively create and leverage positive social relationships and interactions as a means to promote PYD outcomes. Furthermore, the findings from this study illustrate that participating in organized sport may help promote life skill development and transfer among YWPD; though additional research is needed to gain a better understanding of how this may be facilitated through implicit (e.g., fostering a PYD climate) and/or explicit processes (e.g., life skills program focus). Finally, this study further supports the use of PYD as a viable approach for enhancing our understanding of the sport experiences of YWPD. Therefore, we hope that this study sparks future researchers to adopt this approach when examining sport participation among YWPD, as it may help inform a better understanding of how organized sport can be structured and delivered to promote positive outcomes among YWPD, and ultimately contribute to their development within and outside of sport.

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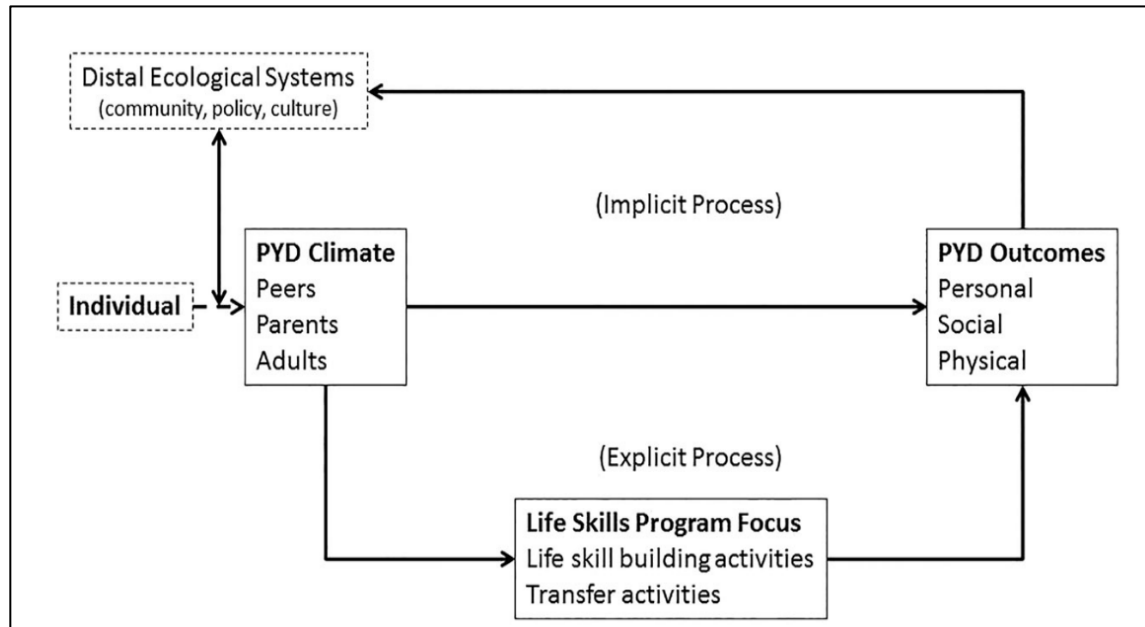
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Appendices

Appendix A: Holt and Colleagues' (2017) Model of Positive Youth Development Through Sport



(Holt et al., 2017)

Appendix B: Recruitment Material

Recruitment Email for Participants

Hello!

My name is Amanda McKinnon and I am a master's student working under the supervision of Dr. Rebecca Bassett-Gunter in the Faculty of Kinesiology and Health Sciences at York University. I am emailing you because you have expressed an interest in being contacted about future studies conducted at York University.

The current study is looking to **recruit youth between the ages of 14-21 with a physical disability** who are interested in sharing their sport experiences. The **purpose** of this study is to **understand the developmental outcomes associated with sport participation among youth with physical disabilities**.

You or your child is **eligible** to participate in this study **if**:

- between the ages of 14-21
- have a physical disability
- enrolled in a sports program
 - This includes any sport activity or program that is organized and run by an adult or leader outside of school hours (ex: swimming lessons, soccer, hockey, tennis, dance, martial arts, track and field, ski etc.)

Study description: The study will take approximately 60 minutes. Your participation will involve a telephone or video chat interview where you will be asked questions about your sport experiences. You will also be asked to fill-out a concept map outlining your sport experiences before doing the interview. You will receive a 25\$ gift card to either Tim Hortons, Indigo, or Amazon as a “thank you” for your time. I would like to assure you that the study has been approved by the York University Research Ethics Committee.

If you are interested in getting more information about the study or would like to volunteer, please reply to this email and list your:

- Age:
- Nature of your physical disability:
- The name and/or type of sports program(s) you are currently enrolled in:
- How you heard about our study:
- Best time(s) and day(s) to schedule an interview

Sincerely,
Amanda McKinnon
York University
School of Kinesiology and Health Science

Recruitment Email for Organizations

Hello [INSERT NAME OF PERSON AT ORGANIZATION],

In partnership with the Canadian Disability Participation Project (<https://cdpp.ca/>), our lab is conducting a study that aims to better understand the developmental outcomes associated with sport participation among youth with physical disabilities. In order to recruit a representative sample of participants for our study, we are looking for support from community organizations that support physical activity and sport participation for youth with disabilities. We were wondering if [INSERT NAME OF ORGANIZATION] would be willing to help out.

If you are interested, here are some ways your organization can support our recruitment efforts for this study:

- Sharing our recruitment information through your organization's online platforms (social media, websites) and/or by word of mouth
- Posting our study's recruitment flyer in your facilities
- Sharing an email script with your participants/clients to tell them about our project

Through this partnership, we are hoping to give back to organizations like [INSERT ORGANIZATION NAME] by providing a lay summary of our research project highlighting key findings and implications that may inform your efforts to provide quality physical activity and sport opportunities for young people with disabilities.

I have attached a summary of the project should you wish to read further about the study. I have also attached a recruitment poster, email script or social media text if you would be willing to share any of these resources. This study has been approved by York University Research Ethics Committee. Please let us know if you are able to help out.

If you have any questions or require any further information, please don't hesitate to contact me.

Kindest regards,

Amanda McKinnon
York University
School of Kinesiology and Health Science

Social Media Text

York University School of Kinesiology and Health Sciences is **looking for youth aged 14-21 with a physical disability** to share their experience participating in sport.

- **What's involved?** Filling out some forms AND completing one telephone interview
- **How long will it take?** Approximately 1 hour

Youth will receive a **25\$ gift card as a “thank you”** for their participation in this study!

IF you (or your child) are interested in participation or would like more information about the study, **please contact Amanda McKinnon**

Recruitment Flyer



LOOKING FOR YOUTH AGED 14-21 WITH A PHYSICAL DISABILITY

to share their sport experiences

The School of Kinesiology and Health Sciences at York University is conducting a study seeking to understand the developmental outcomes associated with sport participation in youth with disabilities.

What's involved?

- ✓ This study involves completing **one telephone interview.**
- ✓ Total participation time is approximately 1 hour.

Who are we looking for?

- ✓ Youth between the ages of **14-21**
- ✓ with a **physical disability**
- ✓ and **enrolled in** an organized **sports program**

If you (or your child) are either:

- ✓ Interested in participating
- ✓ Need more information
- ✓ Have any questions and/or concerns



Please contact: Amanda McKinnon at

Youth will receive a 25\$ gift card as a "thank you" for their participation in this study

Appendix C: Consent Forms

Parent/Guardian Consent Form (younger than 16 years old)



Social Sciences and
Humanities Research
Council of Canada

Canada

Conseil de recherches
en sciences humaines
du Canada



Parental/Guardian Information Letter and Consent Form

Dear Parent(s) or Guardian(s),

Your child has expressed interest in participating in a study titled “*Examining positive youth development through sport in youth with disabilities*” conducted by Amanda McKinnon under the supervision of Rebecca Bassett-Gunter at York University.

Details about the study:

- Youth between the ages of 14 and 21 with a physical disability are needed for this study.
- Participants will complete a short online form and concept-map outlining information about previous/current sport experiences, followed by a short telephone interview (~35-45 minutes).
- The interview asks youth to describe their sport experiences and the outcomes they’ve gained through sport participation, as well as to identify factors within their sport environment that have influenced these outcomes.
- Youth can refuse to take part in the study at any time, with no penalty. Youth will not be part of the study if a parent decides they should not do so OR if the youth does not agree to take part. Youth can change their minds, stop participating or not answer questions if they choose.
- There are no known or anticipated risks from participation in this study.
- You can see a copy of the interview questions by contacting Amanda McKinnon at

What will my child be asked to do? Your child will be asked to complete a short online survey outlining information about sport programs that he/she was previously and/or is currently enrolled in (i.e. type of sport program, number of years enrolled). Your child will then complete a concept-map by writing down key words that describe his/her sport experiences. Following the submission of these forms, your child will be scheduled to perform one, 35-45-minute interview (telephone or video chat). The interview will consist of open-ended questions which will be tailored to your child’s past/current sport experiences and will refer to the concept-map that was generated at the beginning of the study. Your child will receive a \$25 gift card for their participation in this study from either: Indigo, Tim Hortons, or Amazon. Your child’s participation in this study will take a total of approximately 60 minutes.

The interview will:

- Take place over the course of one sitting, approximately 35-45 minutes.
- Ask youth to talk about their sport experiences and the outcomes they’ve gained through sport participation, as well as identify factors within their sport environment that have contributed to these outcomes.
- **With your consent, interviews will be audio-recorded.** Once the recording has been transcribed, the audio-recording will be destroyed.

The interview is confidential

- The interview is completely confidential and poses no risk to your child

- Each participant will have a unique ID and he or she will not be identified by name; only the university researchers will have access to individual interview data
- Once the interview is completed, all interview data will be securely stored in locked computer files, at York University for up to 7 years
- Results will be published in group format; no individual results will be shared

Confidentiality will be provided to the fullest extent possible by law.

What if you change your mind about your child's participation?

- The final decision to participate in this study must be made by the youth and the parent(s) or guardian(s). Your participation is voluntary and there is no penalty if your child does not participate.
- If you and your child agree now to participate, but either of you change your minds later, your child can be withdrawn from the study at any time.

Permission/Consent: Parents/Guardians can decide whether or not they want their child to be part of the study. If a child is the legal age to consent to research, they have the right to decide about the study on their own. In Ontario, the legal age to consent is 16. If your child is under the age of 16 and you wish to provide consent for him/her to participate in this survey, please complete the following information and provide your electronic consent below.

Contact Information: This research has received ethics review and approval by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca). Thank you for taking the time to read this information. To view further project details and the interview questions please contact

Funding: The Social Sciences and Humanities Research Council of Canada

Legal Rights and Signatures: I, consent to my child _____'s (child's name) participation in the research survey "*Examining positive youth development through sport in youth with disabilities*". I have understood the nature of this project and wish for my child to participate. I am not waiving any of my legal rights by consenting within this form. Checking "I consent" below indicates my consent.

Check here to indicate your consent: ☐ I consent

Check here to indicate that you consent for your child to be audiotaped: ☐ I consent

Check here if you wish to be contacted about future studies ☐

Parent/Guardian's signature _____

Participant Assent Form (younger than 16 years old)



Participant Assent Form

Date: Winter 2019

Study Name: Examining positive youth development through sport in youth with disabilities.

Researchers:

Amanda McKinnon, MSc candidate
York University
Kinesiology & Health Science

Rebecca Bassett-Gunter, PhD
York University
Kinesiology & Health Science

Kelly Arbour-Nicopoulos, PhD
University of Toronto
Kinesiology & Physical Education

Jessica Fraser-Thomas, PhD
York University
Kinesiology & Health Science

Purpose of the Research: The purpose of this study is to understand the positive and negative developmental outcomes that youth with disabilities (YWD) experience through sport, and to identify factors that influence these outcomes. The secondary objective is to examine whether Holt and colleagues (2017) positive youth development model can be generalized to YWD in understanding the developmental outcomes associate with youth sport participation

What you will be asked to do in the research:

- Complete a short online survey outlining information about organized sport programs that you were previously and/or are currently enrolled in.
- Fill out a concept-map by writing down key words that describe your sport experiences.
- Following the submission of this form, you will be scheduled to perform one, 35-45-minute interview (video chat, telephone or in person), where you will be asked open-ended questions about your sport experiences.
- You will receive a \$25 gift card for your participation in this study from either: Indigo, Tim Hortons, or Amazon.

The interview will:

- Take place over the course of one sitting, approximately 35-45 minutes.
- Ask you to talk about your sport experiences and the outcomes you've gained through sport participation, as well as identify factors within your sport that have contributed to these outcomes.
- **With your consent, interviews will be audio-recorded.** Once the recording has been transcribed, the audio-recording will be destroyed.

Risks and Discomforts: We do not foresee any risks or discomfort from your participation in the research.

Benefits of the Research and Benefits to You: There are no known or direct benefits to you as the participant.

Voluntary Participation: Your participation in the study is completely voluntary and you may choose to stop participating at any time. Your decision not to volunteer will not influence the nature of your relationship with York University either now, or in the future.

Withdrawal from the Study: You can stop participating in the study at any time, for any reason, if you so decide. If you decide to stop participating, you will still be eligible to receive the promised pay for agreeing to be in the project. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researchers, York University, or any other group associated with this project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality: The interview is confidential

- The interview is completely confidential and poses no known risks to you
- Each participant will have a unique ID and he or she will not be identified by name; only the university researchers will have access to individual interview data
- Once the interview is completed, all interview data will be securely stored in locked computer files, at York University for up to 7 years
- Results will be published in group format; no individual results will be shared

Confidentiality will be provided to the fullest extent possible by law.

Questions about the Research: This research has received ethics review and approval by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca). Thank you for taking the time to read this information. To view further project details and the youth questionnaires please contact Amanda McKinnon:

Funding: The Social Sciences and Humanities Research Council of Canada

Legal Rights and Signatures: I _____ (print name) consent to participate in the study "*Examining positive youth development through sport in youth with disabilities*" conducted by Amanda McKinnon. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. By checking the "I consent" below, I indicate my consent.

Check here to indicate your consent: ☐ I consent

Check here to indicate your consent to being audiotaped: ☐ I consent

Check here if you wish to be contacted to participate in future studies ☐

Participant Consent Form (16 years and older)



Participant Consent Form

Date: Winter 2019

Study Name: Examining positive youth development through sport in youth with disabilities.

Researchers:

Amanda McKinnon, MSc candidate
York University
Kinesiology & Health Science

Rebecca Bassett-Gunter, PhD
York University
Kinesiology & Health Science

Kelly Arbour-Nicitopoulos, PhD
University of Toronto
Kinesiology & Physical Education

Jessica Fraser-Thomas, PhD
York University
Kinesiology & Health Science

Purpose of the Research: The purpose of this study is to understand the positive and negative developmental outcomes youth with disabilities (YWD) experience through sport participation, and to identify factors that influence outcomes of sport participation. The secondary objective is to examine whether Holt and colleagues (2017) positive youth development (PYD) model can be generalized to YWDs in understanding the developmental outcomes associated with youth sport participation.

What you will be asked to do in the research:

- Complete a short online survey outlining information about organized sport programs that you were previously and/or are currently enrolled in.
- Fill out a concept-map by writing down key words that describe your sport experiences.
- Following the submission of this form, you will be scheduled to perform one, 35-45-minute interview (video chat, telephone or in person), where you will be asked open-ended questions about your sport experiences.
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The interview will:

- Take place over the course of one sitting, approximately 35-45 minutes.
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- **With your consent, interviews will be audio-recorded.** Once the recording has been transcribed, the audio-recording will be destroyed.

Risks and Discomforts: We do not foresee any risks or discomfort from your participation in the research.

Benefits of the Research and Benefits to You: There are no known or direct benefits to you as the participant.

Voluntary Participation: Your participation in the study is completely voluntary and you may choose to stop participating at any time. Your decision not to volunteer will not influence the nature of your relationship with York University either now, or in the future.

Withdrawal from the Study: You can stop participating in the study at any time, for any reason, if you so decide. If you decide to stop participating, you will still be eligible to receive the promised pay for agreeing to be in the project. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researchers, York University, or any other group associated with this project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality: The interview is confidential

- The interview is completely confidential and poses no known risks to you
- Each participant will have a unique ID and he or she will not be identified by name; only the university researchers will have access to individual interview data
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Funding: The Social Sciences and Humanities Research Council of Canada

Legal Rights and Signatures: I _____ (print name) consent to participate in the study "*Examining positive youth development through sport in youth with disabilities*" conducted by Amanda McKinnon. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. By checking the "I consent" below, I indicate my consent.

Check here to indicate your consent: ☐ I consent

Check here to indicate your consent to being audiotaped: ☐ I consent

Check here if you wish to be contacted to participate in future studies ☐

Appendix D: Participant and Sport Information Questionnaire

Link to the Online Survey: <https://www.surveymonkey.com/r/amyorkstudy>

Participant Information

How did you hear about the study? _____

How old are you? _____

Sex: _____

What is the nature of your physical disability? (please be specific)

Check one

Is your disability:

- ☐ Congenital (you were born with a disability)
- ☐ Acquired after birth (you were not born with a disability)

IF you have an acquired disability, how long have you had the disability for? _____

Where do you live? (City, Province): _____

Are you currently enrolled in school? (yes/no) _____

If yes,

Are you a full-time or part-time student? _____

What is your current/highest level of education? _____

Sport Information:

How long have you been participating in sports for? _____

How many Sports are you currently enrolled in? _____

List any organized sport program(s) that you are **currently involved in**.

- What is the sport?
- What is the name of your sport program/organization?
- How many times do you attend the program? (per week or month)
- How long have you been participating in this sport?
- Do you compete in your sport? (yes/no)

Remember: a sport program is any sport activity that is organized and run by an adult or leader that happened outside of school hours (NOT physical education class)

EX: Goalball/ Variety Village Goalball Club / 3 times per week/ 1 year/ no

- _____
- _____
- _____
- _____
- _____

Appendix E: Concept – Map Template

Concept- Map

Reflect on your **current/most recent sport experiences**.

Step 1: Use ideas, words or sentences to fill out a concept-map.

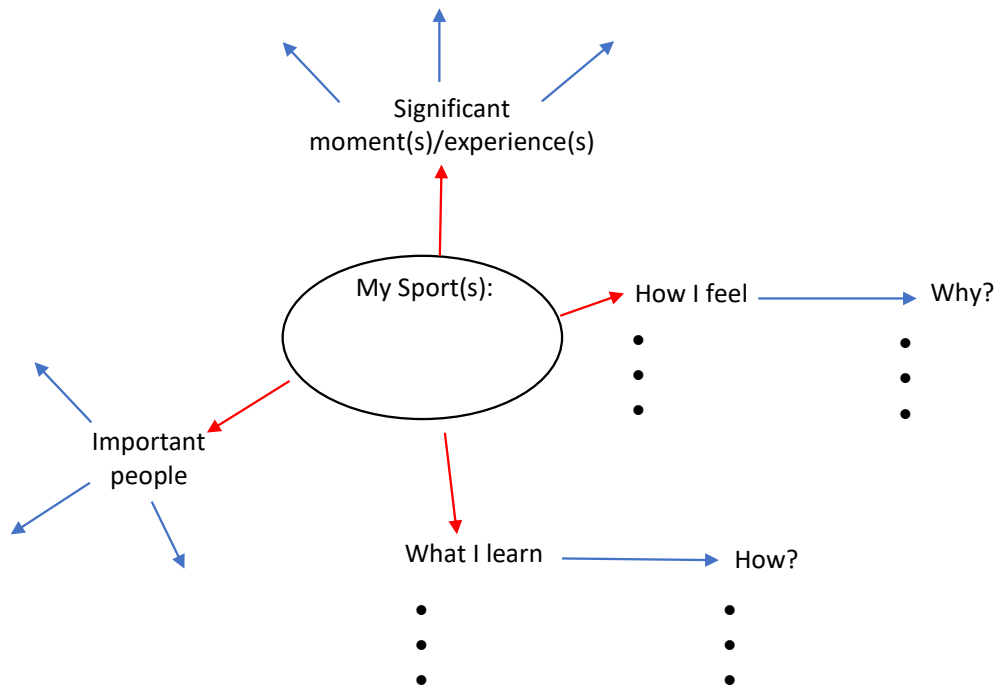
Step 2: You can refer to the “Guiding Questions” when creating your map

Step 3: Feel free to customize your map by adding more sports, ideas, circles/boxes, lines/arrows, bullets, etc.

NOTE: Please add as much detail as possible!!

Guiding Questions:

1. How does playing this sport make me feel?
 - Why does playing this sport make me feel this way? What about this sport makes me feel this way?
2. What do I learn from playing this sport?
 - How do I learn these things through sport?
3. Are there important people that are involved in my sport experiences?
 - Who? /Why?
4. Significant experiences/moments



Appendix F: Semi-structured Interview Guide

Warm-up question:

1. Before we start, I would like us to talk a little bit about the mind-map activity that you completed. Would you be able to walk me through the different things that you included in your mind map and the reasons why you chose to include these things?

[Probe Questions]

Why did you choose to include these things? (i.e. this specific sport, person, feeling).

Can you tell me more about...?

Do you have anything else you want to add?

Main Questions:

1. Can you tell me a little bit about your first experience participating in your sport program? (the oldest memory you have)

[Probe Questions]

Why did you start participating in this program?

How long have you been involved in this program?

Can you tell me more about...?

Do you have anything else you want to add?

2. What has made you want to continue participating in this program up until now?

[Probe Questions]

What things/aspects about your sport/or your sport program have made you want to continue?

Can you tell me more about...?

Do you have anything else you want to add?

3. Thinking about your sport experiences, can you recall any specific situation(s) that stand out to you as either being very positive or negative?

[Probe Questions]

Who was there?

What happened?

How did you feel? and why?

Did you learn anything from this/these experiences? (skills, things about yourself)

- Has learning this helped you in other areas of your life? (i.e. school, home, personal life)

Can you tell me more about...?

Are there any other situations/experiences that you want to share with me?

4. Have you learned anything from participating in your sport/ sport program? **OR** Has being part of your sports program taught you anything?

IF yes:

What kind of things have you learned?

How did you learn these things?

Has learning this helped you in other areas of your life?

Have you been able to apply what you've learned to other areas of your life? (e.g. school, home, relationships).

Are there things you wish you hadn't learned?
Are there any negative things you've learned through sport?

IF no:

What are some things you wish you could learn from your sports program?
[Probe Questions]
Can you tell me more about...?
Do you have anything else you want to add?

5. Can you tell me a little bit about the people in your program/on your team and the relationships you have with these people? (i.e. parents, coaches/leaders, teammates/peers)
[Probe Questions]

Can you tell me more about the people on your team/at your program?
How is your relationship with these people?
How do you get along with these people?
Do you have anything else you want to add?

6. How do these relationships influence your sport experiences?
What kind of influence do these people have? Can you tell me more about...?
Do you have anything else you want to add?

7. If you could make any changes to your sport program to make it better, what would you change? why?

[Probe Questions]

IF NOT: why wouldn't you change anything?
Why would you make these changes?
What/ who could make your experience better?
Can you tell me more about...?
Do you have anything else you want to add?

8. Try and picture yourself 5 years from now. Do you still see yourself participating in sport?

IF yes: how does this image look?

[Probe Questions]

Where are you?
What kind of sport are you playing?
Who is there with you?
How do you feel?
Can you tell me more about...?
Do you have anything else you want to add?

IF no: What do you see yourself doing instead and why?

[Probe Questions]

Where are you?
Who is there with you?
How do you feel?
Can you tell me more about...?
Do you have anything else you want to add?

Wrap Up:

- Do you have anything else that you would like to add?
- Remind participants that the interview is completely confidential and thank them for participating in the study.
- Advise participants that you will be sending them a copy of their transcript for review.
- Ask participant which gift card they would like: Indigo, Tim Hortons, Amazon, or Starbucks