The Process of Developing Contribution Among Young Athletes

by

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Abstract

The overall purposes of this dissertation were to define the term contribution and examine the process by which contribution may be developed through sport. This research was guided by three research questions: (a) what properties are associated with and define contribution? (b) what does contribution mean to youth sport stakeholders? and (c) how do youth athletes develop contribution through involvement in the context of sport? These questions, and the overall objectives of this dissertation, were addressed through three studies. The purposes of the first study were to identify the properties that underlie contribution and to establish a theoretical definition of the construct. Using a scoping review methodology (Levac et al., 2010), six properties of contribution were identified from definitions and descriptions extracted from 75 manuscripts. These properties were combined to create a theoretical definition of contribution. A panel of 20 expert judges rated the properties and definition as fitting well to very well (5.05 to 5.70 on a 6-pt scale) with their conceptualizations of contribution. The purposes of the second study were to examine coaches' perspectives on contribution through sport and obtain their feedback on the theoretical definition of contribution. Data were collected via focus groups with 13 coaches from a variety of individual and team sports (*M* age = 33.0 years, *SD* = 11.1). Focus group transcripts were analyzed using reflexive thematic analysis (Braun & Clarke, 2019). Findings were presented as two categories. In the first category, youth sport coaches' perceptions of contribution, the coaches discussed *contribution as an athlete* by providing sport specific examples of contribution behaviour and their perceptions that contribution involved *having a positive impact* and *acting with intent*. Regarding the second category, coaches' feedback on the definition, coaches expressed that the definition *fit* with their conceptualizations of contribution, although the coaches felt the definition was *complex* and questioned whether the definition

should have focused on *intent versus behaviour.* A practical definition of contribution was suggested to address the coaches' criticisms of the theoretical definition. The purpose of the third study was to create a grounded theory of the development of contribution through sport. Struassian grounded theory (Corbin & Strauss, 2015) was adopted as a research methodology and 20 participants including athletes, coaches, parents, and youth sport administrators, were interviewed individually. The development of contribution through sport was found to be a three-stage process. The first stage was characterized by the centrality of personal development, whereby the foundation for contribution was laid through instilling core values and developing relationships. In the second stage, youth engaged in their initial contribution experiences typically through invitations from adults. These invitations, and initial contribution experiences, helped build competence and confidence and if these initial contribution experiences were perceived as successful youth athletes were likely to continue to engage in contribution activities. The third stage was characterized by the display of regular or sustained contribution by athletes and a shifted focus from development of the individual to providing a benefit to others. Throughout all three stages of the process, coaches and parents stood out as influential individuals; however, the relative influence of the two groups changed as youth got older, became more independent, and drove their own contribution. Collectively, these studies clarify the construct of contribution and illuminate how it may be developed through sport.

Preface

This dissertation is an original work by Colin J. Deal. The studies in this dissertation received ethics approval from the University of Alberta Research Ethics Board (REB2). The first two studies were a part of a project entitled "Defining Contribution Through Sport" (Pro00074490) which was approved on July 10th, 2017. The third study was entitled "Grounded Theory of the Development of Contribution Through Sport" (Pro00093242) which was approved on September 11th, 2019.

Chapter 2 of this dissertation is currently being prepared to submit for publication as Deal, C. J., Dunn, J. G. H., Jørgensen, H., Sivak, A., & Holt, N. L. (2021). Defining contribution: A scoping review. I conceptualized and designed the study; collected, analyzed, and interpreted the data; and prepared the initial draft of the manuscript. N. L. Holt was the supervisory author and provided feedback on the study concept and design, interpretation of the data, and contributed to the manuscript preparation and revisions. J. G. H. Dunn provided feedback on the study concept and design as well as the drafts of the manuscript and revisions. H. Jørgensen assisted with screening manuscripts for inclusion/exclusion in the scoping review as a second screener. A. Sivak assisted with the development and execution of the automated database search strategy.

Chapter 3 of this dissertation has been accepted for publication as Deal, C. J., & Holt, N. L. (in press). Coaches' perspectives on contribution. *International Journal of Sport and Exercise Psychology*. I conceptualized and designed the study; collected, analyzed, and interpreted the data; and prepared the initial draft of the manuscript. N. L. Holt was the supervisory author and provided feedback on the study concept and design, interpretation of the data, and contributed to the manuscript preparation and revisions.

Chapter 4 of this dissertation is currently being prepared to submit for publication. I conceptualized and designed the study; collected, analyzed, and interpreted the data; and prepared the initial draft of the manuscript. N. L. Holt was the supervisory author and provided feedback on the study concept and design, interpretation of the data, and contributed to the manuscript preparation and revisions.

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CHAPTER 1. Introduction

General Introduction

The study of youth development has changed greatly in the past 50 years. In the 1970s youth development was largely regarded as a process done *to* youth *by* adults (Larson, 2006). Youth programing and research adopted what was called a 'deficit-reduction' approach which focused on understanding and preventing undesirable behaviours such as truancy, delinquency, early sexual activity, and drug and alcohol use (Benson, 1997). From such a deficit-reduction perspective, successful development meant protecting youth from engaging in undesirable behaviours (Scales et al., 2000). However, deficit-reduction approaches fail to capture that successful youth development entails more than simply avoiding undesirable behaviours. This is perhaps best illustrated with the following example:

> Suppose we introduced an employer to a young person we worked with by saying, "Here's Johnny. He's not a drug user. He's not in a gang. He's not a dropout. He's not a teen father. Please hire him." The employer would probably respond, "That's great. But what does he know, what can he do?" … *Prevention is an important but inadequate goal... problem free is not fully prepared.* (Pittman et al., 2003, pp. 5-6)

In the late 1990s and early 2000s, prompted by researchers' dissatisfaction with the deficit-reduction approach, a new perspective arose which embraced the idea that youth free from problems are not necessarily successful (Scales et al., 2000). This new perspective, now known as positive youth development (PYD), was an asset-building approach to youth development research and practice in which emphasis was placed on the strengths youth possess and developing the potential in all youth (Lerner et al., 2005). These strengths include a variety of behavioural (e.g., self-regulation), cognitive, (e.g., problem solving), and social (e.g., communication) skills (Lerner et al., 2003; Lerner et al., 2011). As such, a major focus in PYD

revolved around helping youth learn these skills, which are sometimes referred to as life skills (i.e., internal assets that enable youth to be successful in other life environments; Danish et al., 2004), and 'transferring' these skills to other contexts such as home, school, and work (Gould & Carson, 2008). Within this perspective, successfully developing or 'thriving' youth were those who took an active role in their development (Larson, 2006) and were on a path to becoming adults who take actions to better themselves and the social institutions with which they interact (Lerner et al., 2003). The term Lerner applied to refer to such actions was contribution.

The PYD perspective has been applied to the context of youth sport with increasing frequency (Qi et al., 2020) and has been gained greater prominence in both research and practice (Holt, 2016). While there may be a popular belief – and a great deal of rhetoric – that sport is inherently good, builds character, and generally prepares youth for life as an adult (Coakley, 2011, 2016), contemporary researchers and practitioners have shown that sport can only produce positive developmental outcomes *if* the context is appropriately created and delivered (Fraser-Thomas et al., 2005; Jones et al., 2017; Strachan et al., 2018). Most PYD research in sport has been focused on identifying aspects of the sport context which are conducive to developing individual outcomes associated with PYD, such as learning life skills and transferring them to other contexts (Danish et al., 2004; Holt et al., 2009; Kendellen & Camiré, 2017; Lee & Martinek, 2013; Pierce et al., 2018). Ultimately, the individual development youth obtain through the varied contexts in which they live, including sport, are supposed to allow them to thrive and, as Lerner (2004) described, act in accordance with integrated moral and civic identities in ways which contribute to their own well-being and that of their families, communities, and/or society. However, the link between individual development and contribution has received relatively little attention in the sport-based PYD literature. Jay Coakley

(2016) has argued that aside from how youth may engage with others in their immediate social contexts, the social agency of youth "has seldom been given more than lip-service in most sport-based programs claiming to focus on youth development" (p. 26).

> Recently, Holt, Deal, and Smyth (2016) defined PYD through sport as:
>
> PYD through *sport* is intended to facilitate youth development via *experiences* and *processes* that enable participants in *adult-supervised programs* to gain *transferable personal and social life skills*, along with *physical competencies*. These skill and competency outcomes will enable participants in youth sport programs to *thrive* and ***contribute to their communities***, both now and in the future. (p. 231, italics in original, bold for emphasis)

The notion of contribution to communities is specifically mentioned in this definition of PYD through sport. Such an explicit inclusion acknowledges a link between individual development and broader community benefit that may be achieved through sport participation and contribution. However, what exactly contribution *is* and *how* it may be developed through sport participation has yet to be examined in detail.

Conceptualizing PYD

As previously stated, PYD is an approach to research and practice in youth development that arose in response to the deficit-reduction approach (Scales et al., 2000). Several different theories, models, and frameworks have been developed to conceptualize, assess, and measure PYD. In this section, I briefly summarize a selection of the most widely used approaches to conceptualizing PYD.

The Search Institute's 40 Developmental Assets (Benson, 1997; Search Institute, 2005) is a prominent approach to conceptualizing and assessing PYD. The 40 developmental assets are

divided into internal assets and external assets (Scales et al., 2006). The internal assets are further subdivided into the four categories of (a) commitment to learning, (b) positive values, (c) social competencies, and (d) positive identity. The external assets are also subdivided into four categories, namely (a) support, (b) empowerment, (c) boundaries and expectations, and (d) constructive use of time (Scales et al., 2006). Essentially, the more of these developmental assets youth have internally and within their developmental contexts, the more likely they are to experience positive developmental outcomes (Benson, 1997). The Search Institute has measures designed to assess the developmental assets and evaluate youth programs. For example, the Developmental Assets Profile (DAP; Search Institute, 2005) assesses the availability of developmental assets to youth. The Youth and Program Strengths survey (YAPS; Scales et al., 2010) assesses the degree to which youth are exposed to the experiences and opportunities that define high quality programs (i.e., physical and psychological safety, appropriate structures, developmental relationships, opportunities to belong, positive social norms, support of efficacy and mattering, opportunities for skill building, and integration with other developmental contexts). A third measure, known as the Attitudes and Behaviors Survey (A&B; Search Institute, 2015), quantifies indicators of thriving (e.g., academic success), developmental deficits (e.g., TV over-exposure), and risk-taking behaviours (e.g., substance use).

Another conceptualization of PYD is focused on the domains of learning experiences youth encounter and is assessed using the original version of the Youth Experience Survey (YES 1.0; Hansen & Larson, 2002) and the later revised YES 2.0 (Hansen & Larson, 2005). Both measures assess youths' experiences in structured activities such as academic or community clubs, sports, or faith-based groups related to six positive domains and one negative domain. The six positive domains are (a) identity experiences, (b) initiative experiences, (c) basic skills, (d)

positive peer relationships, (e) adult network and social capital, and (f) teamwork and social skills. The negative domain includes measures of stress, negative influences, social exclusion, negative group dynamics, and inappropriate adult behaviour. In one study by Larson et al. (2006), 2280 grade 11 students involved in sports, performance and fine arts, academic clubs, community organizations, service organizations, and faith-based groups completed the YES 2.0 to compare experiences across different types of organized programs. The results showed that youth experiences varied across types of programs, with youth in community service organizations reporting high rates of adult network experiences but low rates of emotional regulation and teamwork experiences. Youth in sports reported high rates of initiative, emotional regulation, and teamwork experiences and low rates of identity work, positive peer relationships, and adult network experiences (Larson et al., 2006). These findings suggest there are some distinctive features of youth sport that create unique PYD experiences for adolescents compared to other types of youth activities.

Within the context of youth sport, Strachan et al. (2009) used the YES 2.0 (Hansen & Larson, 2005) to compare the youth sport experiences of 40 ‘specializers’ (i.e., individuals who invested 15 hours or more in their main sport at an average age of 6.9 years) and 34 ‘samplers’ (i.e., individuals who invested approximately equal time in at least three sports at an average age of 13.4 years). It was found that both groups experienced similar levels of positive developmental experiences. However, samplers scored higher on the integration with family and linkages to community subscales while specializers scored higher on the diverse peer group subscale. Further integration of this approach to PYD in sport can be seen in MacDonald and colleagues’ (2012) creation of the youth experience survey for sport (YES-S). This sport specific

questionnaire assesses youth experiences in four positive domains (i.e., personal and social skills, cognitive skills, goal setting, and initiative) and a single negative experience domain.

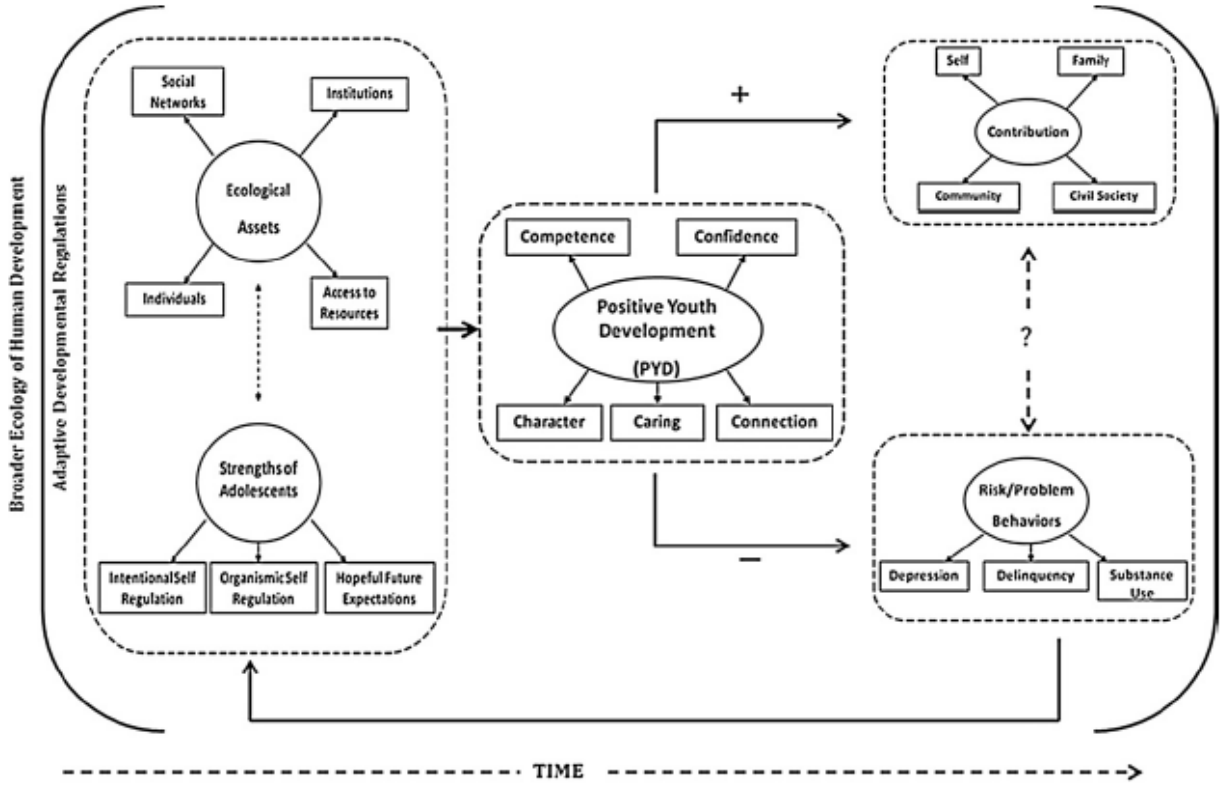
Other PYD approaches focus on key features of programs intended to promote PYD. The National Research Council and Institute of Medicine (NRCIM; 2002) identified eight setting features common to effective youth development settings: (a) physical and psychological safety; (b) appropriate structure; (c) supportive relationships; (d) opportunities to belong; (e) positive social norms; (f) support for efficacy and mattering; (g) opportunities for skill building; and (h) integration of family, school, and community efforts. These setting features may be used to assess the quality of a program, with programs possessing more features being more likely to promote youth development. Other researchers use the "Big Three" features of youth development programs, namely: (a) positive and sustained relationships between youth and adults, (b) activities that build life skills, and (c) opportunities for youth to use life skills as both participants and leaders in community activities (Lerner, 2004; Roth & Brooks-Gunn, 2003).

Perhaps the most popular model in PYD is Richard Lerner's 5Cs model (Figure 1.1). The 5Cs model was initially developed to help guide the approach to youth development used within 4-H. 4-H is a multi-national network of youth organizations, originating in the United States under the U.S. Department of Agriculture, which seek to promote PYD through creating opportunities for youth that broaden their skills and aspirations and nurture their full potential (4-H National Headquarters, 2011). PYD in the 5Cs model is posited to occur when the strengths of youth are aligned with the assets available to them within their social contexts. In this way, the 5Cs model uses integrated actions within person ←→ context interactions as the fundamental unit of analysis for youth development (Lerner et al., 2005). Lerner conceptualized PYD as being comprised of 5Cs (i.e., confidence, competence, connection, character, and caring/compassion;

Lerner et al., 2005; Lerner et al., 2010). These 5Cs manifest over time as youth maintain a trajectory towards idealized adulthood (i.e., thrive; Jeličić et al., 2007; Lerner et al., 2005). Youth with high levels of the 5Cs may exhibit contribution, the 6th C of PYD, which was initially described by Lerner et al. (2002) as functionally valued behaviours based on a commitment to other entities in their community that transcends self-interest.

Figure 1.1

The 5Cs Model of PYD



Note. Reproduced from Lerner et al. (2011) with permission from the publisher (Appendix E).

The general structure of the 5Cs model of PYD, with five first-order constructs (i.e., the 5Cs) loading onto a higher order construct (i.e., PYD), has been supported in several studies by Lerner and colleagues (Jeličić et al., 2007; Lerner et al., 2005; Phelps et al., 2009). However, the measures of the 5Cs used in the 4-H study totaled over 80 items (Lerner et al., 2005; Phelps et

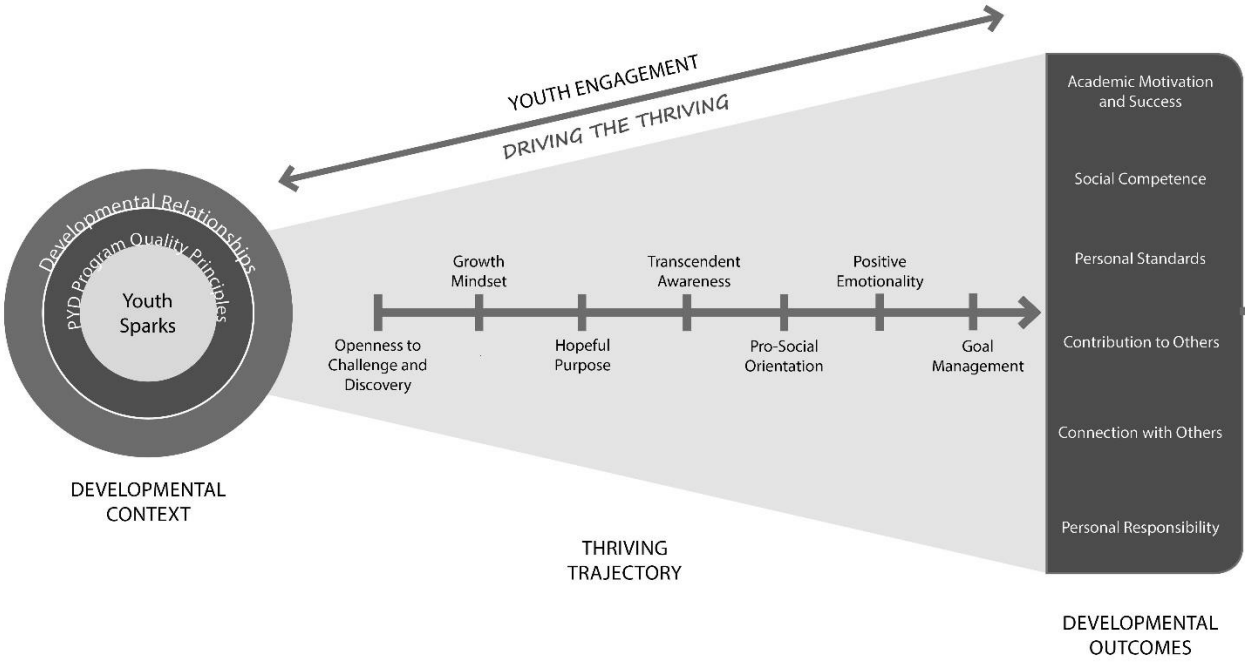
al., 2009), which demanded significant time and attention from participants in order to complete. To alleviate some of these demands, the 34-item Positive Youth Development - Short Form (PYD-SF) and the 17-item Positive Youth Development - Very Short Form (PYD-VSF) were developed (Geldhof, Bowers, Boyd, et al., 2014). Both measures were found to consistently correlate with theorized relationships in the 5Cs model, including positive correlations with contribution and negative correlations with problem behaviours and depressive symptoms.

However, the factor structure of the 5Cs model has been less well supported in sport contexts. The factor structure of the 5Cs was tested by Jones and colleagues (2011) in a sample of 258 youth sport participants. Using a 30-item instrument, the five-factor model (i.e., 5Cs) of PYD was not supported. An exploratory factor analysis supported a two-factor solution, with one factor appearing to represent a combination of competence and confidence and the second factor representing connection, character, and caring/compassion, which the authors labelled 'prosocial values.' From a sport psychology perspective, Côté and colleagues (2010) argued that the constructs of caring/compassion and character are not sufficiently differentiated in sport and suggested a 4C conceptualization akin to Little's (1993) original model. Vierimaa et al. (2012) suggested a measurement framework for the 4Cs composed of existing measures: the Sport Competence Inventory (Causgrove Dunn et al., 2007) for competence, the self-confidence subscale of the revised Competitive State Anxiety-2 (CSAI-2R; Cox et al., 1986) for confidence, Jowett and Ntoumanis's (2004) Coach-Athlete Relationship Questionnaire (CART-Q) and the Peer Connection Inventory (Coie & Dodge, 1983) for connection, and the Prosocial and Antisocial Behavior in Sport Scale (Kavussanu & Boardley, 2009) to assess character. These measures total over 50 items and the measurement framework does not appear to have been used in the published literature to date.

A more recent model of PYD was developed by Arnold (2018). This model, called the 4-H thriving model (Figure 1.2), was developed for use in 4-H youth development programs and builds on developments in the PYD literature, including the 5Cs model (Arnold & Gagnon, 2020). Like the 5Cs model, successful development (i.e., thriving) is dependent on the combination of youth themselves, the programing in which they participate, and the relationships formed with others in their developmental contexts. It is proposed that youth who are thriving will experience positive developmental outcomes (Arnold & Gagnon, 2019). Several of the developmental outcomes within the 4-H thriving model are similar to elements of the 5Cs model. For example, the outcomes 'academic motivation and success' as well as 'social competence' are reflective of competence in Lerner's model while 'personal standards' and 'personal responsibility' reflect Lerner's descriptions of character (Arnold & Gagnon, 2019). Another similarity concerns contribution. In Lerner's 5Cs model, contribution is more likely to occur when youth experience greater PYD and from that perspective contribution may be viewed as a desired outcome of PYD (Deal & Camiré, 2016a). In Arnold's (2018) 4-H thriving model, 'contribution to others' is specifically listed as a developmental outcome and they cite a 2007 book by Lerner intended for general audiences (i.e., non-academics) to suggest "… contribution reflects the young person's ability and interest in giving back to others (Lerner, 2007)" (Arnold, 2018, p. 153).

Figure 1.2

4-H Thriving Model



Note. Reproduced from Arnold and Gagnon (2020) under the terms of the CC BY 4.0 licence.

In summary, there are a multitude of theories, models, and frameworks that may be used in PYD research and program evaluation and design. Despite the difficulties applying Lerner's 5Cs model of PYD (Lerner et al., 2005) and measuring the Cs in the context of sport, it remains an influential model both within and outside of sport. Contribution, the '6th C' in Lerner's model (Lerner et al., 2005), may be regarded as a desired positive outcome of PYD in both the 5Cs model (Deal & Camiré, 2016a) as well as in the later 4-H thriving model (Arnold, 2018). However, the term contribution has not been well defined, nor have the processes leading to the development of contribution been adequately studied.

Contribution as a Component of PYD

According to the 5Cs model, youth who attain greater levels of PYD - marked by development in the five critical areas of competence, confidence, connection, character, and caring/compassion - are more likely to thrive and display contribution (Lerner, 2004). The original conceptualization of contribution included a behavioural (action) component and an ideological component (i.e., that an individual possesses an identity that specifies contribution is predicated on moral and civic duty; Lerner et al., 2003). As Lerner et al. (2005) explained, "when youth believe that they should contribute to self and context and when they act on these beliefs, they will both reflect and promote further advances in their own positive development and, also, the health of their social world" (p. 23). Later, as Lerner and colleagues continued to refine the model, contribution to self, family, and community was differentiated from contribution as a form of active and engaged citizenship (Lerner et al., 2010). Whereas the 5Cs remain consistent through adolescence, contribution is a marker of developmental change (Lerner et al., 2010). Lerner (2004) described thriving as developing towards an adult life characterized by integrated and mutually reinforcing contribution to self (e.g., maintaining one's health and one's ability to remain an active agent in one's development), family, community, and the institutions of civil society. It may be that the contribution of the early adolescent (i.e., contribution to self, family, and community) becomes active and engaged citizenship as a result of developmental changes that occur in adolescence (Zaff et al., 2010). Changes in how contribution manifests (i.e., contribution to self, family, and community then later to civil society through active and engaged citizenship) may be a consequence of adolescents engaging with new contexts and having more opportunities to engage in citizenship behaviours (i.e., different forms of contribution).

The ways in which contribution has been measured provide more insight into its conceptualization. In a study using data from the first two waves of the 4-H study of PYD, Jeličić et al. (2007) examined the relationship between PYD and contribution. Contribution was measured as a composite score derived from 12 items across four subsets: (a) leadership (e.g., during the last 12 months, how many times have you been a leader?), (b) services (in which participants indicated if an activity such as "volunteer work" applied to them), (c) helping (i.e., average amount of time spent each week helping friends), and (d) ideology (e.g., it is important to me to contribute to my community and society). These same items have also been used to measure contribution in subsequent studies (e.g., Geldhof, Bowers, Boyd, et al., 2014; Geldhof, Bowers, Mueller, et al., 2014). These items reflect the distinction between contribution as a set of behaviours or activities and the ideological component of contribution. Additionally, these measures give some perspective on what sort of behaviours may be considered contribution (e.g., helping behaviours, volunteering). However, despite the importance of contribution within the 5Cs model of PYD, and efforts to quantify contribution, the term has not been theoretically defined, nor have the processes that lead to contribution been studied.

Contribution in the Context of Sport

Although a large body of literature has examined various aspects of PYD through sport (Holt, 2016), contribution has not been studied in detail in the sport context. This may be due to the absence of a clear theoretical definition of contribution. However, prosocial behaviour, which may a represent a particular form of contribution, has been studied among athletes. For instance, researchers have compared rates of volunteering and other prosocial activities among athletes compared to non-athlete populations (Babiak et al., 2012; Gayles et al., 2012; Hoffman et al., 2015; Potuto & O'Hanlon, 2007). Other quantitative studies have made use of cross-sectional

designs to examine relationships between youth program involvement and types of prosocial behaviour such as volunteering (e.g., Francis, 2011; Geldhof, Bowers, Boyd, et al., 2014). A number of qualitative studies have provided insight into athletes' motivations including giving back to their sport (Cunningham & Singer, 2010) or obtaining future career-related skills (Lally & Kerr, 2005).

Only two studies have directly examined contribution in sport, both of which focused on the context of university sport (Deal & Camiré, 2016a, 2016b). In the first study, 10 university student athletes were interviewed about their motivations for contribution (Deal & Camiré, 2016a). The university student athletes reported multiple reasons for engaging in contribution behaviours. These reasons fell into three general categories that aligned with the basic psychological needs from self-determination theory (Ryan & Deci, 2000). These student athletes were found to engage in contribution for reasons relating to: (a) autonomy, particularly later in their university careers; (b) competence, in order to develop skills for future careers (e.g., volunteering at a physiotherapy clinic) or demonstrate skills they already possess (e.g., coaching, peer teaching); and (c) relatedness (i.e., contribution allowed athletes to develop and improve relationships with teammates and the broader community). Additionally, the student athletes often reported having multiple motivations for a specific contribution activity. For example, one student athlete recognized that although she primarily volunteered to help others, doing so also had a personal benefit for her in the form of improving her CV which she believed may help her gain admission to medical school.

In the second study (Deal & Camiré, 2016b), the facilitators and barriers to contribution were examined. Participants in this study presented two similar yet different patterns based on how long they had been university student athletes. The first group were first-year student

athletes, and the second group were upper-year student athletes who had a history of contribution (i.e., sustained contributors). Both groups reported teammates, coaches, and athletics department staff as facilitators, though the first-year student athletes were more reliant on these facilitators creating contribution opportunities than the sustained contributors. Additionally, both groups reported a perceived lack of time as the greatest barrier to contribution with sustained contributors possessing more strategies for overcoming or dealing with this barrier than first-year student athletes. Although Deal and Camiré (2016a, 2016b) specifically examined contribution in the context of sport, contribution was not defined, with both studies described the term based on Lerner and colleagues' initial descriptions of contribution (e.g., Lerner et al., 2003; Lerner et al., 2005).

Purposes of the Dissertation

Although there have been initial descriptions of contribution (Lerner et al., 2003; Lerner et al., 2005; Zaff et al., 2010), attempts at quantifying contribution (Geldhof, Bowers, Boyd, et al., 2014; Geldhof, Bowers, Mueller, et al., 2014; Jeličić et al., 2007), and a small number of studies examining contribution in sport (Deal & Camiré, 2016a, 2016b), there are two significant gaps in the literature which need to be addressed. First and foremost, the term contribution needs to be clearly defined so that future research has a solid foundation upon which to examine contribution. Second, the processes behind the development of contribution through sport are unknown and needs to be understood.

The overall objectives of this dissertation were to define the term contribution and examine the process by which contribution may be developed among youth athletes through sport. This research was guided by underlying three research questions: (a) what properties are associated with and define contribution? (b) what does contribution mean to youth sport

stakeholders? and (c) how do youth athletes develop contribution through involvement in the context of sport? These questions, and the overall objectives of this dissertation, were addressed through three studies which are presented in the following three chapters of this dissertation.

References

4-H National Headquarters. (2011). *What is a 4-H club*? https://nifa.usda.gov/sites/default/files/resource/What%20is%20a%20Club%20v.7-11.pdf

Arnold, M. E. (2018). From context to outcomes: A thriving model for 4-H youth development programs. *Journal of Human Sciences and Extension, 6*(1), 141-160. https://www.jhseonline.com/article/view/653

Arnold, M. E., & Gagnon, R. J. (2019). Illuminating the process of youth development: The mediating effect of thriving on youth development program outcomes. *Journal of Human Sciences and Extension, 7*(3), 24-51. https://www.jhseonline.com/article/view/901

Arnold, M. E., & Gagnon, R. J. (2020). Positive youth development theory in practice: An update on the 4-H thriving model. *Journal of Youth Development, 15*(5), 1-23. https://doi.org/10.5195/jyd.2020.954

Babiak, K., Mills, B., Tainsky, S., & Juravich, M. (2012). An investigation into professional athlete philanthropy: Why charity is part of the game. *Journal of Sport Management, 26*(2), 159-176. https://doi.org/10.1123/jsm.26.2.159

Benson, P. L. (1997). *All kids are our kids: What communities must do to raise caring and responsible children and adolescents*. Jossey-Bass.

Causgrove Dunn, J., Dunn, J. G. H., & Bayduza, A. (2007). Perceived athletic competence, sociometric status, and loneliness in elementary school children. *Journal of Sport Behavior, 30*(3), 249-269.

Coakley, J. (2011). Youth sports: What counts as "positive development?" *Journal of Sport and Social Issues, 35*(3), 306-324. https://doi.org/10.1177/0193723511417311

Coakley, J. (2016). Positive youth development through sport: Myths, beliefs, and realities. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 21-33). Routledge.

Coie, J. D., & Dodge, K. A. (1983). Continuities and changes in children's social status: A five-year longitudinal study. *Merrill-Palmer Quarterly, 29*(3), 261-282. http://www.jstor.org/stable/23086262

Cox, R. H., Martens, M. P., & Russell, W. D. (2003). Measuring anxiety in athletics: The revised competitive state anxiety inventory-2. *Journal of Sport & Exercise Psychology*, *25*(4), 519-533. https://doi.org/10.1123/jsep.25.4.519

Côté, J., Bruner, M. W., Erickson, K., Strachan, L., & Fraser-Thomas, J. (2010). Athlete development. In J. Lyle and C. Cushion (Eds.), *Sport coaching: Professionalism and practice* (pp. 63-79). Elsevier.

Cunningham, G. B., & Singer, J. N. (2010). "You'll face discrimination wherever you go": Student athletes' intentions to enter the coaching profession. *Journal of Applied Social Psychology, 40*(7), 1708-1727. https://doi.org/10.1111/j.1559-1816.2010.00636.x

Danish, S., Forneris, T., Hodge, K., & Heke, I. (2004). Enhancing youth development through sport. *World Leisure Journal, 46*(3), 38-49. https://doi.org/10.1080/04419057.2004.9674365

Deal, C. J., & Camiré, M. (2016a). An examination of university student-athletes' motivations to contribute. *Journal of College and Character, 17*(2), 116-129. https://doi.org/10.1080/2194587X.2016.1159227

Deal, C. J., & Camiré, M. (2016b). University student-athletes' experiences of facilitators and barriers to contribution: A narrative account. *The Qualitative Report, 21*(11), 2087-2102. http://nsuworks.nova.edu/tqr/vol21/iss11/11

Francis, J. E. (2011). The functions and norms that drive university student volunteering. *International Journal of Nonprofit and Volunteer Sector Marketing, 16*(1), 1-12. https://doi.org/10.1002/nvsm.390

Fraser-Thomas, J.L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education and Sport Pedagogy, 10*(1), 19-40. https://doi.org/10.1080/1740898042000334890

Geldhof, G. J., Bowers, E. P., Boyd, M. J., Mueller, M. K., Napolitano, C. M., Schmid, K. L., Lerner, J. V., & Lerner, R. M. (2014). The creation and validation of short and very short measures of PYD. *Journal of Research on Adolescence*, *24*(1), 163-176. https://doi.org/10.1111/jora.12039

Geldhof, G. J., Bowers, E. P., Mueller, M. K., Napolitano, C. M., Callina, K. S., & Lerner, R. M. (2014). Longitudinal analysis of a very short measure of positive youth development. *Journal of Youth and Adolescence, 43*(6), 933-949. https://doi.org/10.1007/s10964-014-0093-z

Gould, D., & Carson, S. (2008). Life skill development through sport: Current status and future directions. *International Review of Sport and Exercise Psychology, 1*(1), 58-78. https://doi.org/10.1080175098407018345 73

Hansen, D. M., & Larson, R. (2002). *The youth experience* survey. Unpublished manuscript, University of Illinos at Urbana-Champaign.

Hansen, D. M., & Larson, R. (2005). *The youth experience survey 2.0: Instrument revisions and validity testing*. Unpublished manuscript, University of Illinois at Urbana-Champaign. http://youthdev.illinois.edu/wp-content/uploads/2013/11/YES-2.0-Instrument.pdf

Hoffman, J., Kihl, L., & Browning, A. (2015). Civic engagement and activism: Do college students and college athletes differ? *Journal of College and Character, 16*(2), 75-89. https://doi.org/10.1080/2194587X.2015.1028315

Holt, N. L. (2016). Introduction to the second edition. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 1-4). Routledge.

Holt, N. L., Deal, C. J., & Smyth, C. L. (2016). Future directions for positive youth development through sport. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 229-240). Routledge.

Holt, N. L., Tamminen, K. A., Tink, L. N., & Black, D. E. (2009). An interpretive analysis of life skills associated with sport participation. *Qualitative Research in Sport and Exercise, 1*(2), 160-175. https://doi.org/10.1080/19398440902909017

Jeličić, H., Bobek, D., Phelps, E. D., Lerner, J. V., & Lerner, R. M. (2007). Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H Study of Positive Youth Development. *International Journal of Behavioral Development, 31*(3), 263–273. https://doi.org/10.1177/0165025407076439

Jones, M. I., Dunn, J. G. H., Holt, N. L., Sullivan, P. J., & Bloom, G. A. (2011). Exploring the '5Cs' of positive youth development in sport. *Journal of Sport Behavior, 34*(3), 250-267. https://pdfs.semanticscholar.org/77df/3fe03b2ef55470d896e771fdf6cfbde14f9a.pdf?_ga=2.25601405.1166472067.1597626035-853331449.1597626035

Jones, G. J., Edwards, M. B., Bocarro, J. N., Bunds, K. S., & Smith, J. W. (2017). An integrative review of sport-based youth development literature. *Sports in Society, 20*(1), 161-179. https://doi.org/10.1080/17430437.2015.1124569

Jowett, S., & Ntoumanis, N. (2004). The coach-athlete relationship questionnaire (CART-Q): Development and initial validation. *Scandinavian Journal of Medicine and Science in Sports, 14*(4), 245-257. https://doi.org/10.1111/j.1600-0838.2003.00338.x

Kavussanu, M., & Boardley, I. D. (2009). The prosocial and antisocial behavior in sport scale. *Journal of Sport & Exercise Psychology, 31*(1), 97-117. https://doi.org/10.1080/02640414.2013.775473

Kendellen, K. & Camiré, M. (2017). Examining the life skill development and transfer experiences of former high school athletes. *International Journal of Sport and Exercise Psychology, 15*(4), 395-408. https://doi.org/10.1080/1612197X.2015.1114502

Lally, P. S., & Kerr, G. A. (2005). The career planning, athletic identity, and student role identity of intercollegiate student athletes. *Research Quarterly for Exercise and Sport, 76*(3), 275-285. https://doi.org/10.1080/02701367.2005.10599299

Larson, R. (2006). Positive youth development, willful adolescents, and mentoring. *Journal of Community Psychology, 34*(6), 677-689. https://doi.org/10.1002/jcop.20123

Larson, R. W., Hansen, S. M., & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology, 42*(5), 849-863. https://doi.org/10.1037/0012-1649.42.5.849

Lee, O., & Martinek, T. (2013). Understanding the transfer of values-based youth sport program goals from a bioecological perspective. *Quest, 65*(3), 300-312. https://doi.org/10.1080/00336297.2013.791871

Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's Youth*. Sage.

Lerner, R. M., Brentano, C., Dowling, E. M., & Anderson, P. M. (2002). Positive youth development: Thriving as the basis of personhood and civil society. *New Directions for Youth Development, 2002*(95), 11-33. https://doi.org/10.1002/yd.14

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172-180. https://doi.org/10.1207/S1532480XADS0703_8

Lerner, R. M., & Lerner, J. V. (2011). *The positive development of youth: Report of the findings from the first seven years of the 4-H study of positive youth development*. Tufts University.

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17-71. https://doi.org/10.1177/0272431604272461

Lerner, R. M., Lerner, J. V., von Eye, A., Bowers, E. P., & Lewin-Bizan, S. (2011). Individual and contextual bases of thriving in adolescence: A view of the issues. *Journal of Adolescence, 34*(6), 1107-1114. https://doi.org/10.1016/j.adolescence.2011.08.001

Little, R. R. (1993). *What's working for today's youth: The issues, the programs, and the learnings*. Paper presented at the Institute for Children, Youth, and Families Fellows' Colloquium, Michigan State University.

MacDonald, D. J., Côté, J., Eys, M., & Deakin, J. (2012). Psychometric properties of the youth experience survey with young athletes. *Psychology of Sport and Exercise, 13*(3), 332-340. https://doi.org/10.1016/j.psychsport.2011.09.001

National Research Council and Institute of Medicine. (2002). *Community Programs to Promote Youth Development*. Committee on Community-Level Programs for Youth. J. Eccles and J. A. Gootman, eds. Washington, DC: National Academy Press. http://www.nap.edu/catalog/10022/community-programs-to-promote-youth-development

Phelps, E., Zimmerman, S., Warren, A. E. A., Jeličić, H., von Eye, A., & Lerner, R. M. (2009). The structure and developmental course of positive youth development (PYD) in early adolescence: Implications for theory and practice. *Journal of Applied Developmental Psychology, 30*(5), 571-584. https://doi.org/10.1016/j.appdev.2009.06.003

Pierce, S., Kendellen, K., Camiré, M., & Gould, D. (2018). Strategies for coaching for life skills transfer. *Journal of Sport Psychology in Action*, *9*(1), 11-20. https://doi.org/10.1080/21520704.2016.1263982

Pittman, K. J., Irby, M., Tolman, J., Yohalem, N., & Ferber, T. (2003). Preventing problems, promoting development, encouraging engagement: Competing priorities or inseparable goals? The Forum for Youth Investment. http://forumfyi.org/content/preventing-problems-pr

Potuto, J. R., & O'Hanlon, J. (2007). National study of student-athletes regarding their experiences as college students. *College Student Journal, 41*(4), 947-966.

Qi, S., Hua, F, Zhou, Z., & Shek, D. T. L. (2020). Trends of positive youth development publications (1995-2020): A systematic review. *Applied Research in Quality of Life,* 1-26. https://doi.org/10.1007/s11482-020-09878-3

Roth, J. L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science, 7*(2), 94-111. https://doi.org/10.1207/S1532480XADS0702_6

Ryan, R. M., Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. https://doi.org/10.1037/0003-066X.55.1.68

Scales, P. C. (2000). Building students' developmental assets to promote health and school success. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 74*(2), 84-88. https://doi.org/10.1080/00098655.2000.11478649

Scales, P., Benson, P., Leffert, N. & Blyth, D. A. (2000) Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science, 4*(1), 27–46. https://doi.org/10.1207/S1532480XADS0401_3

Scales, P.C., Benson, P.L., & Roehlkepartain, E.C. (2010). *Teen Voice 2010: Relationships That Matter to America's 15-Year-Olds*. Best Buy Children's Foundation and Search Institute.

Scales, P. C., Benson, P. L., Roehlkepartain, E. C., Sesma Jr., A., & van Dulmen, M. (2006). The role of developmental assets in predicting academic achievement: A longitudinal study. *Journal of Adolescence, 29*(5), 691-708. https://doi.org/10.1016j.adolescence.2005.09.001

Search Institute. (2005). *Developmental assets profile technical manual*. Author.

Search Institute. (2015). *User Guide for the Attitudes & Behaviors Survey*. Author.

Strachan, L., Côté, J., & Deakin, J. (2009). "Specializers" versus "samplers" in youth sport: Comparing experiences and outcomes. *The Sport Psychologist, 23*(1), 77-92. https://doi.org/10.1123/tsp.23.1.77

Strachan, L., McHugh, T.-L., & Mason, C. (2018). Understanding positive youth development in sport through the voices of indigenous youth. *Journal of Sport & Exercise Psychology, 40*(6), 293-302. https://doi.org/10.1123/jsep.2018-0035

Vierimaa, M., Erickson, K., Côté, J., & Gilbert, W. (2012). Positive youth development: A measurement framework for sport. *International Journal of Sports Sciences & Coaching, 7*(3), 601-614. https://doi.org/10.1260/1747-9541.7.3.6

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner, R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence, 39*(7), 736-750. https://doi.org/10.1007/s10964-010-9541-6

CHAPTER 2. Study 1

Defining Contribution: A Scoping Review

Abstract

The term contribution is a key feature of approaches to positive youth development (PYD) but has yet to be adequately defined. The purposes of this study were to identify properties that underlie contribution and to establish a theoretical definition of the construct. A two-phase scoping review was conducted. The first phase involved the systematic search, selection, and analysis of studies from which six properties of contribution were identified and a preliminary theoretical definition was constructed. In the second phase, expert judges rated the degree to that the proposed definition and the six properties of contribution fit with their conceptualization of the construct on a 6-point scale. Mean ratings for the definition and the six properties ranged from 5.05 to 5.70. Expert judges' ratings for the overall definition of contribution and the six properties were evaluated using Aiken's (1985) content validity coefficient (*V*). All *V* coefficients ranged in size from .81 to .94 and were statistically significant ($ps < .01$) indicating that the definition of contribution and the corresponding six properties fit well with experts' conceptualizations of the construct. This study provides a theoretical definition of contribution that may serve as a foundation upon which future research in the area of PYD can build.

Contribution has been conceptualized as a key marker of positive youth development (PYD; Arnold & Gagnon, 2019; Lerner et al., 2005). However, the term contribution has yet to be clearly defined. This is an important issue to address because "the use of sloppy, careless, or subjective definitions" can limit the progress of intellectual fields of study (Locke, 2003, p. 415). Weak definitions can also make it difficult to distinguish the one concept from other similar constructs, potentially leading to concept proliferation (i.e., the emergence of constructs with different names but overlapping conceptual domains; Podsakoff et al., 2016), jingle fallacies (i.e., the assumption that two constructs are the same because they have the same or similar names), or jangle fallacies (i.e., the assumption that two constructs are different because they have different names; Marsh, 1994). Therefore, this study was designed to establish a theoretical definition of contribution.

Contribution in PYD

Within the PYD literature, the term contribution is a central feature of the work of Richard Lerner (see Lerner, 2004; Lerner et al., 2005). A premise underpinning Lerner's work is that integrated actions, within person ←→ context interactions, constitute the fundamental unit of analysis for studying adolescent development. It is hypothesized that positive functioning will be enhanced if the strengths of adolescents are aligned with resources for healthy growth in key developmental contexts (e.g., home, sport, school). Accordingly, the developmental systems theory-based conception of PYD presents an individual ←→ context process model of thriving (Lerner et al., 2010). For Lerner, PYD is comprised of the 5Cs (i.e., confidence, competence, connection, character, and caring/compassion). He further hypothesized that young people who manifest the 5Cs over time (i.e., when they are thriving) will be on a trajectory toward an idealized adulthood marked by the 6th C of contribution. Research with adolescents in the US has

shown that the 5Cs exist as latent constructs, and that the 5Cs are correlated positively with the 6th C of contribution (Jeličić et al., 2007; Lerner et al., 2005).

Lerner (2004) described thriving as developing towards an adult life characterized by integrated and mutually reinforcing contributions to self (e.g., maintaining one's health and one's ability to remain an active agent in one's development), family, community, and the institutions of civil society. Contribution was therefore envisioned to have both a behavioural (action) component and an ideological component (i.e., that an individual possesses an identity that specifies contribution is predicated on moral and civic duty; Lerner et al., 2003). As Lerner et al. (2005) explained, "when youth believe that they should contribute to self and context and when they act on these beliefs, they will both reflect and promote further advances in their own positive development and, also, the health of their social world" (p. 23).

Jeličić et al. (2007) examined the relationship between PYD and contribution using data from the first two waves of the 4-H study of PYD. Contribution was measured as a composite score derived from 12 items across four subsets: (a) leadership (e.g., during the last 12 months, how many times have you been a leader), (b) services (e.g., participants indicated if an activity such as "volunteer work" applied to them), (c) helping (i.e., average amount of time spent each week helping friends), and (d) ideology (e.g., it is important to me to contribute to my community and society). The same items were also used to measure contribution in subsequent studies (Geldhof, Bowers, Boyd, et al., 2014; Geldhof, Bowers, Mueller, et al., 2014). These items reflect the distinction between contribution as a set of behaviours or activities and the ideological component of contribution.

Lerner et al. (2010) later distinguished between contribution to self, family, and community and contribution as a form of active and engaged citizenship. Research with

subsequent waves of the 4H longitudinal study suggested that links between the 5Cs of PYD and contribution are influenced by developmental factors. Zaff et al. (2010) proposed that, due to cognitive, socioemotional, and behavioural changes in middle adolescence, the contribution of the early adolescent (i.e., contribution to self, family, and community) becomes transformed into active and engaged citizenship. As Lerner et al. (2010) observed, although the 5Cs of PYD appear to remain invariant across the early-through-middle adolescent period, contribution appears to reflect developmental transformation. It is possible that this developmental transformation is a function of the broader range of contexts in which middle adolescents can engage, thus providing them with more opportunities to participate in active and engaged citizenship activities.

Despite contribution being regarded as a central marker of healthy development across the lifespan (Hershberg et al., 2015), a clear theoretical definition has not yet been put forward for the term. Rather, contribution has been broadly described (Lerner, 2004), distinguished in terms of activities that reflect developmental change (Lerner et al., 2010; Zaff et al., 2010), and conceived as having a behavioural (action) component and an ideological component (Lerner et al., 2003). Without an established theoretical definition, it is unclear whether operationalizations for measurement (e.g., Lerner et al., 2005; Jeličić et al., 2007) accurately capture what it is that the term contribution means. Theoretical definitions are statements of what a concept means and capture the real-world essence of a phenomenon (Watt & van den Berg, 2002; Wierzbicka, 1992). Such a definition would facilitate differentiation of contribution from other prosocial behaviours that it may resemble.

Prosocial Behaviour

Given that contribution appears to share similarities with forms of prosocial behaviour and has been assessed using other prosocial behaviours (i.e., volunteering and helping), it is useful to consider the definitions and descriptions of other prosocial behaviour concepts. Some examples include volunteerism, civic service, civic engagement, and social activism. Whereas each of these terms encompasses different actions, they share a focus on prosocial behaviours that promote the well-being of others, the community, and/or society. For example, similar to descriptions of contribution, volunteerism may also refer to a broad range of prosocial activities benefiting others within a community. Penner (2002) defined volunteerism as ongoing, planned, and discretionary prosocial behaviour benefiting strangers within the community and typically occurring within an organizational setting. Examples may include serving at a soup kitchen operated by a food bank or church, or working with organizations such as Habitat for Humanity. However, others have argued that the long-term (i.e., on-going) service in Penner's (2002) definition is more indicative of civic service, and volunteerism may be occasional or episodic in nature rather than sustained (Tang et al, 2003). Despite disagreements over the temporal features of volunteerism, the term clearly emphasizes a discretionary or volitional component of prosocial actions. This discretionary or volitional component differentiates volunteerism with mandated or required forms of communal prosocial behaviours, such as court ordered community service or service hours required to graduate high school in some educational jurisdictions. Nonetheless, volunteerism appears to represent a form of community-based contribution.

Civic service is another term used to refer to communal prosocial behaviour. Sherraden (2001) defined civic service as "an organized period of substantial engagement and contribution to the local, national, or world community, recognized and valued by society, with minimal monetary compensation to the participant" (p. 2). Civic service focuses on public benefits,

whether in terms of local community objectives or larger scale national or transnational goals (McBride et al., 2003; McBride & Sherraden, 2004). Individuals performing civic service are usually involved for a specified period of time and work towards an objective within a defined role as a part of a service organization (McBride et al., 2007). Due to the public benefit focus of civic service, it seems to represent a type of contribution that may be at the community or civil society level depending on the scale of service and specific goals.

Civic engagement is similar to civic service. However, the term civic engagement implies a political orientation that may not necessarily be present in civic service or other prosocial behaviours such as volunteerism. Civic engagement has been defined as how an active citizen participates in the life of the community in order to improve conditions for others or to help shape the community's future (Crowley, 2007). Other researchers have defined civic engagement as an integrative mechanism that brings individuals together to address shared issues and pursue goals of communal benefit through coordinated, collaborative work (e.g., Balsano, 2005). There appears to be general agreement that civic engagement involves individual and collective actions intended to address community and political concerns (Adler & Goggin, 2005). Components of civic engagement include an interrelated set of knowledge, skills, attitudes, and civic behaviours relating to community, the common good, and political institutions and systems (Bebiroglu et al., 2013). Examples of civic engagement activities include voting or involvement with political campaigns. In this vein, youth civic engagement has been viewed as crucial for maintaining a healthy democratic system (Balsano, 2005).

The term social activism also involves a focus on the common good. Typically, social activism involves pursuing large scale social change or social justice on issues such as LGBTQIA+ rights, environmental protection, and movements against discrimination (Piliavin &

Grube, 2002). These activities involve collaborative efforts of individuals and organization with little or no financial compensation involved (Harre, 2007). Thus, social activism primarily aims to improve societal well-being and influences communities and individuals indirectly.

The Current Study

Although contribution is a central feature of approaches to PYD (Lerner, 2004), it has yet to be clearly defined from a theoretical perspective. The lack of a clear definition suggests that there may not be a shared understanding of contribution among PYD researchers. Such a lack of shared understanding can create difficulties (both in terms of measurement and theory development) for researchers who wish to study, critique, and communicate ideas around the construct and its role in PYD (cf. Watt & van den Berg, 2002). The purposes of this study were to identify properties that underlie contribution and to establish a theoretical definition of the construct. This theoretical definition of contribution should represent the original presentation of contribution within PYD, how the term has been used since, and its relation to other related terms for prosocial behaviours.

One problem with terms used in the psychological literature is that ordinary words, such as contribution, are used in a special sense or as a technical term without a precise definition or clear examples being provided (Lourenco, 2001). A definition can be understood to be "a hypothesis about the meaning of a word" (Wierzbicka, 1992, p. 551). Watt and van den Berg (2002) differentiated between theoretical definitions and operational definitions. Theoretical definitions clearly state the meaning of a concept and allow "others to understand the researcher's vision of the concept and to criticize it, if they disagree" (Watt & van den Berg, 2002, p. 22). A strong theoretical definition captures the essence of a real-world phenomenon. In contrast, operational definitions are used to define a construct in such a way that a phenomenon

may be observed and measured in the real world (Watt & van den Berg, 2002). Whereas contribution has been described and attempts have been made to operationalize it for measurement, we suggest that the lack of a clear theoretical definition is a gap in the literature that must be addressed.

Definitions and specification of meaning can also be understood in terms *indicators* and *referents* (Kaplan, 1946; Watt & van den Berg, 2002). An indicator is a statement about or description of a term that conveys some, but not all, of the meaning of the term. The meaning of a term (e.g., contribution) is conveyed to varying degrees by each individual indicator. The full meaning of a term is conveyed through the overlap of several indicators (Kaplan, 1946). The term contribution may share several indicators of the prosocial behaviours discussed in the previous section such as volitional involvement, sustained engagement, and benefiting others. Referents are observable cases or examples in reality from which a concept may be abstracted (Watt & van den Berg, 2002). For example, helping to coach a youth sport team and serving in a soup kitchen are observable cases (i.e., referents) from which the concept of volunteering may be abstracted; both examples share a common feature of not receiving monetary benefit (i.e., an indicator of volunteering). Therefore, this scoping review was designed to identify properties that underlie contribution and to establish a theoretical definition of the construct.

Methods & Results

A two-phase scoping review was conducted. The first phase involved the systematic search, selection, and analysis of studies in order to produce a preliminary theoretical definition of contribution. The second phase involved consultation with a panel of expert judges who evaluated the preliminary definition of contribution (and corresponding properties of contribution) that were generated from the first phase. Scoping reviews are systematic literature

searches designed to collect and critique available literature and are useful for examining the extent, range, and nature of research in a given area or on a specific topic (Arksey & O'Malley, 2005). As a broad review of literature in an area, scoping reviews may be used to establish how a particular term is used, for what purposes, and by whom (Anderson et al., 2008). Scoping (and systematic) reviews have recently been used to define terms including children's active play (Truelove et al., 2017), food literacy (Truman et al., 2017), and youth resilience (Christmas & Khanlou, 2018). As such, a scoping review was deemed to be an appropriate methodological selection given the purpose of the current study was to establish a theoretical definition.

Phase 1: Review

Procedure

This study followed Levac et al.'s (2010) updated six stage scoping review procedure based on the framework originally proposed by Arksey and O'Malley (2005). These stages are (a) identifying the research question; (b) identifying relevant studies; (c) study selection; (d) charting the data; and (e) collating, summarizing, and reporting the results; and (f) consultation.

In the first stage, researchers identify the research question(s), purpose(s), and rationale for conducting a scoping review. Given that there is not a clear definition of contribution in the extant literature, the purposes of this review were to identify the properties of contribution and establish a theoretical definition of contribution. This scoping review was guided by the research question: "what properties are associated with and define contribution?" Therefore, this review focused on identifying the properties of contribution and establishing a theoretical definition of contribution.

In the second stage of the scoping review procedure, relevant studies were identified using a systematic search strategy. Scoping reviews use a comprehensive search approach that

includes published, unpublished, and grey (e.g., theses and dissertations) literature (Arksey & O'Malley, 2005). A search of electronic databases was conducted with the assistance of a research librarian to ensure the search terms and strategy would yield comprehensive coverage. The initial electronic search strategy consisted of retrieving database entries written in English from PsycINFO and ERIC using OVID. The search was conducted using the explode function (i.e., all narrower subject headings were included) for the subject headings "adolescent development" and "prosocial behaviour." The search was conducted as follows:

1) exp/ adolescent development

2) exp/ prosocial behaviour

3) 1 AND 2

All searches were limited to publications in English that were published after 1980. The initial electronic searches were supplemented by manual searches of the reference lists of studies retained through the third stage and manual searches of the indices of journals from which multiple articles were included (e.g., Journal of Adolescent Development) as well as adding manuscripts that were known to the authors but were not identified through other means.

In the third stage, identified manuscripts were screened for inclusion (i.e., selected for analysis). Although the second and third stages are separate stages in the scoping review procedure, Levac et al. (2010) recommend reviewing the search strategy and supplementing the initial search as researchers become more familiar with the literature retained through the third stage. The inclusion and exclusion criteria were refined through a process in which a random subsample of 100 abstracts were screened by two reviewers. After screening, the reviewers met to compare agreement and discuss the inclusion and exclusion criteria. For example, the initial exclusion criteria did not include any statement regarding review articles and, as a result, one

reviewer included review articles while the other reviewer did not. This process was repeated twice until the final inclusion and exclusion criteria were established and interrater agreement was over 90 percent. Manuscripts were excluded if any exclusion criteria were meet. Manuscripts were excluded if they (a) were not written in English, (b) were not in the social sciences, (c) did not mention contribution or a related prosocial term (e.g., volunteerism, community involvement, community engagement, civic engagement) in the abstract, (d) were reviews of books (though review articles and reviews of literature were included), or (e) focused on a special population (e.g., individuals with cognitive or developmental impairment or chronic disease). Additionally, in order to be included in the scoping review, manuscripts had to (a) have a social science focus (e.g., psychology, pedagogy, and sociology), and (b) include a definition or description of contribution or a related prosocial term (e.g., volunteerism, community involvement, community engagement, civic engagement). The screening was performed by the lead researcher and an assistant in two stages. First, the reviewers examined the titles and abstracts of each manuscript. Only manuscripts that clearly met exclusion criteria were excluded at this stage in order to minimize the risk of excluding relevant sources of data. Next, full-text versions of the manuscripts were retrieved and screened against both the inclusion and exclusion criteria by both reviewers. When the reviewers failed to make the same decision regarding the inclusion or exclusion of a manuscript, the reviewers discussed their decisions until an agreement was reached. The lead researcher and assistant met prior to, midway through, and upon completion of each phase of screening in order to discuss problems and trends and to revise inclusion/exclusion criteria as necessary.

Once the final screening was completed the fourth stage, data charting, began. Data were extracted from the manuscripts using a spreadsheet with columns for bibliographic information

(e.g., authors, year of publication, title), type of manuscript (e.g., journal article, thesis, dissertation), and the type of data reported (i.e., quantitative, qualitative, mixed, no original data). Definitions or descriptions of contribution or other prosocial terms were copied verbatim into a word document and were recorded as quotations from the manuscript (i.e., quoted material was copied and an in-text citation including authors, year of publication, and pagination were recorded). For the purpose of this study, definitions were statements that explicitly stated the meaning of the term (e.g., "Altruistic behavior is defined as voluntary, intentional behavior that benefits another and that is not motivated by the expectation of external rewards or avoidance of externally produced punishments," Chou, 1998, p.195) and descriptions included statements that provided information that may be considered an indicator or referent for the term (e.g., "Volunteerism is often considered a kind of expression of altruism. Volunteers devote their time to providing services to others without payment," Siu et al., 2012, p. 20).

The fifth stage (i.e., collating, summarizing, and reporting the results) took the form of using thematic analysis to identify patterns in the extracted definitions and description. This process is detailed in the following data analysis section of phase one. The sixth stage (i.e., consultation) is described and reported in phase two.

Data Analysis

After data were extracted from the manuscripts, findings were collated, summarized, and reported in the fifth stage of the scoping review procedures. Consistent with Levac et al.'s (2010) recommendations, numerical summaries were used to describe the sample of manuscripts, including the types of manuscripts. Descriptions and definitions for contribution and other prosocial terms were analyzed inductively in order to identify the properties of contribution and establish a theoretical definition of the construct.

Extracted descriptions and definitions were analyzed using a reflexive thematic analysis modelled after Braun and Clarke's (2006) procedure. Reflexive thematic analysis is useful for determining common ways that ideas are represented and may be used in a wide variety of types of data including pre-existing textual data (Braun et al., 2016). Given that the term contribution has not yet been defined and there is no theory to draw from, an inductive (i.e., data-driven) approach was used. Braun and Clarke (2006) described two types of themes that may be developed in a thematic analysis: semantic and latent. Semantic themes are developed from the explicit or surface meaning of the data and latent themes are developed by interpreting deeper underlying meanings, assumptions, and conceptualizations (Braun & Clarke, 2006; Braun et al., 2016). Given that the purposes of this study were to identify the properties of contribution and develop a theoretical definition of contribution, the themes developed in this analysis were mostly latent themes.

The six phases of thematic analysis are not steps to be taken sequentially; rather these phases are recursive with researchers moving back and forth between them as needed (Braun & Clarke, 2006, 2019; Braun et al., 2016). In the first phase, the extracted phrases used to describe or define contribution were read multiple times to gain familiarity with these descriptions. In the second phase, initial codes were developed that described the underlying idea expressed within an extracted definition or description. In the third phase, codes that appeared to share conceptualizations or ideas about contribution were grouped together into themes. Then, in the fourth phase, themes were reviewed to ensure they contained coded segments that were consistent within the theme and sufficiently different from the content of other themes. Additionally, the themes as a whole were examined in order to ensure that they provided an accurate reflection of the dataset as a whole. In the fifth stage, the themes were given a brief

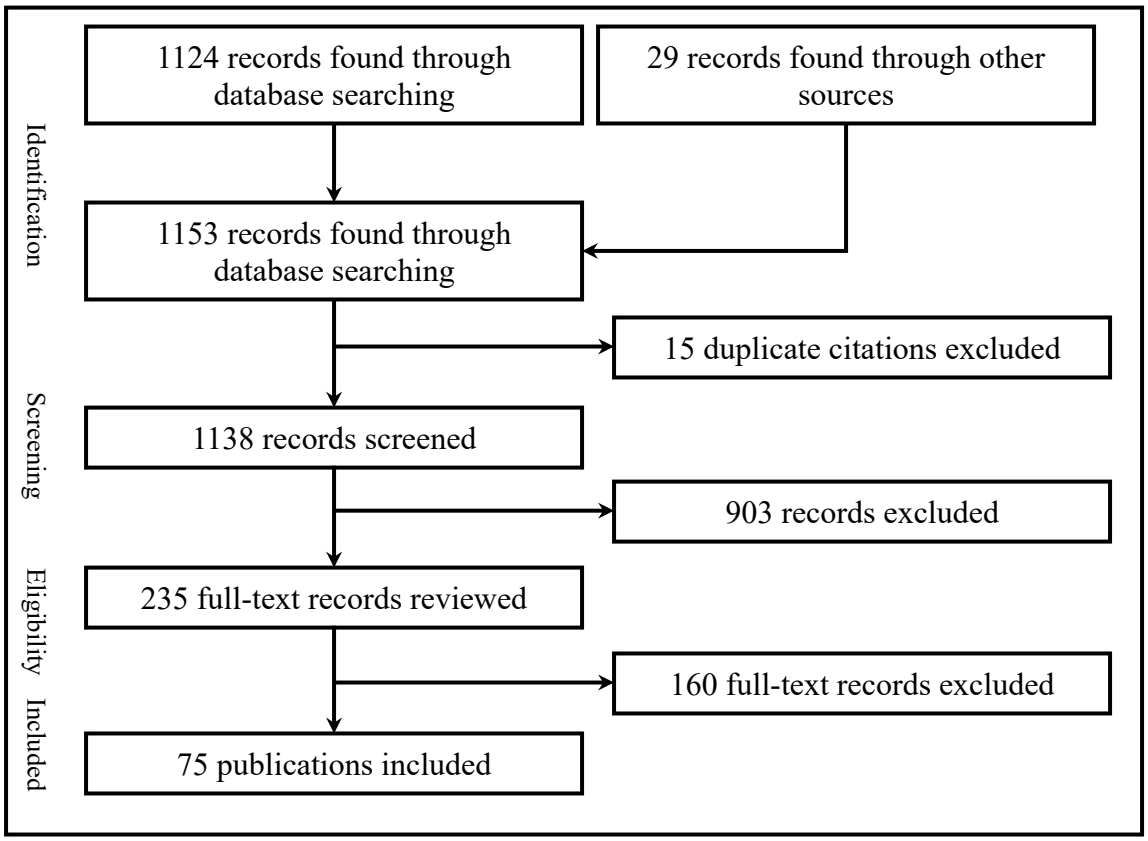
description of their central concept and a name was assigned to the theme that best captured the essence of the theme. These themes were then used as a basis for the construction of a theoretical definition of contribution in the final step, such that each property was reflected within the definition as a whole.

Results

The initial electronic searches returned a total of 1124 records. Additional manual searches of key journals and authors identified another 29 manuscripts. After filtering out 15 duplicates, a total of 1138 manuscripts were retained and screened for inclusion. Of the 1138 titles and abstracts screened in this stage, 235 were retained for full-text review to determine eligibility for inclusion. Reviews of the full-text manuscripts resulted in the exclusion of an additional 160 manuscripts, resulting in a final total of 75 manuscripts being included for analysis (Figure 2.1). A list of all manuscripts included in the scoping review is contained in Appendix A.

Figure 2.1

Search Strategy



In total, 52 journal articles, 17 book chapters, four PhD dissertations, one government report, and one book were retained and included in the scoping review. Twenty-two manuscripts did not report original data (e.g., book chapters, review articles), 44 reported quantitative data, six reported qualitative data, and three reported both quantitative and qualitative data.

A total of 182 definitions and descriptions of contribution or other prosocial terms (e.g., civic engagement, volunteerism) were extracted from the manuscripts. The following list presents a summary of the terms that we obtained from the manuscripts: contribution (20 manuscripts); civic engagement (18 manuscripts); community service (11 manuscripts); volunteerism or volunteering (14 manuscripts); and prosocial behavior (10 manuscripts). The

three remaining terms (i.e., thriving, generativity, and altruistic behaviour) were defined or described in fewer than 10 manuscripts.[1]

The thematic analysis of these 182 data points resulted in the identification of six properties (i.e., themes) underlying contribution. These properties were labeled action, intention, self-transcendent, mutually beneficial, contextually specific, and multi-level. These properties are described and an example of the data extracted that informed each property is included in Table 2.1.

Table 2.1

Properties of contribution derived from scoping review analysis

Property	Description	Example of extracted data
Action	Contribution involves actions or behaviours that an individual performs. Contribution is active rather than passive such as simply having a belief.	'The second measure pertains to the behavioral component of contribution and describes the amount of participation in activities that reflect active engagement with the world around oneself. These activities consist of being a leader in a group, helping friends and neighbors, helping in sports activities, participating in school government and religious youth groups, volunteering in the community, and mentoring and tutoring others.' (Lerner et al., 2005, p. 54)
Intentional	Contribution is purposeful and performed with the intent of positively influencing other individuals, groups, or social structures.	'Pro-social behavior—voluntary cooperative or helping behavior intended to benefit another person—is a common value in schools and within families and is often promoted within these institutions (Dent et al. 2000).' (Champagne, 2005, p. 58)
Self-transcendent	Contribution involves moving beyond self-interest or a focus on oneself in order to benefit others or the common good.	'When youth possess these Five Cs, a "Sixth C," contribution, is believed to emerge (Little, 1993, Pittman, Irby, Tolman, Yohalem, & Ferber, 2001). That is, when youth develop the Five Cs, they are likely to exhibit transcendence of self and self-interest in support of communal needs

[1] Some manuscripts defined or described more than one term.

		(Lerner, Dowling, & Anderson, 2003).' (Balsano, 2005, p. 189)
Mutually beneficial	Contribution benefits other individuals, communities, or social structures and may directly or indirectly benefit the individual making the contribution as well.	'Such behaviors reflect, then, contribution and, consistent with the mutually beneficial individual←→context relations that comprise adaptive developmental regulations, such contributions should support the health and positive development of self, others, and the institutions of civil society.' (Lerner, Alberts, Jelicic, & Smith, 2006, p. 24)
Contextually specific	The specific behaviours that constitute contribution vary across contexts and reflect the values and social norms of each context.	'Civic engagement in social democratic and conservative welfare states, such as Finland and Germany, serves more to express personal values and to champion individual and group interests, whereas in liberal welfare states such as the US, volunteering involves more helping activities and is therefore more prosocial by nature (Salamon and Anheier 1998).' (Pavlova, Silbereissen, Ranta, & Salmela-Aro, 2016, p. 2212)
Multi-level	Contribution can influence multiple levels of social ecology ranging from smaller scale contributions to individuals, up to larger scale contributions that primarily benefit communities or broader society.	'Our civic constructs include both overtly interpersonally prosocial behaviors (i.e., informal helping, volunteering) as well as other civic values, skills, beliefs, and behaviors that allow for broader contributions to community and politics.' (Metzger, Alvis, Oosterhoff, Babskie, Syversten, & Wray-Lake, 2018, p. 1676)

These properties were combined such that each property of contribution identified from the literature appeared in a preliminary definition. Each property was considered equally important and the authors crafted the wording of the definition with the goals of (a) each property being identifiable within the definition, and (b) avoiding unnecessary repetition. Combining the properties of contribution identified from the literature resulted in the following preliminary definition of contribution (version 1):

> Contribution involves actions or behaviours that an individual performs purposefully with the intent of positively influencing other individuals, groups, or social structures. These

actions involve moving beyond self-interest or a focus on oneself in order to benefit others or the common good. However, an individual making a contribution may benefit directly or indirectly as well. The specific behaviours that constitute contribution vary across contexts and reflect the values and social norms of each context.

Phase 2: Expert Consultation

Levac and colleagues (2010) proposed that consultation with stakeholders is an *essential* sixth stage in the scoping review framework. Consultation can be useful for assessing the validity of the outcomes of scoping reviews (Anderson et al., 2008). As such, this study included consultation with a panel of expert judges who had extensive research experience in PYD.

Participants

Purposeful sampling (Paton, 2015) was used to recruit expert judges who could evaluate the preliminary definition of contribution that we developed and the six underlying properties of contribution that we had identified from the scoping review. Of the 28 potential judges who were invited to participate (though their publicly available institutional email addresses), 20 agreed. Nineteen of the 20 participants had a PhD (with one judge in the process of completing their PhD). Judges ranged in age from 29 to 73 years and reported anywhere from 5 to 30 years of experience conducting research and publishing in the area of PYD (M = 12.3 years, SD = 5.85). Prior to beginning recruitment, research ethics board approval was obtained and all participants provided informed consent electronically on the first page of the online questionnaire.

Data collection

Using an online questionnaire, the expert judges were asked to describe what contribution meant to them, and to provide a specific example to illustrate this meaning. Next, judges were asked to rate how well the definition of contribution and the six properties of contribution fit

with their own conceptualizations of contribution. Ratings were made on a 6-point scale ranging from 1 (fit very poorly) to 6 (fit very well). This process is analogous to the assessment of item content relevance that is used in the initial stages of scale construction (and construct validation) research (see Dunn et al., 1999). Finally, judges were asked if they had any comments or suggestions to improve the definition of contribution and the descriptions of the six properties that had been presented.

Data Analysis

Using statistical procedures outlined by Dunn et al. (1999), expert judges' ratings were assessed using Aiken's (1985) content validity coefficient (*V*). Aiken's *V* enabled us to statistically determine whether the set of ratings provided by the 20 judges on (a) the overall definition of contribution, and (b) each of the six properties of contribution, were sufficiently high that conclusions supporting the fit (or content validity) of the definition of contribution and associated properties could be reached. Values of *V* can range from 0 (i.e., all judges provide the lowest possible rating [1 = fits very poorly] in relation to their conceptualization of contribution) to 1 (i.e., all judges provide the highest possible rating [6 = fits very well] with their conceptualization of contribution). Each *V* coefficient is then compared against a right-tailed binomial probability table provided by Aiken (1985) to determine if it is statistically significant.

Results

Table 2.2 contains the descriptive statistics and corresponding *V* coefficients for the judges' ratings on the definition of contribution and the six properties of contribution. All mean ratings were > 5.0 (on the 6-point rating scale), and all corresponding *V* coefficients were statistically significant (*p*s < .01). Collectively, these results indicate that that the panel of expert judges believed that there was a good degree of fit between the judges' conceptualization of

contribution in PYD and (a) the theoretical definition of contribution, and (b) the six properties of contribution that derived from the scoping review.

Table 2.2

Descriptive statistics and content-validity of expert researchers' ratings

Property/Definition	Mean rating	SD	Content-validity (Aiken's *V*)
Definition	5.60	0.60	.92*
Action	5.35	0.75	.87*
Intention	5.05	1.05	.81*
Self-transcendent	5.25	0.85	.85*
Mutually beneficial	5.70	0.57	.94*
Contextually specific	5.58	0.77	.92*
Multi-level	5.55	0.60	.91*

* $p < .01$.

Based upon the written feedback that judges provided in conjunction with their ratings, a small number of minor changes were incorporated into the theoretical definition of contribution and descriptions of the properties of contribution. For example, the word 'exclusive' was added to the self-transcendent property to clarify that a contribution can still be performed with some self-interest or focus as long as the behaviour is not entirely self-focused. After incorporating these minor changes, the following theoretical definition of contribution was retained (version 2; final definition):

> Contribution involves acting on beliefs and the behaviours that an individual performs purposefully with the intent of positively influencing other individuals, groups, or

broader society to bring about a positive outcome for the beneficiaries. These actions involve moving beyond an exclusive self-interest or focus on oneself in order to benefit others or the common good. Additionally, an individual making a contribution to others may benefit directly or indirectly themselves. The specific behaviours that constitute contribution vary across contexts and reflect the values and social norms of each context.

Discussion

This study represents a first attempt to systematically identify the properties of contribution and establish a theoretical definition of contribution. The results offer some valuable additions to the literature because contribution has not been clearly defined to date though it is a marker of healthy development across the lifespan (Hershberg et al., 2015) and an important outcome in models of PYD as the manifestation of the 5Cs over time (Lerner et al., 2005). Poorly articulated definitions constrain the development of fields of study (Locke, 2003) and a lack of conceptual clarity leads to concept proliferation (Podsakoff et al., 2016), and/or jingle-jangle fallacies (Marsh, 1994), which certainly seems to have been the case with contribution given the vast range of terms that have been used previously. A strong theoretical definition should capture the essence of a phenomenon and allow other researchers to understand the vision of a concept, so that it can be critique, challenged, or supported in the future (Watt & van den Berg, 2002). The expert judges were in very strong agreement with the theoretical definition of contribution we presented. As such, the theoretical definition of contribution may provide some conceptual clarity and a foundation for future research, critique, and examination.

Our theoretical definition suggests that contribution exists independent of context. It may be that the personal and social qualities that lead to contribution (e.g., the 5Cs) can be acquired and refined in a range of developmental contexts. The developmental contexts in which

contribution is fostered may not be limited to a particular activity, but rather it is likely that the alignment of the strengths of youth and their developmental contexts (including, but not limited to, home, sport, school; Lerner, 2004; Lerner et al., 2005) is what is important. Contribution may therefore transcend the (multiple) contexts in which it can be developed. For instance, it is possible that much of an individual's development may occur in relatively few contexts (i.e., home, school, and sport), yet that individual's contribution may be made in a different context entirely (e.g., municipal government) later in life. Furthermore, contribution *behaviours* varied across cultures (e.g., Frensch et al., 2007; Lerner et al., 2003; Pavolva et al., 2016; Ungar et al., 2011), societies (e.g., Lerner, 2004; Lerner et al., 2002), and specific contexts (Voight & Torney-Purta, 2013). For example, helping an elderly relative shovel snow off their driveway may be a contribution an adolescent may in the family context whereas distributing assignment materials to help their teacher may be a student's contribution in the school context. Hence, youth may acquire qualities that lead to contribution in a range of developmental contexts, and the contribution behaviours in which they engage may also vary across settings.

The extent to which contribution is related to or predicted by involvement in particular developmental contexts must be examined via future research. For instance, it may be possible to assess and compare contribution between individuals who engage in other types of organized activities (e.g., sport teams, youth clubs, faith-based organizations). In doing so, it would be important to assess the intensity (i.e., frequency) and sustained engagement (i.e., continuity) of activities over time, because frequency and continuity influence the attainment of developmental outcomes in organized activities (Zarrett et al., 2008). Furthermore, it will be important to consider developmental factors, because while the 5Cs of PYD appear to remain invariant across

the early-through-middle adolescent period, contribution may reflect developmental transformation and changing roles and expectations of adolescents (Lerner, 2010).

Lerner (2004) initially described contribution part of an adult life characterized by integrated and mutually reinforcing contribution to self (e.g., maintaining one's health and one's ability to remain an active agent in one's development), family, community, and the institutions of civil society. The theoretical definition of contribution presented in this study shares some of these components. For instance, our definition of contribution involves positively influencing others (individuals, groups, or broader society). However, somewhat in contrast to Lerner's focus on contribution to self, we found that the manuscripts included in this scoping review seldom described contribution as being directly or solely to the self. That is, our definition, while recognizing that an individual's contribution to others may benefit themselves directly or indirectly, highlights the importance of moving beyond self-interest or focus on oneself. This difference with Lerner's (2004) description of contribution may reflect the evolution of the construct over time.

Lerner (2003, 2004) envisioned contribution as having a behavioural (action) component and an ideological component. The theoretical definition we presented reflects the behavioural component (i.e., behaviours individuals perform purposefully with the intent of positively influencing others) and the ideological component (i.e., contribution involves acting on beliefs). The ideological component of our definition focuses more on individuals' beliefs than identity, which is more consistent with Lerner et al.'s (2005) view that contribution occurs "when youth believe that they should contribute to self and context and when they act on these beliefs…" (p. 23). Contribution has been measured in terms of leadership, services, helping, and ideology (Geldhof, Bowers, Boyd, et al., 2014; Geldhof, Bowers, Mueller, et al., 2014; Jeličić et al.,

2007). Services and helping reflect contribution behaviours, consistent with our definition (and, as noted above, beliefs can be associated with ideology). Leadership was not a feature of contribution in our definition. Despite leadership being a subset of items used in some operationalizations of contribution, authors have generally placed greater emphasis on other behaviours or properties of contribution. This suggests that contribution does not necessarily involve engaging in leadership. That is, individuals may be able to engage in contribution without necessarily leading a group or organization.

A key objective of any scoping review is to include all manuscripts that are relevant to the research question (Levac et al., 2010). Although an extensive search strategy was developed and executed, it is always difficult to be certain that all relevant manuscripts were identified (Cooper & Lindsay, 1998). This is a potential limitation shared by all systematic reviews (Paterson et al., 2001) and one that we attempted to mitigate by working with a research librarian when developing the search strategy (Sandelowski & Barroso, 2004) as well as supplementing the electronic search with manual searches of key journals. Another limitation of this study pertains to the fact that the search was limited to English-language manuscripts that introduces the possibility that important and relevant manuscripts in other languages were missed in our review. Finally, given the exploratory nature of this scoping review, manuscripts were not assessed for quality; differences in the quality and academic rigour that may be applied to different manuscripts has the potential to influence the findings of any scoping review, however we note that the majority of manuscripts that met our inclusion criteria (n = 69, 92%) came from peer reviewed sources.

An additional caveat to consider is that the theoretical definition of contribution that we have put forward may reflect a North American orientation because the majority of studies that

met the inclusion criteria in this scoping review were conducted in North America and collected data from samples Canadians (n = 8, 10.6% of included manuscripts) or Americans (n = 51, 68.0% of included manuscripts). In their analysis examining differences between WEIRD (Western, Educated, Industrialized, Rich, and Democratic) populations and other populations across a range of behavioural sciences, Heinrich et al. (2010) highlighted several differences which may impact how contribution is conceptualized in more diverse populations. For example, Western populations were found to consistently have more independent self-concepts (as opposed to interdependent self-concepts) and rely a narrower set of principles (primarily on justice, individual rights, avoidance of harm to others) when making moral judgements (Heinrich et al., 2010). It stands to reason that groups of people with more interdependent self-concepts and hold an ethic of community as an important principle for moral judgements may hold different perceptions of contribution. Future research aimed at determining the generalizability of the proposed theoretical definition of contribution should consider locations outside North America to assess if the properties of contribution are universal.

Other limitations relate to our consultation phase. First, the majority of the expert judges in this study lived and worked in North America or Europe which may have further perpetuated biases present from the included manuscripts. Second, the expert judges were all highly educated and held high paying jobs (i.e., university professors) or were entering into such positions. Sampling academics as expert judges was necessary to best assess the content validity of the proposed theoretical definition and properties of contribution; however, other groups could have been consulted with and provided data on the face validity of theoretical definition and properties. Although these specific demographic data were not collected, it is likely that the expert judges had higher than average socioeconomic status. Individuals with less education or

lower socioeconomic status may have seen some properties of contribution as more or less important than the expert judges. Third, the expert judges were asked to provide comments and feedback on the theoretical definition and properties in a text box. It is likely that more detailed and insightful information could have been gathered through the use of more interactive methods such as focus groups.

In conclusion, this study adds to the PYD literature by identifying the properties of contribution and offering a theoretical definition of contribution based on academic literature and in consultation with PYD experts. This is valuable given the central importance of the term contribution, both within definitions of PYD and as an ultimate outcome of sustained PYD over time (Lerner et al., 2005). By identifying properties and establishing a theoretical definition, we propose that a shared understanding of the term contribution has been established that, in turn, will be useful for assessing and studying individual outcomes arising from PYD in future research.

References

Adler, R. P., & Goggin, J. (2005). What do we mean by "civic engagement"? *Journal of Transformative Education, 3*(3), 236-253. https://doi.org10.1177/1541344605276792

Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement, 45*(1), 131-142. https://doi.org/10.1177/0013164485451012

Anderson, S., Allen, P., Peckham, S., & Goodwin, N. (2008). Asking the right questions: Scoping studies in the commissioning of research on the organisation and delivery of health services. *Health Research Policy and Systems, 6*(7), 1-12. https://doi.org/10.1186/1478-4505-6-7

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19-32. https://doi.org/10.1080/1364557032000119616

Arnold, M. E., & Gagnon, R. J. (2019). Illuminating the process of youth development: The mediating effect of thriving on youth development program outcomes. *Journal of Human Sciences and Extension, 7*(3), 24-51. https://www.jhseonline.com/article/view/901

Balsano, A. B. (2005). Youth civic engagement in the United States: Understanding and addressing the impact of social impediments on positive youth and community development. *Applied Developmental Science, 9(4)*, 188-201. https://doi.org/10.1207/s1532480xads0904_2

Bebiroglu, N., Geldhof, G. J., Pinderhughes, E. E., Phelps, E., & Lerner, R. M. (2014). From family to society: The role of perceived parenting behaviors in promoting youth civic

engagement. *Parenting: Science and Practice, 13*(3), 153-168. https://doi.org/10.1080/15295192.2013.756352

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589-597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In N. Smith & A. C. Sparkes (Eds.), *International handbook on qualitative research in sport and exercise* (pp. 191-218). Routledge.

Bruner, M. W., Balish, S. M., Forrest, C., Brown, S., Webber, K., Gray, E., McGuckin, M., Keats, M. R., Rehman, L., & Shields, C. A. (2017). Ties that bond: Youth sport as a vehicle for social identity and positive youth development. *Research Quarterly for Exercise and Sport, 88*(2), 209-214. https://doi.org/10.1080/02701367.2017.1296100

Bruner, M. W., Boardley, I. D., & Côté, J. (2014). Social identity and prosocial and antisocial behavior in youth sport. *Psychology of Sport and Exercise, 15*(1), 56-64. https://doi.org/10.1016/j.psychsport.2013.09.003

Chou, K.-L. (1998). Effects of age, gender, and participation in volunteer activities on the altruistic behavior of Chinese adolescents. *The Journal of Genetic Psychology, 159*(2), 195-201. https://doi.org/10.1080/00221329809596145

Christmas, C. M., & Khanlou, N. (2018). Defining youth resilience: A scoping review. *International Journal of Mental Health and Addiction, 17*(3), 731-742. https://doi.org/10.1007/s11469-018-0002-x

Cooper, H. M., & Lindsay, J. L. L. (1998). *Research synthesis and meta-analysis*. Sage.

Crowley, D. (2007). *Summary of youth engagement strategy*. Social Capital.

Dunn, J. G. H., Bouffard, M., & Rogers, W. T. (1999). Assessing item content-relevance in sport psychology scale-construction research: Issues and recommendations. *Measurement in Physical Education and Exercise Science, 3*(1), 15-36. https://doi.org/10.1207/s1537841mpee0301_2

Frensch, K. M., Pratt, M. W., & Norris, J. E. (2007). Foundations of generativity: Personal and family correlates of emerging adults' generative life-story themes. *Journal of Research in Personality, 41*(1), 45-62. https://doi.org/10.1016/j.jrp.2006.01.005

Geldhof, G. J., Bowers, E. P., Boyd, M. J., Muller, M. K., Napolitano, C. M., Schmid, K. L., Lerner, J. V., & Lerner, R. M. (2014). Creation of short and very short measures of the five Cs of positive youth development. *Journal of Research on Adolescence, 24*(1), 163-176. https://doi.org/10.1111/jora.12039

Geldhof, G. J., Bowers, E. P., Mueller, M. K., Napolitano, C. M., Callina, K. S., & Lerner, R. M. (2014). Longitudinal analysis of a very short measure of positive youth development. *Journal of Youth and Adolescence, 43*(6), 933-949. https://doi.org/10.1007/s10964-014-0093-z

Harre, N. (2007). Community service or activism as an identity project for youth. *Journal of Community Psychology, 35*(6), 711-724. https://doi.org/10.1002/jcop.20174

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*(2-3), 61-83. https://doi.org/10.1017/S0140525X0999152X

Herbison, J. D., Vierimaa, M., Côté, J., & Martin, L. J. (2018). The dynamic nature of connection and its relation to character in youth sport. *International Journal of Sport and Exercise Psychology, 17*(6), 568-577. https://doi.org/10.1080/1612197X.2017.1423507

Hershberg, R. M., Johnson, S. K., DeSouza, L. M., Hunter, C. J., & Zaff, J. (2015). Promoting contribution among youth: Implications from positive youth development research for youth development programs. In E. P. Bowers, G. J. Geldhof, S. K. Johnson, L. J. Hillard, R. M. Hershberg, J. V. Lerner, & R. M. Lerner (Eds.), *Promoting Positive Youth Development: Advancing Responsible Adolescent Development*. Springer. https://doi.org/10.1007/978-3-319-17166-1_11

Jeličić, H., Bobek, D. L., Phelps, E., Lerner, R. M., & Lerner, J. V. (2007). Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H study of positive youth development. *International Journal of Behavioral Development, 31*(3), 263-273. https://doi.org/10.1177/0165025407076439

Kaplan, A. (1946). Definition and specification of meaning. *The Journal of Philosophy, 43*(11), 281-288. https://doi.org/10.2307/2019221

Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth*. Sage.

Lerner, R. M., Brentano, C., Dowling, E. M., & Anderson, P. M. (2002). Positive youth development: Thriving as the basis of personhood and civil society. *New Directions for Youth Development, 2002*(95), 11-33. https://doi.org/10.1002/yd.14

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172-180. https://doi.org/10.1207/S1532480XADS0703_8

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jeličić , H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17-71. https://doi.org/10.1177/0272431604272461

Lerner, R. M., von Eye, A., Lerner, J. V., Lewin-Bizan, S., & Bowers, E. P. (2010). Special issue introduction: The meaning and measurement of thriving: A view of the issues. *Journal of Youth and Adolescence, 39*(7), 707-719. https://doi.org/10.1007/s10964-010-9531-8

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science, 5*(1), 69-78. https://doi.org/10.1186/1748-5908-5-69

Locke, E. A. (2003). Good definitions: The epistemological foundation of scientific progress. In J. Greenberg (Ed.), *Organizational behavior, state of the science* (pp. 415–444). Lawrence Erlbaum Associates.

Lourenco, O. (2001). The danger of words: A Wittgensteinian lesson for developmentalists. *New Ideas in Psychology, 19*(2), 89-115. https://doi.org/10.1016/S0732-118X(01)00002-2

Marsh, H. W. (1994). Sport motivation orientations: Beware of jingle-jangle fallacies. *Journal of Sport & Exercise Psychology*, *16*(4), 365–380. https://doi.org/10.1123/jsep.16.4.365

McBride, A. M., Benitez, C., & Sherraden, M. (2003). *The forms and nature of civic service: A global assessment* (Research report). Washington University, Center for Social Development.

McBride, A. M., Pritzker, S., Daftary, D., & Tang, F. (2007). Youth service: A comprehensive perspective. *Journal of Community Practice, 14*(4), 71-89. https://doi.org/10.1300/J125v14n04_05

McBride, A. M., & Sherraden, M. (2004). Toward a global research agenda on civic service: Editors' introduction to this special issue. *Nonprofit and Voluntary Sector Quarterly, 33*(*suppl.* 4), 3-7. https://doi.org/10.1177/0899764004269745

Paterson, B. L., Thorne, S. E., Canam, C., & Jillings, C. (2001). *Meta-study of qualitative health research: A practical guide to meta-analysis and meta-synthesis*. Sage.

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.

Pavlova, M. K., Silberseisen, R. K., Ranta, M., & Salmela-Aro, K. (2016). Warm and supportive parenting can discourage offspring's civic engagement in the transition to adulthood. *Journal of Youth and Adolescence, 45*(11), 2197-2217. https://doi.org/10.1007/s10964-016-0511-5

Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues, 58*(3), 447-467. https://doi.org/10.1111/1540-4560.00270

Piliavin, J. A., & Grube, J. A. (2002). Role as a resource for action in public service. *Journal of Social Issues, 58*(3), 469–485. https://doi.org/10.1111/0022-4537.t01-1-00027

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. *Organizational Research Methods*, *19*(2), 159–203. https://doi.org/10.1177/1094428115624965

Sandelowski, M., & Barroso, J. (2004). Creating metasummaries of qualitative findings. *Nursing Research, 52*(4), 226–233.

Sherraden, M. (2001). *Civic service: Issues, outlook, institution building*. Center of Social Development, Washington University.

Sui, A. M. H., Shek, D. T. L., & Law, B. (2012). Prosocial norms as a positive youth development construct: A conceptual review. *The Scientific World Journal, 2012*, 1-7. https://doi.org/10.1100/2012/832026

Tang, F., McBride, A. M., & Sherraden, M. (2003*). Toward measurement of civic service, research background paper*. Center for Social Development, Washington University.

Truelove, S., Vanderloo, L. M., & Tucker, P. (2017). Defining and measuring active play among young children: A systematic review. *Journal of Physical Activity and Health, 14*(2), 155-166. https://doi.org/10.1123/jpah.2016-0195

Truman, E., Lane, D., & Elliott, C. (2017). Defining food literacy: A scoping review. *Appetite, 116*, 365-371. https://doi.org/10.1016/j.appet.2017.05.007

Ungar, M., Theron, L., & Didkowsky, N. (2011). Adolescents' precocious and developmentally appropriate contributions to their families' well-being and resilience in five countries. *Family Relations, 60*(2), 231-246. https://doi.org/10.1111/j.1741-3729.2010.00645.x

Voight, A., & Torney-Purta, J. (2013). A typology of youth civic engagement in urban middle schools. *Applied Developmental Science, 17*(4), 198-212. https://doi.org/10.1080/10888691.2013.836041

Watt, J. H., & van den Berg, S. (2002). Elements of scientific theories: Concepts and definitions. In J. Watt & S. van den Berg (Eds.), *Research methods for communication science* (pp. 11-22). Allyn & Bacon.

Wierzbicka, A. (1992). Defining emotion concepts. *Cognitive Science, 16*(4), 539-581. https://doi.org/10.1207/s15516709cog1604_4

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner, R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence, 39*(7), 736-750. https://doi.org/10.1007/s10964-010-9541-6

Zarrett, N., Lerner, R. M., Carrano, J., Fay, K., Peltz, J. S., & Li, Y. (2008). Variations in adolescent engagement in sports and its influence on positive youth development. In N. L. Holt (Ed.), *Positive youth development through sport* (1st ed., pp. 9-23). Routledge.

CHAPTER 3. Study 2

Coaches' Perspectives on Contribution

Abstract

The purposes of this study were to examine coaches' perspectives on contribution through sport and obtain their feedback on the theoretical definition of contribution. Data were collected via focus groups with 13 coaches from a variety of individual and team sports (*M* age = 33.0 years, *SD* = 11.1). Focus group transcripts were analyzed using reflexive thematic analysis (Braun & Clarke, 2019). Findings were presented as two categories pertaining to the two purposes of the study. In the first category, youth sport coaches' perceptions of contribution, the coaches' discussion of contribution centred on three themes. In the first category, coaches discussed *contribution as an athlete* by providing sport specific examples of contribution behaviour. Through their discussions, it was evident that coaches perceived that contribution involves *having a positive impact* and *acting with intent*. Regarding the second category, coaches' feedback on the theoretical definition, coaches expressed that the definition *fit* with their conceptualizations of contribution, particularly the first sentence which contained the ideas that contribution is intentional and results in positive impacts on others. However, the coaches felt the theoretical definition was overly *complex* and questioned whether the definition should have focused on *intent versus behaviour.* A practical definition of contribution was suggested to address the coaches' criticisms of the theoretical definition. These findings suggest that researchers and practitioners should focus on discussing contribution as intentional acts that have a positive impact on others when working to promote or develop contribution in the context of sport.

Positive youth development (PYD) is an area of research and practice that arose with the positive psychology movement in response to the deficit-reduction perspective that had dominated psychology and youth development research (Synder & Lopez, 2002). Rather than being viewed as problems to be solved, youth were regarded as assets to be developed in PYD approaches (Damon, 2004). One of the prominent approaches to PYD is Richard Lerner's 5Cs model (Lerner et al., 2010). Lerner's work is situated within developmental systems theory, in which a key principle is that person ←→ context interactions are the fundamental unit of analysis in adolescent development (Lerner et al., 2005). That is, positive development may occur, and positive functioning may be enhanced, when the strengths of adolescents are aligned with resources for healthy growth in developmental contexts (e.g., home, school, sport).

Contribution is conceptualized as key marker of development in the PYD approach (Jeličić et al., 2007; Lerner et al., 2005). However, initially contribution was not precisely *defined*; instead, Lerner et al. (2002) more broadly *described* contribution as making integrated and mutually reinforcing contributions to self as well as to family, community, and the institutions of civil society. Additionally, other early descriptions of contribution suggested that contribution has had a behavioural (action) component and an ideological component (i.e., that an individual possesses an identity that specifies contribution is predicated on moral and civic duty; Lerner et al., 2003). It was not until a recent study by Deal et al. (2021) that contribution was defined theoretically. Theoretical definitions are meant to capture the essence of a phenomenon and are important to researchers as strong theoretical definitions allow researchers to understand and critique concepts (Watt & van den Berg, 2002). Deal et al. (2021) conducted a scoping review and created an initial theoretical definition based on properties of contribution derived from the descriptions and definitions of contribution and related prosocial behaviours

(e.g., volunteerism, civic engagement) from 75 manuscripts. This initial theoretical definition and the properties it was derived from were then rated by 20 expert judges (i.e., researchers with experience in the area of PYD) on how well the definition and properties fit their conceptualizations of contribution. The definition and all properties were rated above 5.0 (fit well) on a 6-point rating scale. The final theoretical definition was:

> Contribution involves acting on beliefs and the behaviours that an individual performs purposefully with the intent of positively influencing other individuals, groups, or broader society to bring about a positive outcome for the beneficiaries. These actions involve moving beyond an exclusive self-interest or focus on oneself in order to benefit others or the common good. Additionally, an individual making a contribution to others may benefit directly or indirectly themselves. The specific behaviours that constitute contribution vary across contexts and reflect the values and social norms of each context. (Deal et al., 2021, p. 19)

Researchers have examined range of concepts which may be related to contribution such as prosocial behaviour (e.g., Bruner et al., 2014), social identity development (e.g., Bruner et al., 2017), and character development (e.g., Herbison et al., 2018). Each of these are similar to, but distinct from, contribution. For instance, prosocial behaviours include giving constructive criticism which may be considered contribution, particularly in the context of peer teaching or coaching (Kavussanu & Boardley, 2009). However, congratulating a teammate for a good play is also an example of prosocial behaviour (Kavussanu & Boardley, 2009) which clearly does not fit within Deal et al.'s (2021) theoretical definition of contribution. Social identity is conceptualized as having three dimensions: (a) cognitive centrality, the importance of belonging to the group; (b) ingroup affect, having positive feelings associated with group membership; and (c) ingroup

ties, feeling connected with other group members (Bruner et al., 2017). It seems likely one may make a contribution to benefit a group or group members with whom one socially identifies; however, social identity development is more of an antecedent to contribution than synonymous with contribution. Similarly, character development is more an antecedent of contribution as suggested in Lerner's 5Cs model wherein youth with greater PYD (as marked by the 5Cs, of which character is one) are more likely to display contribution (Lerner et al., 2010).

A large body of literature has examined various aspects of PYD through sport (Holt, 2016). However, only two studies have directly examined contribution, both of which focused on the context of university sport (Deal & Camiré, 2016a, 2016b). In the first study, Deal & Camiré (2016a) interviewed ten university student athletes and examined their motivations for contribution. It was reported that these university student athletes engaged in contribution behaviours for multiple reasons, often with multiple reasons for a single contribution. Specifically, university student athletes were found to engage in contribution activities for reasons relating to: (a) autonomy, particularly later in their university careers; (b) competence, in order to develop skills for future careers (e.g., volunteering at a physiotherapy clinic) or demonstrate skills they already possess (e.g., coaching, peer teaching); and (c) relatedness (i.e., contribution allowed athletes to develop and improve relationships with teammates and the broader community).

In the second study (Deal & Camiré, 2016b), the facilitators and barriers to contribution were examined in two groups of university student athletes. The first group were first-year student athletes, and the second group were upper-year student athletes who had a history of making contribution (i.e., sustained contributors). Both groups reported teammates, coaches, and athletics department staff as facilitators, though the first-year athletes were more reliant on these

facilitators creating contribution opportunities than the sustained contributors. Additionally, both groups reported a perceived lack of time as the greatest barrier to contribution with sustained contributors having more strategies for overcoming or dealing with this barrier than first-year athletes.

Hence, at the current time, very little is known about contribution through sport, despite contribution being one of the key markers of development from a PYD perspective. Deal et al. (2021) recently proposed a theoretical definition of contribution based on a scoping review of the literature that can be used to advance the study of contribution. However, the extent to which this theoretical definition resonates with coaches and can be applied in layperson terms remains unknown. Understanding laypersons' (in this case, coaches') perspectives about contribution may be useful for developing a practical definition of contribution which may efficiently communicate the concept of contribution. Therefore, in order to advance our understandings of contribution through sport, the purposes of this study were twofold: (a) to examine coaches' perspectives about contribution and (b) to obtain their feedback on a previously established theoretical definition of contribution.

Conceptualizing Contribution

Lerner conceptualized PYD as being comprised of 5Cs (i.e., confidence, competence, connection, character, and caring/compassion; Lerner et al., 2005; Lerner et al., 2010). These 5Cs manifest over time as youth develop positively and maintain a trajectory towards idealized adulthood (i.e., thrive; Jeličić et al., 2007; Lerner et al., 2005). These youth may exhibit contribution, the 6th C of PYD, which was initially described by Lerner et al. (2002) as making integrated and mutually reinforcing contributions to self as well as to family, community, and the institutions of civil society. Contribution has been thought of as having both a behavioural

(action) component and an ideological component (i.e., that an individual possesses an identity that specifies contribution is predicated on moral and civic duty; Lerner et al., 2003). Contribution to self, family, and community was later differentiated from contribution as a form of active and engaged citizenship by Lerner (Lerner et al., 2010). Zaff et al. (2010) suggested that the contribution of the early adolescent (i.e., contribution to self, family, and community) becomes active and engaged citizenship because of developmental changes that occur in adolescence. While the 5Cs remain consistent through adolescence, contribution is a marker of developmental changes (Lerner et al., 2010). These changes may be a consequence of adolescents engaging with additional contexts and having more opportunities to engage in citizenship behaviours (i.e., different kinds of contribution).

One of the conclusions of Deal et al.'s (2021) study was that contribution appears to exist independent of context. That is, the development of personal and social qualities that precede contribution (i.e., the 5Cs) may be attained across a range of developmental contexts as a result of appropriate person ←→ context relations (Lerner et al., 2005). However, contribution may manifest in other contexts entirely as a range of different contribution behaviours (Deal et al., 2021). For example, youth athletes may develop personal (e.g., self-confidence) and social (e.g., interpersonal communication) qualities through their interactions with coaches and teammates in youth sport then apply those qualities through contribution in the context of sport (e.g., volunteer coaching) or elsewhere in their community (e.g., student government). However, there remains a need to understand how sport stakeholders perceive contribution and which contribution behaviours are meaningful within youth sport.

In addition, it is important that the theoretical definition of contribution aligns, to some degree, with what contribution means to sport stakeholders. Though theoretical definitions are

primarily intended for use by academics to facilitate academic discussion and critique, these definitions must capture the real-world essence of the phenomenon in question (Watt & van den Berg, 2002). Definitions may be thought of in terms of statements about and descriptions of contribution that convey a portion of the meaning of the term contribution (i.e., indicators) and examples of contribution seen in context (i.e., referents; Kaplan, 1946; Watt & van den Berg, 2002). These indicators and referents from sport stakeholders may suggest key features of contribution that are particularly meaningful in the context of sport. Therefore, there is a need to examine the recent theoretical definition of contribution in sport settings to understand sport stakeholders' perspectives on contribution and what forms (i.e., behaviours) contribution may take.

Method

Methodological Approach

We used qualitative description, which is a low-inference approach to qualitative research. Bradshaw et al. (2017) explained that qualitative description studies typically involve seeking to understand or discover participants' perceptions of events or phenomena, rather than focussing on culture (as in ethnography), lived experience (as in phenomenology), or theory building (as in grounded theory). Instead, qualitative description research provides a vehicle for presenting the voices of those with interest or experience in the phenomena of interest (Bradshaw et al., 2017). Highlighting this low-inference orientation, Sandelowski (2000) described analysis in qualitative description as the reading "*of* lines as opposed to *into, between, over,* or *beyond* lines" (p. 78, italics in original).

It is important to clarify, however, that low-inference does not mean there is no inference or interpretation on the part of the researcher when using qualitative description. Researchers

interpret participants' words and meanings and are influenced by their philosophical and social positionality (Bradshaw et al., 2017). Nonetheless, the final product of a qualitative descriptive study should provide a "straight" description of events or perceptions with relatively little abstraction to broader or higher order social themes (Sandelowski, 2010). When using qualitative description, researchers attempt to account for events or phenomena described from the viewpoint of the participants (Sullivan-Boyai et al. 2005). Therefore, qualitative description is particularly useful for obtaining information about participants' thoughts and perceptions (Sandelowski, 2000), which made it appropriate for examining coaches' perspectives on contribution through sport and obtaining their feedback about a previously established theoretical definition.

Researcher Positionality

Qualitative description is situated within a naturalistic approach (Bradshaw et al., 2017) As Bradshaw et al. (2017) explained, researchers using qualitative description, while taking a low-inference approach, "cannot evade affecting the phenomenon under investigation" (p. 2) and therefore it is important to articulate the philosophical assumptions used in a study. Ontological relativism (i.e., multiple realities are created by individuals' cognitive engagement with phenomena) and epistemological constructionism (i.e., knowledge is constructed through individuals' interpretations of phenomena and researchers' interpretation of research participants accounts) underpinned the current study. Other philosophical underpinnings of qualitative description include an inductive process, recognizing the subjectivity of participant and researcher, seeking to understand and describe phenomena, acknowledging the active role of the researcher in the research process, and adopting an emic stance (an insider view which takes the perspectives and words of the participants as the starting point; Bradshaw et al., 2017).

Ultimately, the qualitative description approach accepts that many interpretations of social reality exist and offers one subjective interpretation (with relatively low inference) "strengthened and supported by reference to verbatim quotations from participants" (Bradshaw et al., 2017, p. 2).

Participants

Prior to beginning recruitment, research ethics board approval was obtained. A purposeful sampling approach was used, which involves selecting participants who would be knowledgeable about, and have experience of, the subject of interest (Bradshaw et al., 2017). More specifically, variation sampling was used to recruit information-rich participants for this study (Patton, 2015). When using variation sampling, participants are purposefully selected across a range of dimensions in order to see diversity of perspectives and identify common patterns that are common across the diversity (Patton, 2015). In the present study, perspectives of youth sport coaches in many different youth sport contexts were sought. As such, the sampling criteria were broad; to be eligible to participate, coaches must have been currently coaching youth or young adults (i.e., ages approximately 5-24 years old). No limitations were placed on level of competition, types of sport, and gender of coaches or the athletes they coached. This breadth was selected in the hope that coaches could draw on a variety of experiences relating to the notion of contribution by athletes.

Coaches and club administrators from a variety of sport contexts were contacted with details of study and interested participants were invited to contact the lead researcher directly. In total, 13 coaches (10 men, three women) participated in focus groups. The coaches were sampled from a variety of sports and a range of competitive levels from recreational to high performance. The coaches were on average 33.0 years old (*SD* = 11.1, range 21-55), had an average of 11.2 years of coaching experience (*SD* = 8.2, range 3-30). The coaches reported having had coached

youth at different ages from children as young as five to young adults in their early twenties as either head or assistant coaches. Nonetheless, all coaches had predominately coached athletes between the ages of 12 and 17. The coaches were recruited from sport contexts ranging from recreational community sport to provincial and national level competitive settings. Eight coaches reported experience coaching recreational sport, 10 had experience coaching competitive sport at a regional level (i.e., competition involving participants from the city and surrounding area), eight had experience coaching competitive sport on a provincial level (i.e., competition involving participants from several regions within the province), seven had experience coaching competitive sport at a national (i.e., competition involving participants from multiple provinces), and two had experience coaching competitive sport at an international level (i.e., competition involving participants from multiple countries). All coaches had received some level of coach training through the National Coaching Certification Program (NCCP) and were from the sports of soccer (n = 4), athletics (n = 3), speed skating (n = 2), cross country skiing (n = 2), football (n = 1), and ice hockey (n = 1).

Data Collection

Data were collected via focus groups. Focus groups provide a setting in which a small group, with the assistance of a trained moderator to guide discussion, explore attitudes, perceptions, and ideas about a given topic (Denscombe, 2007). The key characteristics of a focus group are: (a) the use of a prompt or other stimulus introduced by the moderator to focus discussion, (b) less emphasis on the moderator adopting a neutral role as is often the case with other forms of interview, and (c) interaction within the group where the collective view is given greater importance than individual perspectives (Denscombe, 2007). Focus groups are particularly beneficial when researchers are interested in peoples' understanding and experiences

about an issue or phenomenon (Stewart & Shamdasani, 1990). Casey and Kruegar (2000) suggest that focus groups provide "a more natural environment than that of individual interview because participants are influencing and influenced by others – just as they are in real life" (p. 11).

Recommendations for focus group sizes range from six to 12 participants (Morgan, 1998; Patton, 2015). In this study, focus groups were originally designed for five or six participants each in order to allow participants ample opportunity to share their views. A total of three focus groups were conducted with six coaches in the first focus group, five in the second and two in the third. Regarding the focus group that involved only two coaches, unfortunately, three individuals were unable to attend due to unforeseen circumstances. The researchers decided to go ahead with two coaches as planned out of respect for their time. Despite this third group being well below recommended size for focus groups, the participants engaged in lively discussion in which they built off each other's comments and shared views that were similar to those of the coaches in the first two focus groups, and as such data from this smaller focus group were included in the analysis.

As participants arrived at the focus group, they were greeted by the lead researcher, who was also the moderator. While waiting for the rest of the participants to arrive, participants completed a demographic information form and chatted informally with the researcher and other participants to build rapport. Demographic information included questions about the coaches' main sport, years of experience, age range of athletes coached, and their level of licencing/certification. Focus groups followed a questioning route (Krueger, 1998). The questioning route (Appendix B) was comprised of some broad questions designed to engage

participants in group discussion along with follow-up questions to help elicit greater detail in participant responses.

At the beginning of the focus group, the moderator established the ground rules (e.g., respect others' opinions, try to avoid interrupting others) and asked participants to introduce themselves. The first set of questions were designed to generate discussion about what contribution meant to the coaches in order to get their perspectives on contribution through sport (e.g., "When you hear the word contribution, what does that make you think?") and examples of things a youth athlete may do that could be considered contribution (e.g., "What are some examples of things an athlete might do that you consider to be contribution?"). In the second part of the focus group, participants were provided with the properties and theoretical definition of contribution established in a previous study (Deal et al., 2021). They were asked to comment on the definition and properties with prompts such as "How does this differ/align with what you think of when you hear the word contribution?" At the end of the focus groups, participants were given the opportunity to summarise their thoughts about contribution through sport and what contribution means to them and add any additional comments that they believe may be important. All focus groups were audio recorded.

Data Analysis

Audio recordings were transcribed verbatim. Analysis of the transcripts were guided by Braun and Clarke's (2006) reflexive thematic analysis procedure. This type of thematic analysis is useful for a variety of data sources including data from interviews and focus groups (Braun et al., 2016). Because coaches' perspectives about contribution through sport and their feedback on the previously established theoretical definition of contribution were the focus of this study, the data from each of the two sections of the focus group question route were handled slightly

differently. The data from the first section, which focused on discussion of the coaches' perceptions of contributions were analyzed using an inductive (i.e., data-driven) approach. The analysis of data from the second section, pertaining to the coaches' feedback on the theoretical definition of contribution, was inductive and deductive in which the properties of Deal et al.'s (2021) theoretical definition of contribution also informed theme development. Braun and Clarke (2006) described different types of themes that may be the products of a thematic analysis. The first types of themes, semantic themes, are developed from the explicit or surface meaning of the data. The second types of themes, latent themes, are developed by interpreting underlying meanings, assumptions, and conceptualizations (Braun & Clarke, 2006; Braun et al., 2016). Care was taken to present descriptions of contribution and the coaches' perspectives on the theoretical definition with relatively little interpretation in keeping with the low-inference approach of qualitative description (Sandelowski, 2010). Given that the purposes of this study were to examine coaches' perspectives about contribution through sport and obtain their feedback on a previously established definition of contribution, the themes developed in this analysis were latent themes of lower order with little abstraction consistent with qualitative description (Sandelowski, 2010).

Reflexive thematic analysis consists of six phases. These phases are not steps to be taken in a sequential manner; instead, researchers move back and forth through the phases recursively (Braun & Clarke, 2006, 2019; Braun et al., 2016). The first phase is familiarizing yourself with the data. In this phase, the focus group transcripts were read multiple times to get a better sense of the data. The second phase is generating initial codes. The initial codes were developed that described the core idea expressed within a segment of raw data. The third phase of reflective thematic analysis is searching for themes. In this phase similar codes that appeared to describe a

related idea were grouped together to form themes. This was inductive for data from the first section of the focus groups. For data from the second section of the focus groups, themes were developed from the data (i.e., inductive) but were influenced by the theoretical definition of contribution (i.e., deductive). The fourth phase is reviewing the themes. Reviewing the themes consists of checking themes to ensure they contained coded segments that were consistent within the theme, sufficiently different from the content of other themes, and that the themes as a whole accurately reflected the dataset. The fifth phase of thematic analysis is defining and naming the themes. Each theme was given a name that captured the essence of the theme and a brief description of the central concept was written. Finally, these themes were written up as a part of the final manuscript in the sixth and final phase of thematic analysis.

Results

The results of the analysis are presented in two sections. The findings from the inductive thematic analysis pertaining to the first part of the focus groups focused on coaches' perceptions of what contribution is are presented in the first section and their opinions on the properties of contribution and theoretical definition in the second section.

Youth Sport Coaches' Perceptions of Contribution

In the first section of the focus groups, youth sport coaches shared their own conceptualizations of what contribution meant. These conceptualizations centred on the main themes: (a) contribution as an athlete, (b) having a positive impact, (c) acting with intent.

Contribution as an Athlete

Initially, coaches described contribution in terms of young athletes adding to the team. Coach 8 emphasized the importance of teamwork and that athletes could make a contribution by creating a positive team environment, "Well, I mean soccer is a sport where there's 11 people on

the field; it's not an individual sport. So the main thing that players have to contribute is a good team ethos." Another coach in a different focus group shared this conceptualization, "Within their sport team, right, they may be passing along bits of information or things that they've learned or discovered for themselves within the sport to teammates or other people competing in the sport" (C12). Coach 13 commented on how even simple gestures an athlete can make could be regarded as contribution:

> When you first said it, I honestly thought picking up cones at the end, something like within our club, we take lots of pride on like everybody helps clean up, leave it better than you found it. So you're contributing to the team. And then from that you get the overall contributing to the club and building on the foundation of the bigger picture.

Other coaches' interpretation of contribution centred on athletes fulfilling the role as athletes by being attentive, working hard, and taking instruction. Contribution from athletes included "doing your role or your equal part at the best level you can" (C01) or giving "their time and learning skills" (C03). Other coaches described how an athlete's attitude itself could be a contribution with Coach 11 saying, "A lot of the times it's what are they contributing in terms of their, like characteristics, their attitudes, it's a lot of personal stuff that people contribute. And that's the personal stuff that will help you outside of sport." Similarly, Coach 9 felt that athletes made a contribution to their own development by becoming more engaged in their training and with their coaches:

> It's important for the athlete to be attentive and involved in practices and listen to the coach. But I think, for an athlete to really progress, it's important for them to be really engaged and like their, their contribution changes a bit … so they're bouncing ideas off each other for training plans, and with technique. (C09)

Having a Positive Impact

Perhaps the most important marker of contribution for the coaches was that a contribution has a positive impact on others. Initially, coaches described contribution as having a positive impact within the context of sport itself. Coaching was frequently mentioned as a form of contribution. Coach 8 felt that coaching was an obvious contribution an athlete may make, "It's obvious, but you know, if you go through sports, and then when you get done youth sports, you start coaching other kids. Right? So I think that's a huge contribution to society." Coach 5 described how a 15-year-old athlete showed initiative and helped by assisting the coach during a meet:

> He started getting involved as a volunteer coach this year. But what really stood out to me is it was during the meet that he was also competing at, and he was kind of bored between races … But he had this, this athlete had the initiative to come up to me and be like, hey, like, if there's anything you need help with… just let me know. And he like, coached with me for that morning, cuz [sic] he wasn't racing, but he didn't have to do that.

Coaches also described athletes giving back to the sport and making a contribution to the next generation of youth athletes through coaching later in life, "[They] can do with the next generation of kids coming up what someone did for them and introduce the sport to them and help them along and potentially create pathways or opportunities to university, whether that's academically or athletically" (C12).

In addition to coaching, the coaches indicated that being a role model for younger athletes was another way athletes could make a contribution to the sport. Coach 9 shared how a female university athlete served as a role model for younger female athletes, "She's

out there engaging in sport… providing young females a role model that you can continue to do this. You can be in med school, you can contribute all of those things." Similarly, Coach 13 explained that athletes could make a contribution to their sport by introducing others to the sport:

> I think sharing the love for their sport, like to their friends, or to people that maybe haven't tried it…. So if they share that, like the love of sport, maybe they're contributing to other people getting involved in that sport, or trying it.

The positive of impacts athletes could make through contribution were not restricted to the sport context and coaches were able to give a few examples of how an athlete may demonstrate contribution in other contexts after the theoretical definition and properties were shared with them. Coach 3 explained that coaches are "teaching [youth athletes], you know, how to provide service outside of, you know, their athletic pursuits," and cited the example of shovelling the snow off a neighbour's walkway. Coach 11 described the consistent contribution he had observed from one of the athletes he had coached makes across several contexts of his life, "He also contributes outside of the sport in like things like Bible studies and groups like that. And the cool thing about his contribution is that it's always consistent, whether it's at home, or at track, anything like that."

Acting with Intent

In addition to having a positive impact, the coaches also commented that contribution involved acting with intent to benefit others. Coach 1 explained, "Contribution exists because you're trying to, like, benefit the other person." To some coaches this meant that contribution required planning, "Like, you can't just have a soccer coach go out there [with] no practice plan… so contributions have to be planned, organized, taken seriously. Otherwise it kind of

doesn't help" (C03). However, others felt that so long as the desired outcome was to benefit others, planning was not necessarily required to make a contribution. Coach 5 argued:

> Like, you can definitely tell when someone is like, the contribution is made with intention. But I also think contribution can be made with intention spontaneously, in some cases. Like contributions that usually stand out to me as someone just like, out of the blue, not it being expected of them being like, oh, yeah, hey, like, I'll jump in and help out.

Coaches also commented on how the intended benefit of a contribution, such as their own coaching, may not occur until later. Coach 2 explained how he hoped that by making a contribution to his athletes' personal development, they in turn would engage in contribution later in life, "As coaches you contribute to the identity and ability and all else that makes up an athlete, and then that athlete hopefully would then contribute to society in some way. You're building a human being."

Coaches' Feedback on the Definition

In the second section of the focus group, coaches offered their opinions after they were provided with copies of the properties of contribution and the definition identified from the academic literature. Their comments were summarized with the following themes: (a) fit, (b) complexity, and (c) focus on intent versus behaviour.

Fit

The coaches generally believed that the theoretical definition represented the conversations in the focus groups fairly well and aligned fairly well with their perspectives. Coach 9 said "I think it [the definition] encapsulated most of what everybody had to say today." Coach 4 agreed stating "I like your definition, actually," and Coach 10 commented on the

definition as a whole "… that bottom one there if that's sort of the outcome, like I, when I read that, it's, I think it's pretty spot on." Additionally, the coaches recognized the difficulty of defining a term that could be completely agreed upon by all. Coach 1 demonstrated this clearly:

> How do you come up with something that everyone in this room can agree on? Well I don't know if you can. So I mean, I think it's a matter of, are there enough like qualities in this definition that most people would agree on? And I would say yeah.

Though the coaches generally reported that the theoretical definition fit with their conceptualization, the coaches believed that one part of the definition fit with their conceptualization of contribution better than the other parts. Coach 10 explained that "contribution being purposeful and performed with the intent of positive influencing other individuals, groups or society resulting in a positive outcome to the beneficiaries" was the part of the definition that resonated with him the most. These ideas were from the first sentence of the definition and coaches in other groups agreed that the first sentence of the definition contained the properties that fit their conceptualization of contribution best. Coach 4 commented that "the rest [the second and third sentences] are sort of like qualities of contribution rather than what contribution is." The first sentence also seemed to work well for Coach 6, "I think the only thing missing from the first sentence would be the like, interrelated and contextual aspect of it."

Complexity

Although the coaches believed the theoretical definition fit well with their conceptualization of contribution overall, they had some critiques. One of the primary concerns the coaches had with the proposed theoretical definition of contribution was that it was viewed as complex and complicated. Coach 1 explained "I think it's really good, to be honest. I think the fact that the definition is three sentences, that it's quite long… I think it involves a lot of

components.” The number of components within the definition was also problematic for Coach 10:

> So then I'm just trying to like, break it down. And that's where I was trying to hone it. Okay, like, out of all these components, like, which is the main one? And, of course, they all really do apply, right? It's just, is there a way to kind of trim it down?

Other coaches also had difficulty understanding the definition as a whole. Coach 8 described his difficulty understanding the definition saying, “I have a hard time putting them all together. So you know, different ideas resonate with you… but so some of this stuff doesn't resonate with me at all. I'd have to get an explanation of what you mean.”

The complexity of the theoretical definition raised concerns among the coaches regarding its intended use. Coach 5 directly questioned in what kind of setting the definition was going to be used in, “Like, is the intent for it to be used in an academic setting? Or is it to be used in like a, like, in a context that's like accessible to like someone just like reading the news?” Coach 13 provided more context and explained:

> I know I've been in coaching courses where people are there just to take it. So I think it would be really important if you're coming down to explain it, like why we're doing this and what the value is to the athletes.

Focus on Intent Versus Behaviour

In addition to the complexity, the coaches questioned the relative importance of the intent behind and outcome resulting from a contribution behaviour. Coach 2 explained how a coach may be trying to help an athlete improve as a hockey player could result in negative outcomes despite the positive intentions:

> But then coaches are always pushing for you to play hockey in season, then you do your three on three, or your spring league, and are constantly going to camps and only doing hockey. It probably makes a good hockey player, in some regards, but probably has a negative effect on their development as a broader human being.

Coach 6 shared his thoughts on the matter stating, "This definition is more tied to the intent than to the outcome…. And I think it'd be interesting to compare what would constitute contribution, based this definition, to a definition that's based on quantifying the outcomes for multiple people." Other coaches agreed that acting with positive intentions would not necessarily result in positive outcomes and could create grey areas as to what is or is not considered contribution. Coaches in the first focus group explored this idea using the example of cutting an athlete from a team (i.e., not selecting an athlete during a trial or try-out process) so that they could develop their skills on a team at a lower level of competition that better fit their skill level. Coach 1 framed the situation around who may be benefiting, "Well, if you cut kids, it's because you want the best players, you want to be competitive. But now, is that benefiting others? Is that better? The common good? I don't know. It's, it's grey. For sure." Coach 5 commented on how despite having positive intentions the outcomes may be unclear:

> In one sense, it is a negative outcome, but … getting cut from the team can be the incentive for athletes go out and try a different sport, or like become self-motivated, train and be like "okay, I'm gonna make the team next year."

Discussion

The purposes of this study were to (a) examine coaches' perspectives on contribution through sport and (b) obtain their feedback on the theoretical definition of contribution. The majority of examples of contribution provided by the coaches (e.g., coaching, leading Bible

study) fit well within the Deal et al. (2021) theoretical definition. Other examples provided by the coaches (e.g., working together as a team, being attentive, having a good attitude) do not appear to fit within the theoretical definition as well. These examples are more reflective of life skills in that they are skills or characteristics that "can be facilitated or developed in sport and are transferred for use in non-sport settings" (Gould & Carson, 2008, p. 60) as opposed to actions taken to benefit others. Therefore, the findings suggest that a practical definition of contribution for use in practical (sporting) contexts by laypersons (e.g., coaches) is necessary and the theoretical definition should remain in academic contexts. In the following sections, some of the key findings are discussed, before going on to consider the necessity for a simplified, practical definition of contribution.

The coaches in this study were able to provide a range of examples of behaviours they considered to be contribution. Not surprising given the sample and purpose of the study, most of the coaches' examples of contribution were behaviours that were specific to sport such as acting like a good teammate (e.g., working together, helping a teammate improve), engaging in helping behaviours within the team or club (e.g., picking up equipment after practice, cleaning the dressing room), and facilitating to their own development (e.g., being attentive, working hard). Research outside of sport has suggested that contribution behaviours varied across societies (e.g., participating in and supporting democratic systems in democracies; Lerner et al., 2002) and specific contexts (e.g., involvement in student government; Voight & Torney-Purta, 2013). For example, consider two scenarios in two contexts. In the first, a young athlete helps a coach to set up drill by putting a series of markers out on the field; and in the second, a student helps a teacher by distributing assignment materials to their peers. Though the specific contribution *behaviours* are different in each context, the *intention* to have a *positive impact* is the consistent.

Deal et al. (2021) suggested that contribution behaviours may transcend the context in which it and the personal and social qualities that lead to contribution are developed. The coaches in this study described many behaviours they considered to be contribution which were specific to the context of sport (e.g., coaching, officiating); however, the coaches provided fewer examples of contribution by athletes outside of the context of sport and these came after being prompted about contribution outside of sport. These non-sport examples of contribution behaviours included shovelling the snow from a neighbour's walkway, leading Bible study, and an athlete using their public presence to be a role model for youth. Contribution has been described as being dependent on the alignment of the strengths of youth with the developmental contexts in which they live (Lerner, 2004; Lerner et al., 2005). The findings of this study suggest that coaches may first think of facilitating contribution within the context of sport and may require prompting or encouragement to foster contribution by athletes in other contexts. This mirrors a similar pattern in the literature examining life skill development and transfer in sport wherein coaches focus on teaching life skills and how these skills may be applied within sport before helping athletes to transfer these life skills to contexts outside of sport (Carson Sackett & Gano-Overway, 2017; Pierce et al., 2018; Turnnidge et al., 2014). For example, Martin et al. (2021) delivered an intervention with a high school teacher-coach that was intended to facilitate student-athletes' life skills transfer from sport to the classroom. In a pre-intervention interview the teacher-coach explained how he sought to promote the life skills (i.e., discipline, effort, and sacrifice) in the players he coached but his approach in teaching was less formalized than his coaching. After the intervention, the teacher-coach made more explicit connections between the life skills he was teaching on the field, in the classroom, and beyond.

In most of the examples and descriptions of contribution given by the coaches in this study, it was clear that intention to benefit others and having a positive impact on others were central to how the coaches thought of contribution. Not only are these consistent with early descriptions of contribution being composed of an action (behavioural) and ideological component (e.g., Lerner et al., 2003; Lerner et al., 2005; Jeličić et al., et al., 2007); these ideas are also reflected in Deal et al.'s (2021) theoretical definition. Specifically, the theoretical definition of contribution was informed by two properties identified as 'intention' (i.e., contribution is purposeful and performed with the intent of positively influencing other individuals, groups, or social structures) and 'self-transcendent' (i.e., contribution involves moving beyond exclusive self-interest or a focus on oneself in order to benefit others or the common good). However, a few examples that coaches provided were almost entirely self-oriented, such as working hard to improve as an athlete, although we contend that this is more akin to the development of life skills. Examples of contribution in previous studies were also primarily other-oriented even when there was an element of contribution to the self or a functional component. For example, a university student athlete used the example of peer teaching (in a study group) as an example of contribution to others though the act of studying also had benefit for themself and studying is a functional component of being a student (Deal & Camiré, 2016a). These findings suggest that Deal et al.'s (2021) theoretical definition captured the core meaning of contribution as perceived by youth sport coaches.

A Practical Definition of Contribution

Deal et al.'s (2021) theoretical definition of contribution had been rated by expert judges (i.e., academics) as fitting well with their conceptualizations of contribution. The findings of the current study show that the theoretical definition encompassed the most central parts of coaches'

conceptualizations of contribution (i.e., that contribution is intentional and has a positive impact). The coaches' initial examples of contribution were primarily sport specific behaviours (e.g., assisting with setting up equipment for practice or cleaning up after). It was only after sharing the theoretical definition of contribution and properties of contribution with coaches (i.e., the second set of the questions in the guide) that coaches considered contribution more broadly and were able to generally support the theoretical definition of contribution. In particular, the first sentence which includes the notion of acting with intention to benefit others, was seen as the most important part of the definition by coaches likely because it reflected ideas that were central to coaches' perspective of contribution (i.e., contribution being intentional and benefiting others).

However, the coaches' critiques of the theoretical definition warrant further examination. The primary critique was that the theoretical definition was long and complex and as a result did not seem to be meaningful or useful for coaches initially. This is not necessarily a problem with the theoretical definition itself, as the purpose of a theoretical definition is to capture the essence of a phenomenon to allow researchers to understand and critique concepts (Watt & van den Berg, 2002). That is to say, theoretical definitions are not necessarily designed to be immediately accessible to laypeople. Therefore, while we do not recommended changes to the theoretical definition based on the results of this study, it does appear necessary to conceptualize contribution in more practical ways for use in sport contexts.

The coaches' second critique was that the theoretical definition of contribution was more focused on intent than outcome which raised interesting questions in the focus groups. Deal et al.'s (2021) theoretical definition of contribution was written such that contribution was defined by the intent behind the behaviour rather than the consequences of that behaviour. The coaches'

concerns point to an implicit assumption within the definition. That is, the actions or behaviours individuals perform with the intent of positively influencing others are assumed to be actions or behaviours that could be reasonably expected to bring about positive outcomes or benefit to others. Such an assumption is critical because without it dangerous behaviours that are known to lead to negative outcomes (e.g., excessive training demands resulting in burnout or overuse injuries; DiFiori et al., 2014) or outright abusive behaviours (e.g., using physical punishment to 'toughen up' a youth athlete) could fall under Deal et al.'s (2021) theoretical definition.

Taken together, the coaches' criticisms of the theoretical definition of contribution warrant consideration by researchers when engaging with sport stakeholders. First, PYD researchers should be aware of the implicit assumption within Deal et al.'s (2021) theoretical definition of contribution. Though most PYD researchers would be likely to assume that contribution behaviours are those that could be reasonably expected to bring about positive outcomes and not be harmful behaviours, this may not necessarily be the case for all involved in youth sport. It may be helpful for researchers to frame discussions of contribution around examples of contribution that sport stakeholders are familiar with and are clearly beneficial and not harmful (e.g., volunteer coaching, fundraising for charity). Second, researchers should recognize that the theoretical definition of contribution may not be the best way to present the concept of contribution to sport stakeholders such as coaches and describing the term in a way that takes stakeholders' perspectives into consideration may be better.

Overall, the results of the current study suggest that contribution may be conceptualized as "actions or behaviours performed intentionally with the intent of having a positive impact on others." Such a conceptualization remains consistent with the theoretical definition (in fact it is the first sentence of the theoretical definition) and it includes the notions of intentionality and

benefit to others that were central to the coaches' conceptualizations of contribution. Therefore, operationalizing contribution in this way seems likely to get sport stakeholders (e.g., coaches, athletes, sport parents) to think about behaviours in line with the theoretical definition without the complicating, and perhaps unnecessarily detailed, bulk of the subsequent sentences in the theoretical definition.

This practical definition of contribution will be useful in sport settings and with sport stakeholders. First, coaches and others designing and delivering sport programing can use this operational definition as a base when teaching or promoting contribution. It is easy to remember (compared to the lengthy theoretical definition), provides common language for discussing contribution, and identifies critical components of contribution that resonate with sport stakeholders (i.e., contribution is intentional and benefits others). Second, this operational definition facilitates discussion of contribution with sport stakeholders. As a part of data collection (e.g., in focus groups or interviews), researchers may use the operational definition to efficiently communicates the core of what contribution is and help prompt participants to think about contribution without the risk of overly complicating the term with the full theoretical definition. Although previous research (Deal & Camiré, 2016a, 2016b) had presented succinct descriptions of contribution, these descriptions were not based on any kind of systematic process. The practical definition suggested in this study is derived from a theoretical definition based on a scoping review that included 75 manuscripts (Deal et al., 2021) and this study shows that it resonates well with sport stakeholders. As a result, the practical definition from the present study is representative of developments in how contribution has been conceptualized over time and thus is likely a better operationalization than how Deal & Camiré (2016a, 2016b) described contribution. This practical definition may also be useful for sharing research findings with sport

stakeholders in short reports or community presentations as it will provide a quick reference that is unlikely to distract from the implications being shared.

In addition to having implications for sport program design and delivery, the practical definition of contribution may have theoretical implications. Although the theoretical definition of contribution and its properties were rated as fitting well with their conceptualization of contribution by a panel of experienced researchers (Deal et al., 2021), it is not yet known how useful the theoretical definition will be for researchers. It is possible that researchers may find the practical definition presented in this study easier to use in their work and sufficient for their needs despite being less specific and not referencing all the properties of contribution that informed the theoretical definition. Such a determination will ultimately bear out over time as researchers adopt and use whichever definition best suits their needs. Future research should examine the adoption and utilization of both the theoretical and practical definitions of contribution before any conclusion as to whether the additional specificity the theoretical definition has compared to the practical definition is worth the added complexity.

The findings of this study must be considered along with limitations. First, the focus groups were scheduled with five or six participants in each; however, multiple participants cancelled on short notice and we were unable to inform the other participants in time resulting only two participants being present for the third focus group. The quality of interaction between participants of this focus group was similar to that of the other groups and was included in the study as a result. Additionally, each of the themes identified through data analysis included data segments from all three focus groups. Second, the emphasis placed on collective views in a focus group comes with the risk that some individuals may be hesitant to share views that may be contrary to those of the rest of the group. We attempted to minimize this risk by allowing focus

group participants by allowing for a period of rapport building conversation prior to beginning the focus group and by prefacing the discussion with a reminder to respect others' opinions. A third limitation relates to the sample of participants. Though the authors are confident that the participants in this study represent a diverse range of sports, age of athletes they coached, and levels of competitiveness, these findings may not be completely representative of youth sport in all contexts such as less structured or informal sports (e.g., skateboarding, recreational skiing or snowboarding). Additionally, all participants were North American and could not speak to contribution as it may be in other cultural contexts.

The findings of this study show some of the variation in the specific behaviours that constitute contribution in sport. Many of the examples of contribution provided by coaches clearly fit within Deal et al.'s (2021) theoretical definition of contribution. However, the results also make the limitations of using the theoretical definition in practical settings clear. As a result, a practical definition of contribution was suggested. This practical definition encompasses the core of what contribution means to coaches (i.e., contribution is intentional and benefits others) and is much less complex than the theoretical definition. These definitions will serve as a foundation for future research on contribution in sport and communication with stakeholders in sport. Specifically, the theoretical definition of contribution will be instrumental in discussion and critique of contribution in academic contexts and the practical definition will help establish a common understanding to facilitate interactions between researchers and non-academic stakeholders seeking to teach or promote contribution in sport.

Data Availability Statement

Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data is not available.

References

Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research, 4*, 1-8. https://doi.org/10.1177/2333393617742282

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589-597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In N. Smith & A. C. Sparkes (Eds.), *International handbook on qualitative research in sport and exercise* (pp. 191-218). Routledge.

Bruner, M. W., Boardley, I. D., & Côté, J. (2014). Social identity and prosocial and antisocial behavior in youth sport. *Psychology of Sport and Exercise, 15*(1), 56-64. https://doi.org/10.1016/j.psychsport.2013.09.003

Bruner, M. W., Balish, S. M., Forrest, C., Brown, S., Webber, K., Gray, E., McGuckin, M., Keats, M. R., Rehman, L., & Shields, C. A. (2017). Ties that bond: Youth sport as a vehicle for social identity and positive youth development. *Research Quarterly for Exercise and Sport, 88*(2), 209-214. https://doi.org/10.1080/02701367.2017.1296100

Carson Sackett, S., Gano-Overway, L. A. (2017). Coaching life skills development: Best practices and high school tennis coach exemplar. *International Sport Coaching Journal, 4* (2), 206-219. https://doi.org/10.1123/iscj.2016-0080

Casey, M. A., Kruegar, R. A. (2000). *Focus groups: A practical guide for applied research* (3rd ed.). Sage.

Damon, W. (2004). What is positive youth development? *Annals of the American Academy of Political and Social Science, 591*(1), 13-24. https://doi.org/10.1177/0002716203260092

Deal, C. J., & Camiré, M. (2016a). An examination of university student-athletes' motivations to contribute. *Journal of College and Character, 17*(2), 116-129. https://doi.org/10.1080/2194587X.2016.1159227

Deal, C. J., & Camiré, M. (2016b). University student-athletes' experiences of facilitators and barriers to contribution: A narrative account. *The Qualitative Report, 21*(11), 2087-2102. http://nsuworks.nova.edu/tqr/vol21/iss11/11

Deal, C. J., Dunn, J. G. H., Jørgensen, H., Sivak, A., & Holt, N. L. (2021). Defining contribution: A scoping review [Manuscript submitted for publication].

Denscombe, M. (2007). *The good research guide for small-scall social research project* (3rd ed.). McGraw-Hill.

DiFiori, J. P., Benjamin, H. J., Brenner, J. S., Gregory, A., Jayanthi, N., Landry, G. L., & Luke, A. (2014). Overuse injuries and burnout in youth sports: A position statement from the American Medical Society for Sports Medicine. *British Journal of Sports Medicine, 48*(4), 287-288. https://doi.org/10.1136/bjsports-2013-093299

Herbison, J. D., Vierimaa, M., Côté, J., & Martin, L. J. (2018). The dynamic nature of connection and its relation to character in youth sport. *International Journal of Sport and Exercise Psychology, 17*(6), 568-577. https://doi.org/10.1080/1612197X.2017.1423507

Holt, N. L., Deal, C. J., & Smyth, C. L. (2016). Future directions for positive youth development through sport. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 229-240). Routledge.

Jeličić, H., Bobek, D. L., Phelps, E., Lerner, R. M., & Lerner, J. V. (2007). Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H study of positive youth development. *International Journal of Behavioral Development, 31*(3), 263-273. https://doi.org/10.1177/0165025407076439

Kaplan, A. (1946). Definition and specification of meaning. *The Journal of Philosophy, 43*(11), 281-288. https://doi.org/10.2307/2019221

Kavussanu, M., & Boardley, I. D. (2009). The prosocial and antisocial behavior in sport scale. *Journal of Sport & Exercise Psychology, 31*(1), 97-117. https://doi.org/10.1123/jsep.31.1.97

Kruegar, R. A. (1998). *Developing questions for focus groups*. Sage.

Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth*. Sage.

Lerner, R. M., Brentano, C., Dowling, E. M., & Anderson, P. M. (2002). Positive youth development: Thriving as the basis of personhood and civil society. *New Directions for Youth Development, 2002*(95), 11-33. https://doi.org/10.1002/yd.14

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172-180. https://doi.org/10.1207/S1532480XADS0703_8

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jeličić , H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D.,

Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17-71. https://doi.org/10.1177/0272431604272461

Lerner, R. M., von Eye, A., Lerner, J. V., Lewin-Bizan, S., & Bowers, E. P. (2010). Special issue introduction: The meaning and measurement of thriving: A view of the issues. *Journal of Youth and Adolescence, 39*(7), 707-719. https://doi.org/10.1007/s10964-010-9531-8

Martin, N., Camiré, M., & Kramers, S. (2021). Facilitating life skills transfer from sport to the classroom: An intervention assisting a high school teacher-coach. *Journal of Applied Sport Psychology,* 1-24. https://doi.org/10.1080/10413200.2021.1917016

Morgan, D. L. (1998). *Planning focus groups*. Sage.

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.

Pierce, S., Kendellen, K., Camiré, M., & Gould, D. (2018). Strategies for coaching for life skills transfer. *Journal of Sport Psychology in Action, 9*(1), 11-20. https://doi.org/10.1080/21520704.2016.1263982

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health, 23*(4), 334-340. https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G

Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health, 33*(1), 77-84. https://doi.org/10.1002/nur.20362

Stewart, D. W., & Shamdasani, P. N. (1990) *Applied social research methods series*. Sage.

Sullivan-Bolyai, S., Bova, C., & Harper, D. (2005). Developing and refining interventions in persons with health disparities: The use of qualitative description. *Nursing Outlook, 53*(3), 127-133.

Turnnidge, J., Côté, J., & Hancock, D. J. (2014). Positive youth development from sport to life: Explicit or implicit transfer? *Quest, 66*(2), 203-217. https://doi.org/10.1080/00336297.2013.867275

Voight, A., & Torney-Purta, J. (2013). A typology of youth civic engagement in urban middle schools. *Applied Developmental Science, 17*(4), 198-212. https://doi.org/10.1080/10888691.2013.836041

Watt, J. H., & van den Berg, S. (2002). Elements of scientific theories: Concepts and definitions. In J. Watt & S. van den Berg (Eds.), *Research methods for communication science* (pp. 11-22). Allyn & Bacon.

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner, R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence, 39*(7), 736-750.https://doi.org/10.1007/s10964-010-9541-6

CHAPTER 4. Study 3

A Grounded Theory of the Development of Contribution Through Sport

Note on the impact of COVID-19: This study coincided with the onset of COVID-19 restrictions in Alberta. As a result of public health restrictions, youth sport was greatly restricted, and at times, prohibited over a period of several months. This negatively impacted my ability to recruit participants.

Abstract

The purpose of this study was to create a grounded theory of the process of the development of contribution through sport. Participants (n = 20) were seven athletes (M age = 23.1) who had previously made some kind of contribution, seven coaches (M age = 41.3) who had coached such an athlete, four parents of athletes (M age = 53.0) who had had engaged in contribution, and two sport administrators (45 and 54 years old) responsible for designing or delivering youth sport programing. This study was conducted using Straussian grounded theory (Corbin & Strauss, 2015). Data were collected via individual interviews. The grounded theory produced depicts the development of contribution through sport as a three-stage process. The first stage was characterized by the centrality of individual personal development, whereby the foundation for contribution was laid through instilling core values and developing relationships. In the second stage, youth engaged in their initial contribution experiences typically through invitations from adults. These invitations, and initial contribution experiences, helped build competence and confidence. If these initial contribution experiences were perceived as successful. youth athletes were likely to continue to engage in contribution activities. The third stage was characterized by the display of regular or sustained contribution by athletes. The focus shifted from the development of the individual to providing a benefit to others. Throughout all three stages of the process, parents and coaches were influential; however, the relative influence of the two groups changed as youth got older, became more independent, and drove their own contribution. This theory will serve as a foundation for future research and programing aimed at promoting and facilitating the development of contribution among young athletes.

In positive youth development (PYD), the term contribution features prominently in Lerner's 5Cs model of PYD (Lerner et al., 2005). Within the 5Cs model, it is stated that youth with higher levels of PYD, marked by the 5Cs (i.e., competence, confidence, connection, character, and caring/compassion) are less likely to engage in risky or problematic behaviour (e.g., delinquency, substance abuse) and more likely to display contribution (Lerner et al., 2011). Thus, contribution may be regarded as a desired outcome or product of successful development.

Contribution is also a key element of PYD through sport. For example, Holt and colleagues (2016) included contribution within their definition of PYD through sport:

> PYD through *sport* is intended to facilitate youth development via *experiences* and *processes* that enable participants in *adult-supervised programs* to gain *transferable personal and social life skills*, along with *physical competencies*. These skill and competency outcomes will enable participants in youth sport programs to *thrive* and ***contribute to their communities***, both now and in the future. (p. 231, italics in original, bold for emphasis)

This definition suggests that there are processes and experiences within the context of organized youth sport that facilitate development that eventually manifests in contribution. However, experiences and processes that lead to the development of contribution are not well understood.

The lack of insight into the process of how contribution may be developed through sport is likely because the term contribution had not been adequately defined until recently. Deal et al. (2021) conducted a scoping review in which descriptions and definitions of contribution and similar prosocial terms (e.g., volunteerism, civic engagement) were extracted from 75 manuscripts to establish a theoretical definition of the construct. The definition was then rated by 20 expert judges. The judges rated the definition (and its properties) above 5.0 on a 6-point scale,

indicating that the definition and properties fit ‘well’ to ‘very well’ with their conceptualizations of contribution. The final theoretical definition was:

> Contribution involves acting on beliefs and the behaviours that an individual performs purposefully with the intent of positively influencing other individuals, groups, or broader society to bring about a positive outcome for the beneficiaries. These actions involve moving beyond an exclusive self-interest or focus on oneself in order to benefit others or the common good. Additionally, an individual making a contribution to others may benefit directly or indirectly themselves. The specific behaviours that constitute contribution vary across contexts and reflect the values and social norms of each context. (Deal et al., 2021, p. 19)

In a follow up study that involved applying the theoretical definition of contribution to sport, Deal et al. (in press) conducted focus groups with 13 youth sport coaches. The coaches shared what contribution meant to them and then discussed the theoretical definition of contribution. It was found that intention to benefit others and having a positive impact on others were central to how the coaches thought of contribution. However, the coaches felt that the theoretical definition was overly complex and unnecessarily long. As a result of this feedback, Deal and Holt (in press) suggested that “actions or behaviours performed intentionally with the intent of having a positive impact on others” could be used as a practical definition of contribution, particularly when conducting research in sport and/or sharing findings with non-academics.

Prior to Deal et al.’s (2021) theoretical definition of contribution and Deal and Holt’s (in press) practical definition of contribution, the meaning of the term contribution was inferred from Lerner and colleagues’ (Lerner et al., 2002, 2003, 2005, 2010) *descriptions* of (rather than theoretical definitions of) contribution. For example, a young person was described as thriving if

"he or she is involved over time in such healthy, positive relations with his or her community, and on the path to … 'idealized personhood' (an adult status marked by making culturally valued contribution to self, others, and institutions)" (Lerner et al., 2002, p. 15). Other descriptions of contribution specified that contribution has both a behavioural (action) and ideological component (Lerner et al., 2003) and that cognitive, socioemotional, and behavioural changes in middle adolescence change contribution from simple acts that benefit the self, family, or community into active and engaged citizenship supporting democratic structures and institutions (Zaff et al., 2010). Perhaps because of the lack of a clear definition and a series of evolving descriptions, efforts to measure or assess contribution have often used other prosocial behaviours, such as volunteerism and helping behaviours, as proxies, (e.g., Geldhof, Bowers, Boyd, et al., 2014; Geldhof, Bowers, Mueller, et al., 2014; Jeličić et al., 2007).

To date, only a few studies have specifically examined contribution (as opposed to related prosocial behaviours) in the context of sport. The first of these was a study by Deal and Camiré (2016a) in which university student athletes' motives for contribution were examined using individual interviews with ten Canadian university student athletes. The student athletes described various types of contribution in their community with a range of motives including involvement in mandatory team activities; to learn new career related skills; to practice or display existing skills; and to build and strengthen relationships with teammates, friends, and community members. Additionally, the student athletes often had more than one motive at the same time for engaging in a contribution. For example, one participant explained how she volunteered for a student athlete council to help other student athletes as well as to build her CV to improve her chances at getting into a master's program or obtaining a job after her degree.

In the second study (Deal & Camiré, 2016b) eight university student athletes were interviewed to understand the facilitators and barriers to contribution. Four participants were first-year student athletes and the four participants were upper-year (i.e., second- through fifth-year) student athletes who had sustained contribution activities over multiple years. Both groups described coaches, administrators, and teammates as important others who facilitated their contribution activities by creating opportunities and inviting others to make a contribution with them. However, first-year student athletes viewed their senior teammates as key facilitators of their contribution because they introduced them to new contribution opportunities and helped them overcome the barriers posed by time constraints through mentorship. Additionally, the first-year student athletes reported greater difficulties balancing the time demands of being a full-time student, a university athlete, and their contribution activities. The first-year student athletes also had fewer strategies for managing their time than the upper-year student athletes.

Furthermore, a Deal and Holt (in press) study with coaches, that focused on understanding coaches' views of contribution and produced the practical definition that guided the current study, also offered some insights into how contribution is developed through sport. For example, one coach suggested that small forms of contribution (e.g., cleaning facilities after use or picking up equipment after practice) may build into larger forms of contribution over time. Another coach highlighted that coaches can influence the development of contribution among their athletes. Together, these studies (i.e., Deal & Camiré, 2016a, 2016b; Deal & Holt, in press) suggest that student athletes may have a variety of motives for engaging in contribution and that other social agents (teammates, coaches, and administrators) play a role in facilitating their engagement in contribution. However, these studies did not explicitly explore the process by which coaches, teammates, and administrators facilitated developing contribution. Accordingly,

the purpose of this study was to create a grounded theory of the development of contribution through sport.

Method

Grounded Theory

Grounded theory methodology is particularly useful for explaining social phenomena when little pre-existing theory is available (Holt, 2016). This was the case with contribution as, although there are theories of PYD, there are few studies -- and no theories -- of the process through which contribution may be developed through sport. Theories created when using grounded theory methodology (i.e., the outcome of a study referred to as a grounded theory) may be substantive, middle range, or formal regarding their level of abstraction (Glaser & Strauss, 1967). Substantive theories are topic-focused, specific to a particular group in a context, and typically are only generalizable to other samples or contexts that are very similar (Holt, 2016). Conversely, formal theories are applicable to a wider range of problems and contexts as they are broader in scope than substantive theories (Corbin & Strauss, 2015). Middle level theories are broader and more generalizable than substantive theories, but less so than formal theories (Corbin & Strauss, 2015). In this study, Straussian grounded theory methodology was used to create a substantive theory specific to the development of contribution through organized, adult-led, youth sport.

Straussian grounded theory methodology (Corbin & Strauss, 2015) is a systemic and flexible approach that can be used to construct theories grounded in data. The Straussian variant of grounded theory methodology features several interrelated techniques and procedures. One of its defining features is the iterative process of data collection and data analysis. Theoretical sampling is an important procedure at the heart of the iterative process of data collection and

analysis (Corbin & Strauss, 2015). Theoretical sampling is deeply embedded in grounded theory methodology and is the process of sampling additional data sources based on concepts identified through data analysis (Corbin & Strauss, 2015). Therefore, theoretical sampling "both drives, and is driven by, the interaction of data collection and analysis" (Holt, 2016, p. 28). This iterative process of data collection and data analysis, facilitated by theoretical sampling, continues until an adequate level of theoretical saturation is reached. Theoretical saturation is the point in research at which concepts are fully accounted for and the relationships between concepts and categories are fully explained (Green & Thorogood, 2004) and further collection of data would not add to the explanation provided by the substantive theory (Corbin & Strauss, 2015). Another key feature of the grounded theory methodology is constant comparison. Constant comparison is the foundational technique within grounded theory methodology wherein instances, data, and concepts are compared in order to classify data and develop theory (Corbin & Strauss, 2015).

Philosophical Approach and Researcher Positionality

Though some scholars (Guba & Lincoln, 1994; Weed, 2009) have located Straussian grounded theory within a post-positivist perspective, Corbin, in the fourth edition of *Basics of Qualitative Research* (Corbin & Strauss, 2015), positioned Straussian grounded theory within a constructionist approach. Corbin contended that theories are "*constructed* by researchers out of stories that are constructed by research participants who are trying to explain and make sense out of their experiences and lives, both to the researcher and themselves" (Corbin & Strauss, 2015, p. 26, italics for emphasis in original). Furthermore, Corbin argued that grounded theorists are concerned with individuals' experiences of, and meanings given to, events based on their own biography and experiences rather than the event itself (Corbin & Strauss, 2015). Thus, I adopted a philosophical perspective that acknowledged the existence of multiple subjective realties based

on participants' experiences, which are interpreted and reconstructed to generate knowledge in the form of a grounded theory.

Researcher positionality is related to the concept of theoretical sensitivity in grounded theory methodology. Theoretical sensitivity refers to researchers "having insights as well as being tuned in to and being able to pick up on relevant issues, events, and happenings during data collection and analysis of data" (Corbin & Strauss, 2015, p. 78). Theoretical sensitivity is developed over time by researchers through reflection on their philosophical assumptions, their personal experiences, and knowledge of the topic.

In addition to my philosophical perspective, my theoretical sensitivity was informed by my previous research on PYD and contribution and my knowledge of the broader scope of PYD research. For instance, models of PYD (Lerner et al., 2005), PYD through sport (e.g., Holt et al., 2017), social processes within PYD including the learning and transfer of life skills (Kendellen & Camiré, 2019; Pierce et al., 2017) were used as sensitizing concepts (Corbin & Strauss, 2015). These sensitizing concepts helped orient my attention to potentially influential relationships (e.g., coach-athlete relationships) and served as touch points for theoretical comparisons to stimulate analysis and the identification of the properties and dimensions of concepts (Corbin & Strauss, 2015).

Participants and Sampling

The initial purposeful sampling criterion was to recruit young adult athletes who had made some kind of contribution or were presently making a contribution. These participants were selected because they were likely to be able to reflect on their contribution and comment on how they came to be involved in contribution activities. Subsequent sampling, based on the principle of theoretical sampling, involved using a broader sampling frame and led to the

recruitment of coaches (who had coached athletes who had had engaged in contribution), parents (whose children had engaged in contribution), and administrators who were responsible for designing or delivering youth sport programing.

A total of 20 individuals participated in this study (seven athletes, seven coaches, four parents, and two youth sport administrators). The seven athletes (four men, three women) were between 20 and 28 years old (M = 23.1, SD = 2.1), reported playing their main sport for between 7 and 15 years (M = 11.4, SD = 2.9), and competed in speed skating (n = 2), volleyball (n = 2), Canadian football (n = 1), rugby (n = 1), and wheelchair rugby (n = 1). The seven coaches (six men, one woman) were between 24 and 56 years old (M = 41.3, SD = 11.8), reported coaching their sport for between 6 and 35 years (M = 18.4, SD = 10.1), and coached basketball (n = 2), ice hockey (n = 2), athletics (long distance running events; n = 1), soccer (n = 1), and volleyball (n = 1). All the coaches had experience coaching recreational or competitive youth sport (i.e., athletes between 5 and 18 years old) as well as university student athletes. Four coaches were presently coaching university student athletes. The four parents (one man, three women) were between 46 and 60 years old (M = 53.0, SD = 6.6) and had one (n = 1), three (n = 2), or four (n = 1) children in organized youth sport. The two sport administrators (one man, one woman) were 45 and 54 years old, and were administrators for a basketball club and a soccer club. Although the grounded theory produced in this study was deemed sufficiently saturated to produce a thorough explanation of the theory, it should be noted that participant recruitment was severely hampered by the COVID-19 pandemic. Sport was subjected to restrictions and, at times, prohibited during the course of this study, which created difficulties in recruiting participants.

Data Collection

Prior to beginning data collection, ethics approval was obtained from the Research Ethics Board. Data collection began in March 2020. All interviews were conducted using video teleconferencing due to the gathering restrictions arising from the COVID-19 pandemic. All interviews were conducted individually. Prior to beginning the interview, the study purpose and procedures were explained to participants, the researcher answered any questions participants had, and verbal consent to participate was obtained. All interviews were audio recorded, ranged from 50 to 106 minutes (M = 71.9, SD = 16.7), and were transcribed verbatim.

Interviews followed a semi-structured interview guide with a four-part structure (see Appendix B). The specific questions in the interview guide changed over time to fully develop emerging concepts, categories, and the relationships between them. First, participants were asked about their own sport history and their role in youth sport (e.g., coaches were asked how they started to coach, parents were asked about their children's sport participation) to help establish rapport and ease participants into the conversation. Next, Deal and Holt's (in press) practical definition of contribution was shared with participants and they were told that contribution could be anything from small-scale actions that benefit a single individual such as shoveling an elderly neighbor's driveway, to large-scale actions such as advocating for social justice issues. In the third part of the interview, participants were asked to describe what they (or their children, athletes they coach, or athletes who participate in their youth sport organization as appropriate to their own role in youth sport) do or have done that they considered to be contribution. Finally, in the last part of the interview guide for later interviews, findings from previous interviews were shared with participants and they were invited to comment on how their own experiences and perceptions were similar or different to the initial findings. As analysis progressed and the theory

began to take shape, a diagram of the developing theory was shared with participants and they were invited to comment on the theory.

Data Analysis

Data analysis and data collection took place concurrently as a part of the iterative process (Corbin & Strauss, 2015) and analysis began as soon as an interview transcript was available. Breaking data down to concepts is essential as "theorists works with conceptualizations of data, not the actual data per se" (Corbin & Strauss, 1990, p. 7). Concepts served as the basic unit of analysis and were examined using constant comparison with existing concepts to further refine the concepts' properties and dimensions with each new transcript (Corbin & Strauss, 2015). As coding progressed similar concepts were grouped to form more abstract categories, which formed the structure of the theory (Corbin & Strauss, 2015).

Three primary coding techniques were used in analysis. The first, open coding, involved breaking data down analytically in order to identify concepts within the data as well as their properties and dimensions (Corbin & Strauss, 2015). The second, axial coding, was used to examine concepts in relation to each other in order to further develop the concepts; group similar concepts into categories; and create relational statements between concepts, categories, and subcategories (Corbin & Strauss, 2015). The third type of coding, theoretical integration, was used to identify core category and build a theoretical framework around the core category through further identification of the relationships between concepts and refinement of categories (Corbin & Strauss, 2015). Corbin and Strauss did not intend these techniques to be a sequence of steps. Rather, the techniques were used as needed throughout the research process to raise the level of abstraction from specific instances in the raw data to concepts and categories in an iterative manner as additional data were collected and analyzed.

Two other analytic techniques were used. Memos were used to record analytical thoughts throughout data collection and analysis. These memos included questions about concepts, possible relations between concepts or categories, and ideas for theoretical sampling. Diagramming was also used throughout analysis to facilitate thinking theoretically (i.e., to help focus analysis on relations between concepts as part of the developing theory) and in later interviews diagrams were shared with participants as a means of confirming or further refining the theory.

Demonstrating Quality

Corbin and Strauss (2015) provided two lists of 'checkpoints' for judging quality of grounded theory studies. These lists are reproduced in Appendix C. The first list contains 16 questions which may give insight into the methodological consistency of the study and includes questions such as (a) "Did data collection alternate with analysis?" and (b) "Was there feedback on the findings from other professionals and from participants? And were changes made in the theory based on this feedback?" The second list contains 17 questions which may be used to evaluate the quality and applicability of a grounded theory study and included questions such as (a) "Is there descriptive data given under each category that brings the theory to life so that it provides understanding and can be used in a variety of situations" and (b) "Do the findings have the potential to become part of the discussions and ideas exchanged among relevant social and professional groups?"

To demonstrate quality in the present study, I focused on a few key concepts that guided the research design, process, and presentation of the manuscript. First, I utilized appropriate methodological rigour and methods consistent with my philosophical position and research purpose (Mayan, 2009). Second, several analytical tools consistent with Straussian grounded

theory methodology were used including memoing, diagramming, questioning the data, and constant comparison (Corbin & Strauss, 2015). In addition to advancing analysis by facilitating brainstorming and questioning, memos and diagrams created a 'paper trail' that recorded the progression of analysis and stored ideas about developing concepts and categories (Corbin & Strauss, 2015). Third, the methods and procedures used were written in a clear and transparent manner and the categories and concepts were presented clearly with supporting quotations from participants. Finally, I shared the developing theory with participants in the later parts of interviews and gathered feedback on how it did or did not fit with their experiences in a modified member checking protocol (Neely et al., 2016; Neely & Holt, 2014).

Results

The results are presented in four sections. The first section provides an overview of the grounded theory developed in this study. The remaining sections detail the three stages of the development of contribution through sport, which formed the structure of the theory.

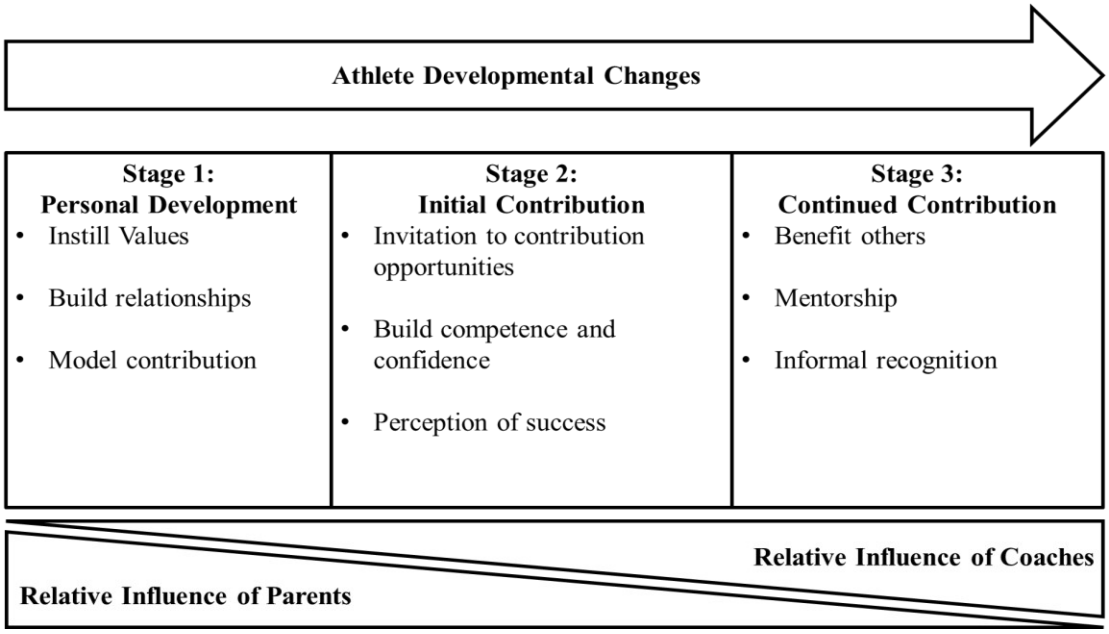
A Grounded Theory of the Development of Contribution Through Sport

The central claim of this grounded theory was that the development of contribution through sport occurred across three stages. The first stage was characterized by the centrality of personal development, whereby the foundation for contribution was laid through instilling core values and developing relationships. In the second stage, youth engaged in their initial contribution experiences typically through invitations from adults. These invitations, and the initial contribution experiences, helped build competence and confidence and if these initial contribution experiences were perceived as successful youth athletes were likely to continue to engage in contribution activities. The third stage was characterized by athletes engaging in contribution activities in a regular or sustained manner. Additionally, the focus had shifted from

development of the individual athlete to providing a benefit to others. Throughout all three stages of the process, coaches and parents stood out as influential individuals; however, the relative influence of the two groups changed as young athletes underwent developmental changes and became more independent and drove their own contribution. A visual depiction of the theory can be seen in Figure 4.1.

Figure 4.1.

Theory of the Development of Contribution Through Sport



Stage 1: Personal Development

Participants reported that the initial stage of the development of contribution was focused on personal development and was highly influenced by parents and, to a lesser extent, youth sport coaches. This foundation was based on core values and shaped by parents selecting activities for youth to participate in that reinforced these values, the development of relationships with coaches, and demonstration of contribution by parent and coach role models.

Within the personal development stage, instilling values was a key part of the foundation of the development of contribution through sport. Though participants mentioned a range of values, respect stood out as being a critically important value for later contribution. Parent 3 highlighted respect when she was asked what she had tried to teach her children when they were young. She said, “We've taught our kids respect. You know, respect for authority, respect for others. We've also taught them that what you do matters. So you know, your actions matter.” Additionally, a club administrator identified respect as an important core value for contribution. He said, “I think the biggest part is just make sure you treat people around you with respect. I think that's the best first step to contribution that you can make” (Ad1). Inclusivity appeared to be another value that formed a foundation for contribution. One parent shared how she and her husband secretly bought a team jacket for one of their children’s teammates whose family could not afford one and used that situation to talk about inclusion with their son:

> We pointed that out that must have made him feel really good… But the conversation wasn't about who provided the jacket, it was about the feeling of inclusion and how he would have felt if he hadn't had the jacket. (P1)

As this example suggests, parents were primarily responsible for instilling core values in young athletes. One athlete described how her values were shaped by how her parents had raised her, “my parents, I think did a good job raising us and knowing what's right and what's wrong and just instilling good character values and the idea of like, helping out those when you can and stuff like that” (Ath6). Parents were also cognizant of the role they had in instilling values in their children. One parent described how she and her husband had spoken with their children about how important contribution was for society and how contribution can also be personally beneficial:

> So what we talked to them about often was how Canadian society runs on volunteerism, like in in many circumstances… If you can give a little bit of time doesn't have to be a lot of time. But if you can give a little bit of time and other people will benefit. [We] also talked a little bit about sometimes how we benefit from how it makes us feel good. But it was always about we tried to be a good person. It's about doing for others. (P1)

Coaches also emphasised the role of parents in teaching values to their children. One coach explained how it was evident when parents had instilled values in their children and how these children were better prepared to take on additional opportunities for personal development within sport through leadership roles than their peers:

> That kickstart happened or that's just the culture in their family or the values that they've had all along that, that they automatically bring in those. You find out very, very quickly who those people are. And, you know, coincidentally they end up kind of getting into that into leadership roles a lot more quickly. (C1)

Although parents were primarily responsible for instilling values in their children, others in youth sport also had some influence. For example, a youth sport administrator explained how her organization screened coaches. She said, “we have a character basically, for coaches. And if they don't apply to that, we let them go, we just kick them out” (Ad2). Other participants viewed the role of coaches as being about reinforcing the values that parents had taught their children. This sentiment was conveyed when Coach 5 described that his role was to take what parents had taught and further refine those values, explaining:

> I think the big thing with the early stages, it is the parent… is kind of a reflection of what the kid will be and the kind of the values that come from the parents usually trickle down

> to the kid…. So then they want a new voice to kind of show them a way and that new voice comes down to the coach and their increased kind of role in contributing to that.

In addition to instilling values, building meaningful relationships with others in sport was an important part of building the foundation of contribution. Creating and maintaining meaningful relationships between coaches and athletes was seen as a way for coaches to better understand what young athletes may need to learn and what their interests were which may facilitate later contribution. These coach-athlete relationships were deeply valued by coaches and athletes. One athlete described the most impactful relationship in his life as the relationship he developed with one of his youth football coaches who later coached him again in high school. He said, "I think that is kind of the biggest impact on my life, which is having that personal relationship. And knowing that that was built from his coaching of me, kind of helps me steer towards coaching others as well" (Ath5). Similarly, a parent shared how a coach who spent time with her child and her child's teammates helped create a relationship that formed the start of a pathway to contribution:

> And it's probably the time that wasn't being coached where they played those games or [coach] was scared of the mice or, you know, eating together and whatever that I think that's what solidified that relationship…. [Son] even came back and helped coach because [coach] asked him if he would be willing to. (P3)

Finally, by participating in youth sport, young athletes were surrounded by examples of contribution. These examples included parents serving on boards as well as coaches and administrators who filled their roles on a voluntary basis. These examples by others in youth sport helped make contribution tangible for athletes and provided them with examples of

different types of contribution. Parent 4 explained how she was modeling behaviour that she hoped to see from her daughter by actively volunteering in her daughter's biathlon club:

> We're trying to model a behaviour and a commitment to a group that we get so much enjoyment out of. I'm hoping that as she grows, she continues to find ways to be involved in activities that are meaningful to her.

Another parent used his coaching as an example for his son who later started coaching. Athlete 4 explained, "… my dad coached us all the way up.… I have younger sister as well, so when dad started coaching her I would usually stick around and help out." The value of surrounding youth with examples of contribution was recognized by all participants. Coaching was a highly visible example of contribution for youth to follow. This was highlighted by Coach 3 who explained how he hoped his volunteer coaching would be an example for his athletes, "I think leading by example is a good one. Practice what you preach and you know, volunteer, be a good person, and make sure that you contribute before you ask someone else to." Administrators were also conscious of role modeling contribution for young athletes in their programs. Although she lacked the technical knowledge required to coach soccer, one administrator explained how she took her passion for soccer and found another way to be a role model. She explained, "I can contribute with what I can do. I'm a very good administrator. And I hope that's kind of role models if you have skills, use them to make things better" (Ad2).

Stage 2: Initial Contribution

The second stage of developing contribution through sport centred on young athletes' initial contribution experiences and their perceptions of these experiences. However, many youth athletes required encouragement or an invitation from an adult with whom they had built a relationship before they engaged in contribution. Being encouraged or invited, and the initial

contribution experiences, helped build athletes' competence and confidence. Once young athletes have made their initial contribution experiences, they were likely to continue to engage in contribution regularly in the future if they perceive their initial contribution experiences as being successful or meaningful.

As noted above, youth athletes often needed to receive some kind of encouragement or invitation to engage in contribution from an adult with whom they had formed a relationship. Some athletes may not have thought of a particular kind of contribution without encouragement to do so. Athlete 6 explained how she probably would not have ended up coaching without being asked to, "I wouldn't be coaching if other people didn't push me to or didn't say like, we really need you or someone needs to fill this position. Can you do it?" Similarly, being invited made some athletes realize that they had something of value to give. For example, Athlete 2, who had been coaching and volunteering at speed skating competitions for years, had not thought of doing either before he was asked to do so for the first time:

> Neither of those things were on my radar at all. So I think just the fact that someone's out there saying like, 'Hey, this is the thing that you can do,' is huge and then I think that to asked, like, kind of says you can provide something of value to us…. I think that can have a huge effect on someone, especially if that person, you know, like 13, 14, 15 [years old], and they maybe haven't heard that in their life or in a meaningful way.

For other athletes, being asked to help by someone with whom they had a meaningful relationship made engaging in a contribution activity an easy choice. Athlete 7 had shared one of these experiences in which a board member and assistant coach asked him to help, "She really spearheaded that when she was on our board and I just, I just came along when she was like, 'I need volunteers.' I'm like 'Okay, I'm there.'"

Coaches and parents also recognized how helping young athletes initiate contribution was beneficial to the club. One parent, who also volunteered as a board member for her children's biathlon club, explained how she encouraged her daughter to take what she had learned and make a contribution back to the club. She said, "I sat down with [daughter] saying 'This club is giving you a lot. I think maybe if you learn how to be an instructor, you could give back a little bit'" (P4). Coaches described looking for specific athletes whom they believed would be capable of making a contribution to the club and would likely enjoy the experience. Coach 3 said, "there's that piece of headhunting in there with the people that you think, one, will enjoy it and, two, is a good fit and has something that they can contribute in a positive way." Clubs with structures in place to help transition athletes into forms of contribution, such as coaching or officiating, were also instrumental in helping athletes. For example, Coach 2 explained how their university team created a youth basketball club, in part, to make a built-in pathway for their university players to begin coaching in a safe and supportive environment:

> … the intent was always to get more higher end basketball opportunities for young women, plus coaching jobs for my athletes who are interested in coaching to do it in a safe space where they're not getting fired. … They're going to be mentored, they're going to be educated in coaching studies of best practices, and then giving practical application of such things.

A major reason why these initial contribution experiences were critical to the development of contribution through sport was that they bolstered athletes' confidence and allowed them to further build competence. One athlete shared how being asked to be a junior coach and having the support of mentor coaches and the club administrators prepared her for contribution experiences in the future. She explained:

> [Mentor coaches] gave us tools and tips and ideas of how to work with these younger athletes. So that when I moved away, I was confident in my ability to work with them and then I also had some skills to work with them. (Ath1)

The effect that early contribution experiences could have on athletes' confidence and competence was also noted by coaches and parents. Coach 2 explained, "And I think that they all grow in confidence and ability to articulate clearly what they're trying to get across to a variety of different age groups… I just see them grow in confidence." One parent explained that she believed that the growth in confidence was the result of earning respect from adults the athletes looked up to:

> It's like you gain confidence in being able to contribute. And that confidence is something that you build upon, right? … You can bring people along and now they gain some confidence and respect from their elders and the people they admire, then they sort of feel like they could do it, like they could do something. (P4)

The final important part of developing contribution through sport during the initial contribution stage was how athletes perceived these initial contribution experiences. When contribution experiences were perceived as being successful or meaningful experiences, it was then likely that young athletes would continue to engage in contribution in the future. Volunteering with a faith-based organization which ran sport camps for youth in Haiti helped Athlete 3 realize how enjoyable contribution could be and what motivated her. She explained, "I guess going down there and doing that I realized like how much I love giving back and how much I love connecting with people and realizing that through volleyball, I can connect with so many people." Others related how seeing others share in their passion made for a meaningful experience. Athlete 5 shared how seeing the kids that he coached having a good time made him

want to keep coaching, “Just seeing how much fun they had with the game that I like to play a lot kept me coming back every week.” The importance of initial contribution experiences going well was also reported by coaches and parents. Parent 4 explained how her daughter being paired with a friend to co-coach a younger group of athletes made that initial contribution more positive experience, “They had at least started together and could, you know, get those first few lessons under their belt and feeling comfortable. And that positive experience is just going to make them stick with it.” The impact of positive initial contribution experiences persisted and built a desire to continue contribution well past adolescence. One coach shared the story of a former athlete who continued to display contribution later in life because her initial contribution experiences had been positive:

> And through her experience with both with our junior programs, and then as a player coaching within our junior system, I think she's really developed a love of like giving back. So she now coaches in our summer camps. She's also expanded that to now she works with two different cancer camps. So she takes two weeks off in the summer to go and work with like cancer camps, and just contributed in all of those other ways.” (C4)

Stage 3: Continued Contribution

The third stage was characterized by athletes engaging in contribution activities in a regular or sustained manner. More focus was placed on the beneficiaries of a contribution as opposed to the personal development of athletes themselves. It appeared that informal recognition (as opposed to formal recognitions such as awards or honoraria) was important for keeping athletes motivated to continue engaging in contribution.

At this stage, athletes were driving their own contribution with much less help needed from others than in earlier stages. In the first stage, parents were seen as having greater influence

on the development of contribution; however, by this third stage, coaches were more influential regarding contribution. At this stage, coaches served as mentors or otherwise connected athletes to more opportunities, especially when athletes choose coaching as a contribution. One way this mentorship manifested was helping athletes find the right clubs which would be the best fit for them and their schedules. Coach 4 explained:

> I've said things like club A will promise and deliver where club B will promise and under deliver or … club C travels a lot and club D stays local.… So I would push you to go to this one, because it's going to fit better with your work schedule.

One athlete shared a similar experience where a coach helped her to remain involved in her sport and encouraged her to get further coach training after suffering an injury that ended her playing career. Athlete 6 said, "the provincial coach in Nova Scotia kind of felt sorry for me and wanting to keep me involved and engaged in the sport and encouraged me to apply for this female coaching mentorship program."

The defining feature of the third stage was a focus on providing a benefit to others through contribution. Parents and coaches described how regular contribution eventually led to young athletes engaging in contribution out of a desire to have a positive effect on others. One coach shared how some former athletes continued benefiting their community or sport through contribution after they were no longer playing at a competitive level:

> You see it once they get out, and they all of a sudden they have all of this massive amount of time. So whether they're giving back as coaches or, you know, involved in their community, and you know, they have different ways that they make an impact. (C7)

At this stage, participants often discussed contribution in terms of giving others the kinds of positive sport experiences that they had experienced through their own youth sport participation.

One parent shared how one of her sons had benefited greatly from playing football and that he now coached so that the next generation of athletes could also have positive sport experiences. She said, “for him, it's that level of sport that he wants to share with the kids around him. The love of football, for sure.” (P1). The athlete participants frequently described contribution at this stage in reference to others’ experiences rather than their own. Athlete 6 encapsulated this well when she said:

> I want to be the best role model I can be for other people where I want to help in some capacity. And I want to serve others so that they have a positive experience with the sport, but aren't just becoming better rugby players but becoming better people.… And I think that rugby is such a great ambassador for that… and I really want to see it thrive.

Additionally, the findings showed that continued engagement in contribution at this stage was bolstered when athletes received recognition for their contribution. However, informal recognition rather than awards or formal recognition was believed to be particularly impactful. One athlete explained, “I would just rather not like receive an award or be named, you know? … it's just like if someone says, ‘Hey thanks, this helped’ or if I see someone that I've helped succeeding, like that's the reward” (Ath2). Parents and coaches were also cognizant of how influential informal recognition could be for maintaining athlete contribution. Coach 2 described the effect that this kind of recognition had on athletes he had coached, “When they get acknowledged for it, they light up and they get excited about it.” Similarly, one parent shared how his children appeared to value the informal recognition they received from parents of the children they coached. He explained, “a lot of the parents were really appreciative. And you could just see that he got such good, positive praise, and that just made them feel good. And I know that they are willing to do it again” (P2).

Discussion

The purpose of this study was to create a grounded theory of the development of contribution through sport. The grounded theory depicted the development of contribution through sport over three stages: (a) personal development, (b) initial contribution, and (c) continued contribution. Personal development laid a foundation for later contribution. In the second stage, youth engaged in their initial contribution experiences. If these initial contribution experiences were perceived as successful, youth athletes were likely to continue to engage in contribution activities. Continued contribution focused on providing a benefit to others. Throughout all three stages of the process, coaches and parents stood out as influential individuals; however, the relative influence of the two groups changed as young athletes underwent developmental changes and became more independent and began to drive their own contribution.

Although the stages in this theory are not delimitated by age, it appeared that participants tended to be in late adolescence (i.e., high school) for initial contribution experiences (i.e., stage 2) and emerging adulthood (approximately 18-24 years old; Arnett, 2007) for experiences that corresponded to stage 3. Developmental changes at these stages may provide some insight into why the relative influence of parents changed across the stages in the grounded theory. Bowers et al. (2014) hypothesized that parents of late adolescents who displayed appropriate prosocial behaviour may decrease their level of involvement in and monitoring of their children's lives. Additionally, Arnett (2007) described emerging adulthood as a stage when youth are transitioning into adult roles, becoming more independent, and may be living away from home. Both of these suggest that as young athletes mature and begin to take on more adult roles and

responsibilities, there may be less need for parents to be as involved in their children's contribution activities.

Additionally, the relative influence of coaches on the development of contribution also changed across stages with them becoming more influential in the later stages. In the present study, initial contribution experiences were often instigated by an invitation from a coach. Previous research in sport had found that coaches were key facilitators of contribution by student athletes, in part, by creating opportunities for them to engage in contribution (Deal & Camiré, 216b). Athletes in stage 2 were typically in late adolescence which roughly corresponded with the investment stage of their sport participation (Côté & Vierimaa, 2014), a stage marked by greater investment in a single sport with more deliberate practice. It may be that late adolescent athletes who competed at high performance levels, as was the case for the most athletes in this study, spent more time training and competing than younger athletes. As a result, these athletes may have had more interactions with coaches who may then have a greater influence on the development of contribution through sport.

The grounded theory features several concepts that resemble features of Lerner's 5Cs model of PYD (Lerner et al., 2005). Specifically, some of the 5Cs themselves appear in some manner within the theory. First, building meaningful relationships with others in sport, particularly coaches and parents as previously discussed, was an important part of building the foundation of contribution. This directly relates to the C of connection which has been described as "positive bonds with people and institutions… in which both parties contribute to the relationship" (Lerner et al., 2010, p. 710). The second C featured in the first stage of this theory was character. This was seen through the values that were viewed as being part of the foundation of contribution, namely respect, integrity, and a sense of right and wrong. These values, as well

as appropriate standards for conduct behaviour, have been used to assess character in research using the 5Cs model (Holsen et al., 2017; Lerner et al., 2010). In the second stage of the theory of development of contribution through sport, young athletes were found to build competence and confidence through initial contribution experiences. Caring/compassion was the only one of the 5Cs that did not clearly appear this grounded theory. However, character and caring/compassion have been found to be highly correlated and the high degree of conceptual overlap has prompted researchers in the context of sport to combine them together as a single factor (Côté et al., 2016; Jones et al., 2011; Vierimaa et al.,2012). Previous research has shown that greater levels of PYD, as marked by high levels of the 5Cs, was associated with greater contribution (Geldhof, Bowers, Boyd, et al., 2014; Holsen et al., 2017; Jeličić et al., 2007). This grounded theory provides insight into how the Cs relate to contribution. These findings suggest that the 5Cs may both lead to contribution (e.g., connections with coaches leading to contribution opportunities) and arise from contribution (e.g., initial contribution experiences boosting confidence).

This theory of the development of contribution through sport advances our theoretical understanding of contribution through sport and poses some implications for practice in youth sport. First, building meaningful and supportive relationships between youth and adults has consistently been found to be an important feature of PYD through sport (Holt et al., 2017) as well as specific processes including learning and transferring life skills (Kendellen & Camiré, 2019). The role of adults on the development of contribution through sport has also been found to some extent in previous research in sport. Deal and Camiré (2016b) found that coaches facilitated contribution by student athletes through inviting athletes to help them coach. This same interaction was found in the present study and was critically important for initiating

contribution. These findings provide additional support for the importance of coach-athlete relationships for fostering PYD and PYD outcomes (Camiré, 2015; Deal & Camiré, 2016b; Holt et al., 2017).

Additionally, this theory may be particularly useful as a guiding framework that youth sport administrators and coaches may use to transition athletes into coaching roles. The most frequently discussed contribution that athletes made in the present study was to become coaches themselves. This shows that youth sport can be a fully integrated contribution context. For example, athletes may first be exposed to contribution through the examples set by parents and coaches volunteering with their teams. Later, sport may serve as a familiar context for athletes to have their initial contribution experiences in with the support of trusted adults (e.g., assisting a former coach with coaching a younger age group). Contribution may also continue after athletes cease to compete as they may take on volunteer roles such as coaching, serving on administrative boards, or as officials. It stands to reason that youth sport clubs would likely benefit from developing their own future coaches from their current athletes. If administrators and coaches structure their programs and delivery in ways that foster relationships, instill values, and offer supported opportunities for youth athletes to begin coaching, clubs may be able to develop athletes into coaches who are already familiar with the goals and culture of the club.

These findings and the substantive theory should be considered in light of a few limitations. First, as previously noted, sampling was limited by the COVID-19 pandemic. Although the concepts and categories in the present study were well saturated, broader sampling may have allowed for the development of a theory with even greater saturation. This theory represents an initial examination of the process of the development of contribution through sport and maintained a narrow scope (i.e., development of contribution through sport and the influence of

parents and coaches on the process). There may be additional social, psychological, and environmental influence on this process which may be a direction for future research. For example, a few participants discussed following an older sibling's example and engaging in similar forms of contribution as a sibling; however, there did not appear to be a consistent pattern. It may be useful for future research examining contribution through sport to specifically investigate the roles of siblings and peers as these groups have been found to be influential in other PYD processes such as life skill development (e.g., Hodge et al., 2017). Additionally, only the perspectives of participants who had displayed contribution or influenced contribution of young athletes were obtained. It is possible that athletes who had not engaged in contribution may have been able to provide a different perspective, by serving as negative cases (Patton, 2015). Such divergent perspectives may have confirmed the importance of some influences or identified factors that athletes in this study may have overlooked or taken for granted in the development of contribution through sport.

It should also be noted that characteristics of the athletes and coaches sampled in this study may have had an impact on the results. The athletes included in the present study were over 20 years old on average. Although this sample allowed for retrospective perspectives on aspects of youth sport participation which affected the development of contribution, a sample with younger athletes involved in their initial contribution experiences, for example, may have highlighted different aspects of the development of contribution. Furthermore, the coaches all had experience coaching in high performance (i.e., university) sport contexts. These contexts are often well supported in terms of financial resources and tend to have partnerships with other organizations or internal programs (e.g., junior varsity programs) which may facilitate athletes' contribution activities (e.g., athletic department staff facilitating contribution; Deal & Camiré,

2016b). These high-performance contexts also place athletes and coaches in positions of greater public prominence which may create pressure on athletes in these contexts to be seen to have a positive influence on the community through being role models and engaging in community-based contribution activities. And finally, the participants in the present study were predominantly highly educated (i.e., undergraduate degree or higher) and resided in a major Canadian city. Their access to and experiences of youth sport likely differed meaningfully from individuals from lower socioeconomic families and those in rural communities. Future research is necessary to assess the explanatory power and generalizability of the theory to other youth sport contexts (Smith, 2018).

The grounded theory of the development of contribution through sport created in this study provides greater insight into the development of contribution and the influence that parents and coaches had on the process. The theory showed the development of contribution progressed from personal development, through initial contribution experiences, to continuing contribution. This grounded theory may serve as a foundation for future research and programing intended to promote and facilitate the development of contribution through sport.

References

Arnett, J. J. (2007). Emerging adulthood: What is it and what is it good for? *Child Development Perspectives, 1*(2), 68-73. https://doi.org/10.1111/j.1750-8606.2007.00016.x

Bowers, E. P., Johnson, S. K., Buckingham, M. H., Gasca, S., Warren, D. J. A., Lerner, J. V., & Lerner, R. M. (2014). Important non-parental adults and positive youth development across mid- to late-adolescence: The moderating effect of parent profiles. *Journal of Adolescence, 43*(6), 897-918. https://doi.org/10.1007/s10964-014-0095-x

Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluation criteria. *Qualitative Sociology, 13*(1), 3-21. https://doi.org10.1515/zfsoz-1990-0602

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Sage.

Côté, J., Turnnidge, J., & Vierimaa, M. (2016). A personal assets approach to youth sport. In K. Green & A. Smith (eds.) *Routledge handbook of youth sport*, 243–256. Routledge.

Côté, J., & Vierimaa, M. (2014). The developmental model of sport participation: 15 years after its first conceptualization. *Science & Sports, 29S*, S63-S69. https://dx.doi.org/10.1016/j.scispo.2014.08.133

Cunningham, G. B., & Singer, J. N. (2010). "You'll face discrimination wherever you go": Student athletes' intentions to enter the coaching profession. *Journal of Applied Social Psychology, 40*(7), 1708-1727. https://doi:10.1111/j.1559-1816.2010.00636.x

Deal, C. J., & Camiré, M. (2016a). An examination of university student-athletes' motivations to contribute. *Journal of College and Character, 17*(2), 116-129. https://doi.org/10.1080/2194587X.2016.1159227

Deal, C. J., & Camiré, M. (2016b). University student-athletes' experiences of facilitators and barriers to contribution: A narrative account. *The Qualitative Report, 21*, 2087-2102. http://nsuworks.nova.edu/tqr/vol21/iss11/11

Deal, C. J., Dunn, J. G. H., Jørgensen, H., Sivak, A., & Holt, N. L. (2021). Defining contribution: A scoping review [Manuscript submitted for publication].

Deal, C. J., & Holt, N. L. (in press). Coaches' perspectives on contribution. *International Journal of Sport and Exercise Psychology*. https://doi.org/10.1080/1612197X.2021.1956568

Gayles, J. G., Rockenbach, A. B., & Davis, H. A. (2012). Civic responsibility and the student athlete: Validating a new conceptual model. *The Journal of Higher Education, 83*(4), 535-557. https://doi.org/10.1353/jhe.2012.0024

Geldhof, G. J., Bowers, E. P., Boyd, M. J., Muller, M. K., Napolitano, C. M., Schmid, K. L., Lerner, J. V., & Lerner, R. M. (2014). Creation of short and very short measures of the five Cs of positive youth development. *Journal of Research on Adolescence, 24*(1), 163-176. https://doi.org/10.1111/jora.12039

Geldhof, G. J., Bowers, E. P., Mueller, M. K., Napolitano, C. M., Callina, K. S., & Lerner, R. M. (2014). Longitudinal analysis of a very short measure of positive youth development. *Journal of Youth and Adolescence, 43*(6), 933-949. https://doi.org/10.1007/s10964-014-0093-z

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine de Gruyter.

Green, J. & Thorogood, N. (2004). *Qualitative methods for health research*. Sage.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp.105-117). Sage.

Hodge, C. J., Kanters, M. A., Forneris, T., Bocarro, J. N., & Sayre-McCord, R. (2017). A family thing: Positive youth development outcomes of a sport based like skills program. *Journal of Parks and Recreation Administration, 35*(1), 34-50. https://doi.org/10.18666/JPRA-2017-V35-11-6840

Hoffman, J., Kihl, L., & Browning, A. (2015). Civic engagement and activism: Do college students and college athletes differ? *Journal of College and Character, 16*(2), 75-89. https://doi.org/10.1080/2194587X.2015.1028315

Holsen, I., Geldho, J., Larsen, T., & Aardal, E. (2017). The give Cs of positive youth development in Norway: Assessment and associations with positive and negative outcomes. *Behavioral Development, 41*(5), 559-569. https://doi.org/10.1177/0165025416645668

Holt, N. L. (2016). Doing grounded theory in sport and exercise. In B. Smith and A. C. Sparkes (Eds.) *Routledge handbook of qualitative research in sport and exercise* (pp. 24-36). Routledge.

Holt, N. L., Deal, C. J., & Smyth, C. L. (2016). Future directions for positive youth development through sport. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 229-240). Routledge.

Holt, N. L., Knight, C. J., & Tamminen, K. A. (2012). Grounded theory. In K. Armour and D. Macdonald (Eds.), *Research methods in physical education and youth sport*. Routledge.

Holt, N. L., Neely, K. C., Slater, L. G., Camiré, M., Côté, J., Fraser-Thomas, J., MacDonald, D., Strachan, L., & Tamminen, K. A. (2017). A grounded theory of positive youth

development through sport based on results from a qualitative meta-study. *International Review of Sport and Exercise Psychology, 10*(1), 1-49. https://doi.org/10.1080/1750984X.2016.1180704

Holt, N. L., Pankow, K., Ormond, I., Jørgensen, H., Deal, C. J., & Pynn, S. R. (2021). Grounded theory. *International Review of Sport and Exercise Psychology* [Manuscript submitted for publication].

Jeličić, H., Bobek, D., Phelps, E. D., Lerner, J. V., & Lerner, R. M. (2007). Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H Study of Positive Youth Development. *International Journal of Behavioral Development, 31*(3), 263–273. https://doi.org/10.1177/0165025407076439

Kendellen, K., & Camiré, M. (2019). Applying in life the skills learned in sport: A grounded theory. *Psychology of Sport and Exercise, 40*, 23-32. https://doi.org/10.1016/j.psychsport.2018.09.002

Lally, P. S., & Kerr, G. A. (2005). The career planning, athletic identity, and student role identity of intercollegiate student athletes. *Research Quarterly for Exercise and Sport, 76*(3), 275-285. https://doi.org/10.1080/02701367.2005.10599299

Lerner, R. M., Brentano, C., Dowling, E. M., & Anderson, P. M. (2002). Positive youth development: Thriving as the basis of personhood and civil society. *New Directions for Youth Development, 95*, 11-33.

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172-180. https://doi.org/10.1207/S1532480XADS0703_8

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17-71. https://doi.org/10.1177/0272431604272461

Lerner, R. M., Lerner, J. V., von Eye, A., Bowers, E. P., & Lewin-Bizan, S. (2011). Individual and contextual bases of thriving in adolescence: A view of the issues. *Journal of Adolescence, 34*(6), 1107-1114. https://doi.org/10.1016/j.adolescence.2011.08.001

Lerner, R.M., von Eye, A., Lerner, J. V., Lewin-Bizan, S., & Bowers, E. P. (2010). Special issue introduction: The meaning and measurement of thriving: A view of the issues. *Journal of Youth and Adolescence, 39*, 707-719. https://doi.org/10.1007/s10964-010-9531-8

Mayan, M. J. (2009). *Essentials of qualitative inquiry*. Left Coast Press.

Neely, K. C., Dunn, J. G., McHugh, T. L. F., & Holt, N. L. (2016). The deselection process in competitive female youth sport. *The Sport Psychologist, 30*(2), 141-153. https://doi.org/10.1123/tsp.2015-0044

Neely, K. C., & Holt, N. L. (2014). Parents' perspectives on the benefits of sport participation for young children. *The Sport Psychologist, 28*(3), 255-268. https://doi.org/10.1123/tsp.2013-0094

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.

Pierce, S., Gould, D., & Camiré, M. (2017). Definition and model of life skills transfer. *International Review of Sport and Exercise Psychology, 10*(1), 186-211. https://doi.org/10.1080/1750984X.2016.1199727

Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health, 10*(1), 137–149. https://doi.org/10.1080/2159676X.2017.1393221.

Weed, M. E. (2009). Research quality considerations for grounded theory research in sport & exercise psychology. *Psychology of Sport and Exercise, 10*(5), 502-510. https://doi.org/10.1016/j.psychsport.2009.02.007

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner, R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence, 39*(7), 736-750. https://doi.org/10.1007/s10964-010-9541-6

CHAPTER 5. General Discussion

General Discussion

The overall purposes of this dissertation were to define the term contribution and examine the process by which contribution may be developed among youth athletes through sport. To this end, the research was guided by three research questions: (a) what properties are associated with and define contribution? (b) what does contribution mean to youth sport stakeholders? and (c) how do youth athletes develop contribution through involvement in the context of sport? These questions, and the overall objectives of this dissertation, were addressed through three studies. In study 1, the properties associated with contribution were identified and a theoretical definition of contribution was established through a scoping review that included consultation with expert researchers. In study 2, youth sport coaches' perspectives on contribution through sport were examined and their feedback on the theoretical definition of contribution established in the first study was obtained. In study 3, a grounded theory methodology was utilized to create a grounded theory of the process through which contribution is developed through sport.

Theoretical Contributions

The findings of this dissertation contained a few notable theoretical contributions. First, two definitions of contribution were created that clearly present the meaning of the term contribution. The theoretical definition defined contribution in a thoroughly detailed academically oriented theoretical sense whereas the practical definition defined the term in a succinct form that resonated with non-academics. Contribution had been used as a technical term in the literature, which was confusing or unclear in the absence of a precise definition or clear examples (Dohme et al., 2017; Lourenco, 2001). Furthermore, descriptions of contribution had evolved over several years of published work (e.g., Hershberg et al., 2015; Lerner et al., 2003;

Lerner et al., 2005) but had not been adequately collated in single concise definition. The theoretical definition of contribution created in this dissertation addressed these issues and provided a clear, unambiguous point of reference for contribution that will facilitate and improve academic discourse (Watt & van den Berg, 2002).

Study 2 built upon study 1 through continued examination of the theoretical definition of contribution. The theoretical definition established in study 1 was intended to clarify the meaning of an academic term for use academics in research and scholarship. However, for the definition to be most useful, it needed to also encompass what the term contribution meant to lay people such as coaches and other stakeholders in youth sport. Using focus groups with youth sport coaches, it was concluded that the theoretical definition of contribution did encompass the core meaning of contribution (i.e., contribution was intentional acts that benefit others). However, a more succinct practical definition would be better to use when working with or sharing research findings with non-academics. Thus, collectively study 1 and study 2 answered the question of what is contribution in the context of sport and provided two useful definitions (i.e., a theoretical definition for academic contexts and a practical definition for non-academic contexts) for future researchers to utilize.

Another theoretical contribution of this dissertation pertains to how contribution can be developed through sport. Prior to this work, there had been little research on contribution in the context of sport and no studies had examined how contribution was developed through sport. The development of contribution through sport was found to be a three-stage process, with sport being a context that can both introduce youth to contribution and remain a context for lifelong contribution. The theory produced in study 3 included a number of factors in youth sport that have been related to contribution (e.g., four of the 5Cs; Holsen et al., 2017; Jeličić et al., 2007;

Lerner et al., 2005) and facilitative of PYD more broadly, such as building appropriate and supportive youth-adult relationships (e.g., Holt et al., 2017). In addition to providing further support for previously identified factors important for the development PYD and contribution, study 3 provided insight into *how* these factors led to the development of contribution through sport.

The findings of this dissertation also showed that contribution is an inherently social concept. Social influences and experiences were important for the development of contribution. The findings also clearly showed that having a positive effect on others or providing some benefit to others was critical component of both definitions and a key characteristic of the continued contribution in the third stage of the grounded theory. Some scholars have been critical of PYD research in sport as being overly focused on individual development and failing to attend to how youth sport could be leveraged to benefit the wider community (Coakley, 2016). The findings of this dissertation strongly suggest that contribution is a promising avenue by which the individual development that occurs in the context of youth sport can also have a positive effect on the broader community. Additionally, the findings of this dissertation build upon previous research on contribution in the context of sport highlighting the role others (i.e., coaches, parents, and administrators) may have on the development of contribution (Deal & Camiré, 2016a, 2016b).

Practical Implications

This research offers a number of practical implications. First, having a clear and concise practical definition of contribution may be useful for youth sport programs and administrators to help communicate program goals or missions in a way that encompasses both service internal to the program and service externally to the broader community. Effective communication,

including having clear program goals or mission statements to inform program evaluation can help youth sport programs secure more funding through grants and develop partnerships with other organizations (Parent & Harvey, 2017).

Relatedly, the findings suggest that youth sport stakeholders can promote and facilitate contribution among young athletes by creating pathways or structures to connect young athletes with to opportunities for contribution and support them in these opportunities. One way this may be done is though the formation of partnerships with other community organizations. If youth sport administrators work with partners to create structures that provide young athletes with contribution opportunities and support when getting started, it may be possible to get more young athletes to engage in contribution outside the context of sport through invitations or suggestions to work with partnering organizations. However, given that many community sport organizations lack the capacity to make such partnerships, it may be easier for sport administrators and coaches to focus on creating internal pathways. One of the common examples of contribution in this dissertation was athletes transitioning into coaching roles. Whether it takes the form of a formal program in which youth sport organizations pay for coaching courses and offer a junior coaching program, or less formally with individual coaches asking older athletes to help coach younger athletes, coaches and administrators can help athletes develop contribution within sport itself.

Strengths and Limitations

The strengths and limitations of the individual studies are discussed in the relevant sections of this dissertation; however, there are a few overarching strengths and limitations to discuss. First, one of the strengths of the dissertation as a whole was the inclusion of both academics and laypeople in collaborative research designs. Consulting both of these groups

resulted in a theoretical definition of contribution that resonated with both academics and coaches, as well as a less complex practical definition that was meaningful to youth sport coaches. These definitions will facilitate future research on contribution by providing a theoretical definition to base academic discussion and critique upon and an efficient means of communicating with other sport stakeholders using the practical definition. Additionally, as a part of the grounded theory methodology adopted for study 3, the developing theory and concepts arising from previous interviews were shared with research participants. In this way, research participants not only provided data, but also directed analysis as they commented on developing concepts and questioned diagrams of the theory. A second related strength was that perspectives of a variety of sport stakeholders were garnered throughout the research within this dissertation. This variety of perspectives served to triangulate data and bolster confidence in the findings through consensus among academics, administrators, athletes, coaches, and parents. This was most clearly evident in study 3 where commonalities were found between administrators, athletes, coaches, and parents talking about youth from a variety of sports regarding how contribution can be developed through sport. This type of congruence between different stakeholders from a variety of specific sport contexts enhances the naturalistic generalizability of the findings (Smith, 2018).

Although a range of perspectives from different stakeholders was a strength of this dissertation, some specific homogeneities among participants pose a limitation to the dissertation. The participants in all the studies were overwhelmingly individuals with higher education credentials residing in well-developed urban areas and with access to well established sport programing and sport infrastructure. Additionally, the majority manuscripts included in the scoping review in study 1 were conducted by researchers in WEIRD (Western, Educated,

Industrialized, Rich, and Democratic) countries and drew on samples of participants from WEIRD countries. This reflects a trend in psychology research that most findings are based on samples from WEIRD countries (Henrich et al., 2010) and the findings of this dissertation do not provide any additional understanding of contribution in other contexts. As a result, further research is needed to understand how contribution and the development of contribution may differ in other contexts.

Future Research

Several directions for future research arise from this dissertation. The first direction for future research relates directly to the overarching limitation of this dissertation. There has been little research on contribution in sport to date, and all of it has been in North American contexts. There remains a need to examine contribution in diverse youth sport contexts and future research should examine contribution and the development process in a variety of contexts including non-Western nations and lower socioeconomic communities. Additionally, researchers have not done well accounting for non-contributors (i.e., those individuals who do not engage in contribution). Although recruiting participants who represent negative cases may be difficult, with care it should be possible for researchers to do so and gain a greater understanding of the reasons why non-contributors do not engage in contribution and/or the constraints and barriers that prevent them from doing so.

Another line of research arising from the findings of this dissertation concerns promoting the development of contribution through sport. The findings from this research have indicated what contribution is, that contribution can develop through sport, and identified several factors that influence the process of developing contribution through sport. There is potential for researchers to develop, deliver, and evaluate coach education materials intended to help coaches

better facilitate the development of contribution through sport. Similarly, researchers can work with sport program administrators and coaches to design and evaluate programing specifically intended to promote contribution among athletes. Either of these avenues will benefit from leveraging the findings from this dissertation. Specifically, understanding the theoretical definition of contribution and the properties therein will inform the design, implementation, and evaluation of programs and material. For example, the theoretical definition of contribution specifies that contribution behaviours are contextually specific. This suggests that researchers working with a sport program to encourage contribution among athletes should start by working with stakeholders in the program to identify what specific contribution behaviours would be desirable in the context of specific sport programs and the broader communities. Additionally, the practical definition of contribution may prompt sport stakeholders and research participants to think of relevant behaviours without the risk of overwhelming or confusing them with the full theoretical definition. And finally, theory of the development of contribution through sport provides promising targets for implementing interventions such as training coaches to actively invite athletes to make a contribution or encouraging youth sport programs to create cross-age coaching opportunities and to provide coach education to athletes who participate in such opportunities.

Conclusion

In conclusion, this dissertation has furthered the fields of sport psychology and PYD by addressing three fundamental questions concerning (a) what properties are associated with and define contribution? (b) what does contribution mean to youth sport stakeholders? and (c) how do youth athletes develop contribution through involvement in the context of sport? By addressing these questions, a theoretical definition of contribution was established, a practical

definition that resonated with sport stakeholders was created, and a number of factors that influence the process through which contribution may be developed through sport were identified in a grounded theory. These definitions of contribution and the grounded theory of the development of contribution through sport developed through this dissertation research deepen our understanding of contribution and will provide a solid foundation for future researchers and practitioners to build upon.

References

Coakley, J. (2016). Positive youth development through sport: Myths, beliefs, and realities. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 21-33). Routledge.

Deal, C. J., & Camiré, M. (2016a). An examination of university student-athletes' motivations to contribute. *Journal of College and Character, 17*(2), 116-129. https://doi.org/10.1080/2194587X.2016.1159227

Deal, C. J., & Camiré, M. (2016b). University student-athletes' experiences of facilitators and barriers to contribution: A narrative account. *The Qualitative Report, 21*, 2087-2102. http://nsuworks.nova.edu/tqr/vol21/iss11/11

Dohme, L.-C., Barkhouse, S., Piggott, D., & Morgan, G. (2017), Categorising and defining popular psychological terms used within the youth athlete talent development literature: A systematic review. *International Review of Sport and Exercise Psychology, 10*(1), 134-163. https://doi.org/10.1080/1750984X.2016.1185451

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*(2-3), 61-83. https://doi.org/10.1017/S0140525X0999152X

Hershberg, R. M., Johnson, S. K., DeSouza, L. M., Hunter, C. J., & Zaff, J. (2015). Promoting contribution among youth: Implications from positive youth development research for youth development programs. In E. P. Bowers, G. J. Geldhof, S. K. Johnson, L. J. Hillard, R. M. Hershberg, J. V. Lerner, & R. M. Lerner (Eds.), *Promoting Positive Youth Development: Advancing Responsible Adolescent Development*. Springer. https://doi.org/10.1007/978-3-319-17166-1_11

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172-180. https://doi.org/10.1207/S1532480XADS0703_8

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17-71. https://doi.org/10.1177/0272431604272461

Lourenco, O. (2001). The danger of words: A Wittgensteinian lesson for developmentalists. *New Ideas in Psychology, 19*(2), 89-115. https://doi.org/10.1016/S0732-118X(01)00002-2

Parent, M. M., & Harvey, J. (2017). A partnership-based evaluation of a community-based youth sport and physical activity programme. *Sport in Society, 20*(1), 7-29. https://doi.org/10.1080/17430437.2015.1124561

Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health, 10*(1), 137-149. https://doi.org/10.1080/2159676X.2017.1393221

Watt, J. H., & van den Berg, S. (2002). Elements of scientific theories: Concepts and definitions. In J. Watt & S. van den Berg (Eds.), *Research methods for communication science* (pp. 11-22). Allyn & Bacon.

Works Cited

4-H National Headquarters. (2011). *What is a 4-H club*? https://nifa.usda.gov/sites/default/files/resource/What%20is%20a%20Club%20v.7-11.pdf

Adler, R. P., & Goggin, J. (2005). What do we mean by "civic engagement"? *Journal of Transformative Education, 3*(3), 236-253. https://doi.org10.1177/1541344605276792

Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement, 45*(1), 131-142. https://doi.org/10.1177/0013164485451012

Anderson, S., Allen, P., Peckham, S., & Goodwin, N. (2008). Asking the right questions: Scoping studies in the commissioning of research on the organisation and delivery of health services. *Health Research Policy and Systems, 6*(7), 1-12. https://doi.org/10.1186/1478-4505-6-7

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19-32. https://doi.org/10.1080/1364557032000119616

Arnett, J. J. (2007). Emerging adulthood: What is it and what is it good for? *Child Development Perspectives, 1*(2), 68-73. https://doi.org/10.1111/j.1750-8606.2007.00016.x

Arnold, M. E. (2018). From context to outcomes: A thriving model for 4-H youth development programs. *Journal of Human Sciences and Extension, 6*(1), 141-160. https://www.jhseonline.com/article/view/653

Arnold, M. E., & Gagnon, R. J. (2019). Illuminating the process of youth development: The mediating effect of thriving on youth development program outcomes. *Journal of*

Human Sciences and Extension, 7(3), 24-51. https://www.jhseonline.com/article/view/901

Arnold, M. E., & Gagnon, R. J. (2020). Positive youth development theory in practice: An update on the 4-H thriving model. *Journal of Youth Development, 15*(5), 1-23. https://doi.org/10.5195/jyd.2020.954

Babiak, K., Mills, B., Tainsky, S., & Juravich, M. (2012). An investigation into professional athlete philanthropy: Why charity is part of the game. *Journal of Sport Management, 26*(2), 159-176. https://doi.org/10.1123/jsm.26.2.159

Balsano, A. B. (2005). Youth civic engagement in the United States: Understanding and addressing the impact of social impediments on positive youth and community development. *Applied Developmental Science, 9(4)*, 188-201. https://doi.org/10.1207/s1532480xads0904_2

Bebiroglu, N., Geldhof, G. J., Pinderhughes, E. E., Phelps, E., & Lerner, R. M. (2014). From family to society: The role of perceived parenting behaviors in promoting youth civic engagement. *Parenting: Science and Practice, 13*(3), 153-168. https://doi.org/10.1080/15295192.2013.756352

Benson, P. L. (1997). *All kids are our kids: What communities must do to raise caring and responsible children and adolescents*. Jossey-Bass.

Bowers, E. P., Johnson, S. K., Buckingham, M. H., Gasca, S., Warren, D. J. A., Lerner, J. V., & Lerner, R. M. (2014). Important non-parental adults and positive youth development across mid- to late-adolescence: The moderating effect of parent profiles. *Journal of Adolescence, 43*(6), 897-918. https://doi.org/10.1007/s10964-014-0095-x

Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research, 4*, 1-8. https://doi.org/10.1177/2333393617742282

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589-597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In N. Smith & A. C. Sparkes (Eds.), *International handbook on qualitative research in sport and exercise* (pp. 191-218). Routledge.

Bruner, M. W., Balish, S. M., Forrest, C., Brown, S., Webber, K., Gray, E., McGuckin, M., Keats, M. R., Rehman, L., & Shields, C. A. (2017). Ties that bond: Youth sport as a vehicle for social identity and positive youth development. *Research Quarterly for Exercise and Sport, 88*(2), 209-214. https://doi.org/10.1080/02701367.2017.1296100

Bruner, M. W., Boardley, I. D., & Côté, J. (2014). Social identity and prosocial and antisocial behavior in youth sport. *Psychology of Sport and Exercise, 15*(1), 56-64. https://doi.org/10.1016/j.psychsport.2013.09.003

Carson Sackett, S., Gano-Overway, L. A. (2017). Coaching life skills development: Best practices and high school tennis coach exemplar. *International Sport Coaching Journal, 4* (2), 206-219. https://doi.org/10.1123/iscj.2016-0080

Casey, M. A., Kruegar, R. A. (2000). *Focus groups: A practical guide for applied research* (3rd ed.). Sage.

Causgrove Dunn, J., Dunn, J. G. H., & Bayduza, A. (2007). Perceived athletic competence, sociometric status, and loneliness in elementary school children. *Journal of Sport Behavior, 30*(3), 249-269.

Chou, K.-L. (1998). Effects of age, gender, and participation in volunteer activities on the altruistic behavior of Chinese adolescents. *The Journal of Genetic Psychology, 159*(2), 195-201. https://doi.org/10.1080/00221329809596145

Christmas, C. M., & Khanlou, N. (2018). Defining youth resilience: A scoping review. *International Journal of Mental Health and Addiction, 17*(3), 731-742. https://doi.org/10.1007/s11469-018-0002-x

Coakley, J. (2011). Youth sports: What counts as "positive development?" *Journal of Sport and Social Issues, 35*(3), 306-324. https://doi.org/10.1177/0193723511417311

Coakley, J. (2016). Positive youth development through sport: Myths, beliefs, and realities. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 21-33). Routledge.

Coie, J. D., & Dodge, K. A. (1983). Continuities and changes in children's social status: A five-year longitudinal study. *Merrill-Palmer Quarterly, 29*(3), 261-282. http://www.jstor.org/stable/23086262

Cooper, H. M., & Lindsay, J. L. L. (1998). *Research synthesis and meta-analysis*. Sage.

Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluation criteria. *Qualitative Sociology, 13*(1), 3-21. https://doi.org10.1515/zfsoz-1990-0602

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Sage.

Côté, J., Bruner, M. W., Erickson, K., Strachan, L., & Fraser-Thomas, J. (2010). Athlete development. In J. Lyle and C. Cushion (Eds.), *Sport coaching: Professionalism and practice* (pp. 63-79). Elsevier.

Côté, J., Turnnidge, J., & Vierimaa, M. (2016). A personal assets approach to youth sport. In K. Green & A. Smith (eds.) *Routledge handbook of youth sport*, 243–256. Routledge.

Côté, J., & Vierimaa, M. (2014). The developmental model of sport participation: 15 years after its first conceptualization. *Science & Sports, 29S*, S63-S69. https://dx.doi.org/10.1016/j.scispo.2014.08.133

Cox, R. H., Martens, M. P., & Russell, W. D. (2003). Measuring anxiety in athletics: The revised competitive state anxiety inventory-2. *Journal of Sport & Exercise Psychology*, *25*(4), 519-533. https://doi.org/10.1123/jsep.25.4.519

Crowley, D. (2007). *Summary of youth engagement strategy*. Social Capital.

Cunningham, G. B., & Singer, J. N. (2010). "You'll face discrimination wherever you go": Student athletes' intentions to enter the coaching profession. *Journal of Applied Social Psychology, 40*(7), 1708-1727. https://doi.org/10.1111/j.1559-1816.2010.00636.x

Damon, W. (2004). What is positive youth development? *Annals of the American Academy of Political and Social Science, 591*(1), 13-24. https://doi.org/10.1177/0002716203260092

Danish, S., Forneris, T., Hodge, K., & Heke, I. (2004). Enhancing youth development through sport. *World Leisure Journal, 46*(3), 38-49. https://doi.org/10.1080/04419057.2004.9674365

Deal, C. J., & Camiré, M. (2016a). An examination of university student-athletes' motivations to contribute. *Journal of College and Character, 17*(2), 116-129. https://doi.org/10.1080/2194587X.2016.1159227

Deal, C. J., & Camiré, M. (2016b). University student-athletes' experiences of facilitators and barriers to contribution: A narrative account. *The Qualitative Report, 21*, 2087-2102. http://nsuworks.nova.edu/tqr/vol21/iss11/11

Deal, C. J., Dunn, J. G. H., Jørgensen, H., Sivak, A., & Holt, N. L. (2021). Defining contribution: A scoping review [Manuscript submitted for publication].

Deal, C. J., & Holt, N. L. (in press). Coaches' perspectives on contribution. *International Journal of Sport and Exercise Psychology*. https://doi.org/10.1080/1612197X.2021.1956568

Denscombe, M. (2007). *The good research guide for small-scall social research project* (3rd ed.). McGraw-Hill.

DiFiori, J. P., Benjamin, H. J., Brenner, J. S., Gregory, A., Jayanthi, N., Landry, G. L., & Luke, A. (2014). Overuse injuries and burnout in youth sports: A position statement from the American Medical Society for Sports Medicine. *British Journal of Sports Medicine, 48*(4), 287-288. https://doi.org/10.1136/bjsports-2013-093299

Dohme, L.-C., Barkhouse, S., Piggott, D., & Morgan, G. (2017). Categorising and defining popular psychological terms used within the youth athlete talent development literature: A systematic review. *International Review of Sport and Exercise Psychology, 10*(1), 134-163. https://doi.org/10.1080/1750984X.2016.1185451

Dunn, J. G. H., Bouffard, M., & Rogers, W. T. (1999). Assessing item content-relevance in sport psychology scale-construction research: Issues and recommendations. *Measurement in Physical Education and Exercise Science, 3*(1), 15-36. https://doi.org/10.1207/s1537841mpee0301_2

Forneris, T., Camiré, C., & Williamson, R. (2015). Extracurricular activity participation and the acquisition of developmental assets: Differences between involved and noninvolved Canadian high school students. *Applied Developmental Science, 19*(1), 47-55. https://doi.org/10.10888691.2014.980580

Francis, J. E. (2011). The functions and norms that drive university student volunteering. *International Journal of Nonprofit and Volunteer Sector Marketing, 16*(1), 1-12. https://doi.org/10.1002/nvsm.390

Fraser-Thomas, J.L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education and Sport Pedagogy, 10*(1), 19-40. https://doi.org/10.1080/1740898042000334890

Frensch, K. M., Pratt, M. W., & Norris, J. E. (2007). Foundations of generativity: Personal and family correlates of emerging adults' generative life-story themes. *Journal of Research in Personality, 41*(1), 45-62. https://doi.org/10.1016/j.jrp.2006.01.005

Gayles, J. G., Rockenbach, A. B., & Davis, H. A. (2012). Civic responsibility and the student athlete: Validating a new conceptual model. *The Journal of Higher Education, 83*(4), 535-557. https://doi.org/10.1353/jhe.2012.0024

Geldhof, G. J., Bowers, E. P., Boyd, M. J., Muller, M. K., Napolitano, C. M., Schmid, K. L., Lerner, J. V., & Lerner, R. M. (2014). Creation of short and very short measures of the five Cs of positive youth development. *Journal of Research on Adolescence, 24*(1), 163-176. https://doi.org/10.1111/jora.12039

Geldhof, G. J., Bowers, E. P., Mueller, M. K., Napolitano, C. M., Callina, K. S., & Lerner, R. M. (2014). Longitudinal analysis of a very short measure of positive youth development.

Journal of Youth and Adolescence, 43(6), 933-949. https://doi.org/10.1007/s10964-014-0093-z

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine de Gruyter.

Gould, D., & Carson, S. (2008). Life skill development through sport: Current status and future directions. *International Review of Sport and Exercise Psychology, 1*(1), 58-78. https://doi.org/10.1080175098407018345 73

Green, J. & Thorogood, N. (2004). *Qualitative methods for health research*. Sage.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp.105-117). Sage.

Hansen, D. M., & Larson, R. (2002). *The youth experience* survey. Unpublished manuscript, University of Illinos at Urbana-Champaign.

Hansen, D. M., & Larson, R. (2005). *The youth experience survey 2.0: Instrument revisions and validity testing*. Unpublished manuscript, University of Illinois at Urbana-Champaign. http://youthdev.illinois.edu/wp-content/uploads/2013/11/YES-2.0-Instrument.pdf

Harre, N. (2007). Community service or activism as an identity project for youth. *Journal of Community Psychology, 35*(6), 711-724. https://doi.org/10.1002/jcop.20174

Herbison, J. D., Vierimaa, M., Côté, J., & Martin, L. J. (2018). The dynamic nature of connection and its relation to character in youth sport. *International Journal of Sport and Exercise Psychology, 17*(6), 568-577. https://doi.org/10.1080/1612197X.2017.1423507

Hershberg, R. M., Johnson, S. K., DeSouza, L. M., Hunter, C. J., & Zaff, J. (2015). Promoting contribution among youth: Implications from positive youth development research for youth development programs. In E. P. Bowers, G. J. Geldhof, S. K. Johnson, L. J.

Hillard, R. M. Hershberg, J. V. Lerner, & R. M. Lerner (Eds.), *Promoting Positive Youth Development: Advancing Responsible Adolescent Development*. Springer. https://doi.org/10.1007/978-3-319-17166-1_11

Hodge, C. J., Kanters, M. A., Forneris, T., Bocarro, J. N., & Sayre-McCord, R. (2017). A family thing: Positive youth development outcomes of a sport based like skills program. *Journal of Parks and Recreation Administration, 35*(1), 34-50. https://doi.org/10.18666/JPRA-2017-V35-11-6840

Hoffman, J., Kihl, L., & Browning, A. (2015). Civic engagement and activism: Do college students and college athletes differ? *Journal of College and Character, 16*(2), 75-89. https://doi.org/10.1080/2194587X.2015.1028315

Holsen, I., Geldho, J., Larsen, T., & Aardal, E. (2017). The give Cs of positive youth development in Norway: Assessment and associations with positive and negative outcomes. *Behavioral Development, 41*(5), 559-569. https://doi.org/10.1177/0165025416645668

Holt, N. L. (2016). Introduction to the second edition. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 1-4). Routledge.

Holt, N. L. (2016). Doing grounded theory in sport and exercise. In B. Smith and A. C. Sparkes (Eds.) *Routledge handbook of qualitative research in sport and exercise* (pp. 24-36). Routledge.

Holt, N. L., Deal, C. J., & Smyth, C. L. (2016). Future directions for positive youth development through sport. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 229-240). Routledge.

Holt, N. L., Knight, C. J., & Tamminen, K. A. (2012). Grounded theory. In K. Armour and D. Macdonald (Eds.), *Research methods in physical education and youth sport*. Routledge.

Holt, N. L., Neely, K. C., Slater, L. G., Camiré, M., Côté, J., Fraser-Thomas, J., MacDonald, D., Strachan, L., & Tamminen, K. A. (2017). A grounded theory of positive youth development through sport based on results from a qualitative meta-study. *International Review of Sport and Exercise Psychology, 10*(1), 1-49. https://doi.org/10.1080/1750984X.2016.1180704

Holt, N. L., Pankow, K., Ormond, I., Jørgensen, H., Deal, C. J., & Pynn, S. R. (2021). Grounded theory. *International Review of Sport and Exercise Psychology* [Manuscript submitted for publication].

Holt, N. L., Tamminen, K. A., Tink, L. N., & Black, D. E. (2009). An interpretive analysis of life skills associated with sport participation. *Qualitative Research in Sport and Exercise, 1*(2), 160-175. https://doi.org/10.1080/19398440902909017

Jeličić, H., Bobek, D. L., Phelps, E., Lerner, R. M., & Lerner, J. V. (2007). Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H study of positive youth development. *International Journal of Behavioral Development, 31*(3), 263-273. https://doi.org/10.1177/0165025407076439

Jones, G. J., Edwards, M. B., Bocarro, J. N., Bunds, K. S., & Smith, J. W. (2017). An integrative review of sport-based youth development literature. *Sports in Society, 20*(1), 161-179. https://doi.org/10.1080/17430437.2015.1124569

Jones, M. I., Dunn, J. G. H., Holt, N. L., Sullivan, P. J., & Bloom, G. A. (2011). Exploring the '5Cs' of positive youth development in sport. *Journal of Sport Behavior, 34*(3), 250-267.

https://pdfs.semanticscholar.org/77df/3fe03b2ef55470d896e771fdf6cfbde14f9a.pdf?_ga=2.25601405.1166472067.1597626035-853331449.1597626035

Jowett, S., & Ntoumanis, N. (2004). The coach-athlete relationship questionnaire (CART-Q): Development and initial validation. *Scandinavian Journal of Medicine and Science in Sports, 14*(4), 245-257. https://doi.org/10.1111/j.1600-0838.2003.00338.x

Kaplan, A. (1946). Definition and specification of meaning. *The Journal of Philosophy, 43*(11), 281-288. https://doi.org/10.2307/2019221

Kavussanu, M., & Boardley, I. D. (2009). The prosocial and antisocial behavior in sport scale. *Journal of Sport & Exercise Psychology, 31*(1), 97-117. https://doi.org/10.1080/02640414.2013.775473

Kendellen, K. & Camiré, M. (2017). Examining the life skill development and transfer experiences of former high school athletes. *International Journal of Sport and Exercise Psychology, 15*(4), 395-408. https://doi.org/10.1080/1612197X.2015.1114502

Kendellen, K., & Camiré, M. (2019). Applying in life the skills learned in sport: A grounded theory. *Psychology of Sport and Exercise, 40*, 23-32. https://doi.org/10.1016/j.psychsport.2018.09.002

Kruegar, R. A. (1998). *Developing questions for focus groups*. Sage.

Lally, P. S., & Kerr, G. A. (2005). The career planning, athletic identity, and student role identity of intercollegiate student athletes. *Research Quarterly for Exercise and Sport, 76*(3), 275-285. https://doi.org/10.1080/02701367.2005.10599299

Larson, R. (2006). Positive youth development, willful adolescents, and mentoring. *Journal of Community Psychology, 34*(6), 677-689. https://doi.org/10.1002/jcop.20123

Larson, R. W., Hansen, S. M., & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology, 42*(5), 849-863. https://doi.org/10.1037/0012-1649.42.5.849

Lee, O., & Martinek, T. (2013). Understanding the transfer of values-based youth sport program goals from a bioecological perspective. *Quest, 65*(3), 300-312. https://doi.org/10.1080/00336297.2013.791871

Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's Youth*. Sage.

Lerner, R. M., Brentano, C., Dowling, E. M., & Anderson, P. M. (2002). Positive youth development: Thriving as the basis of personhood and civil society. *New Directions for Youth Development, 2002*(95), 11-33. https://doi.org/10.1002/yd.14

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172-180. https://doi.org/10.1207/S1532480XADS0703_8

Lerner, R. M., & Lerner, J. V. (2011). *The positive development of youth: Report of the findings from the first seven years of the 4-H study of positive youth development*. Tufts University.

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17-71. https://doi.org/10.1177/0272431604272461

Lerner, R. M., Lerner, J. V., von Eye, A., Bowers, E. P., & Lewin-Bizan, S. (2011). Individual and contextual bases of thriving in adolescence: A view of the issues. *Journal of Adolescence, 34*(6), 1107-1114. https://doi.org/10.1016/j.adolescence.2011.08.001

Lerner, R.M., von Eye, A., Lerner, J. V., Lewin-Bizan, S., & Bowers, E. P. (2010). Special issue introduction: The meaning and measurement of thriving: A view of the issues. *Journal of Youth and Adolescence, 39*, 707-719. https://doi.org/10.1007/s10964-010-9531-8

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science, 5*(1), 69-78. https://doi.org/10.1186/1748-5908-5-69

Little, R. R. (1993). *What's working for today's youth: The issues, the programs, and the learnings*. Paper presented at the Institute for Children, Youth, and Families Fellows' Colloquium, Michigan State University.

Locke, E. A. (2003). Good definitions: The epistemological foundation of scientific progress. In J. Greenberg (Ed.), *Organizational behavior, state of the science* (pp. 415–444). Lawrence Erlbaum Associates.

Lourenco, O. (2001). The danger of words: A Wittgensteinian lesson for developmentalists. *New Ideas in Psychology, 19*(2), 89-115. https://doi.org/10.1016/S0732-118X(01)00002-2

MacDonald, D. J., Côté, J., Eys, M., & Deakin, J. (2012). Psychometric properties of the youth experience survey with young athletes. *Psychology of Sport and Exercise, 13*(3), 332-340. https://doi.org/10.1016/j.psychsport.2011.09.001

Marsh, H. W. (1994). Sport motivation orientations: Beware of jingle-jangle fallacies. *Journal of Sport & Exercise Psychology*, *16*(4), 365–380. https://doi.org/10.1123/jsep.16.4.365

Martin, N., Camiré, M., & Kramers, S. (2021). Facilitating life skills transfer from sport to the classroom: An intervention assisting a high school teacher-coach. *Journal of Applied Sport Psychology,* 1-24. https://doi.org/10.1080/10413200.2021.1917016

Mayan, M. J. (2009). *Essentials of qualitative inquiry*. Left Coast Press.

McBride, A. M., Benitez, C., & Sherraden, M. (2003). *The forms and nature of civic service: A global assessment* (Research report). Washington University, Center for Social Development.

McBride, A. M., Pritzker, S., Daftary, D., & Tang, F. (2007). Youth service: A comprehensive perspective. *Journal of Community Practice, 14*(4), 71-89. https://doi.org/10.1300/J125v14n04_05

McBride, A. M., & Sherraden, M. (2004). Toward a global research agenda on civic service: Editors' introduction to this special issue. *Nonprofit and Voluntary Sector Quarterly, 33*(*suppl.* 4), 3-7. https://doi.org/10.1177/0899764004269745

Morgan, D. L. (1998). *Planning focus groups*. Sage.

National Research Council and Institute of Medicine. (2002). *Community Programs to Promote Youth Development*. Committee on Community-Level Programs for Youth. J. Eccles and J. A. Gootman, eds. Washington, DC: National Academy Press. http://www.nap.edu/catalog/10022/community-programs-to-promote-youth-development

Neely, K. C., Dunn, J. G., McHugh, T. L. F., & Holt, N. L. (2016). The deselection process in competitive female youth sport. *The Sport Psychologist, 30*(2), 141-153. https://doi.org/10.1123/tsp.2015-0044

Neely, K. C., & Holt, N. L. (2014). Parents' perspectives on the benefits of sport participation for young children. *The Sport Psychologist, 28*(3), 255-268. https://doi.org/10.1123/tsp.2013-0094

Paterson, B. L., Thorne, S. E., Canam, C., & Jillings, C. (2001). *Meta-study of qualitative health research: A practical guide to meta-analysis and meta-synthesis*. Sage.

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.

Pavlova, M. K., Silberseisen, R. K., Ranta, M., & Salmela-Aro, K. (2016). Warm and supportive parenting can discourage offspring's civic engagement in the transition to adulthood. *Journal of Youth and Adolescence, 45*(11), 2197-2217. https://doi.org/10.1007/s10964-016-0511-5

Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues, 58*(3), 447-467. https://doi.org/10.1111/1540-4560.00270

Phelps, E., Zimmerman, S., Warren, A. E. A., Jeličić, H., von Eye, A., & Lerner, R. M. (2009). The structure and developmental course of positive youth development (PYD) in early adolescence: Implications for theory and practice. *Journal of Applied Developmental Psychology, 30*(5), 571-584. https://doi.org/10.1016/j.appdev.2009.06.003

Pierce, S., Gould, D., & Camiré, M. (2017). Definition and model of life skills transfer. *International Review of Sport and Exercise Psychology, 10*(1), 186-211. http://doi.org/10.1080/1750984X.2016.1199727

Pierce, S., Kendellen, K., Camiré, M., & Gould, D. (2018). Strategies for coaching for life skills transfer. *Journal of Sport Psychology in Action*, *9*(1), 11-20. https://doi.org/10.1080/21520704.2016.1263982

Piliavin, J. A., & Grube, J. A. (2002). Role as a resource for action in public service. *Journal of Social Issues, 58*(3), 469–485. https://doi.org/10.1111/0022-4537.t01-1-00027

Pittman, K. J., Irby, M., Tolman, J., Yohalem, N., & Ferber, T. (2003). Preventing problems, promoting development, encouraging engagement: Competing priorities or inseparable goals? The Forum for Youth Investment. http://forumfyi.org/content/preventing-problems-pr

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. *Organizational Research Methods*, *19*(2), 159–203. https://doi.org/10.1177/1094428115624965

Potuto, J. R., & O'Hanlon, J. (2007). National study of student-athletes regarding their experiences as college students. *College Student Journal, 41*(4), 947-966.

Qi, S., Hua, F, Zhou, Z., & Shek, D. T. L. (2020). Trends of positive youth development publications (1995-2020): A systematic review. *Applied Research in Quality of Life,* 1-26. https://doi.org/10.1007/s11482-020-09878-3

Roth, J. L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science, 7*(2), 94-111. https://doi.org/10.1207/S1532480XADS0702_6

Ryan, R. M., Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. https://doi.org/10.1037/0003-066X.55.1.68

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health, 23*(4), 334-340. https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G

Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health, 33*(1), 77-84. https://doi.org/10.1002/nur.20362

Sandelowski, M., & Barroso, J. (2004). Creating metasummaries of qualitative findings. *Nursing Research, 52*(4), 226–233.

Scales, P. C. (2000). Building students' developmental assets to promote health and school success. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 74*(2), 84-88. https://doi.org/10.1080/00098655.2000.11478649

Scales, P. C., Benson, P. L., Roehlkepartain, E. C., Sesma Jr., A., & van Dulmen, M. (2006). The role of developmental assets in predicting academic achievement: A longitudinal study. *Journal of Adolescence, 29*(5), 691-708. https://doi.org/10.1016j.adolescence.2005.09.001

Scales, P., Benson, P., Leffert, N. & Blyth, D. A. (2000) Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science, 4*(1), 27–46. https://doi.org/10.1207/S1532480XADS0401_3

Scales, P.C., Benson, P.L., & Roehlkepartain, E.C. (2010). *Teen Voice 2010: Relationships That Matter to America's 15-Year-Olds*. Best Buy Children's Foundation and Search Institute.

Search Institute. (2005). *Developmental assets profile technical manual*. Author.

Search Institute. (2015). *User Guide for the Attitudes & Behaviors Survey*. Author.

Sherraden, M. (2001). *Civic service: Issues, outlook, institution building*. Center of Social Development, Washington University.

Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health, 10*(1), 137–149. https://doi.org/10.1080/2159676X.2017.1393221.

Stewart, D. W., & Shamdasani, P. N. (1990) *Applied social research methods series*. Sage.

Strachan, L., Côté, J., & Deakin, J. (2009). "Specializers" versus "samplers" in youth sport: Comparing experiences and outcomes. *The Sport Psychologist, 23*(1), 77-92. https://doi.org/10.1123/tsp.23.1.77

Strachan, L., McHugh, T.-L., & Mason, C. (2018). Understanding positive youth development in sport through the voices of indigenous youth. *Journal of Sport & Exercise Psychology, 40*(6), 293-302. https://doi.org/10.1123/jsep.2018-0035

Sui, A. M. H., Shek, D. T. L., & Law, B. (2012). Prosocial norms as a positive youth development construct: A conceptual review. *The Scientific World Journal, 2012*, 1-7. https://doi.org/10.1100/2012/832026

Sullivan-Bolyai, S., Bova, C., & Harper, D. (2005). Developing and refining interventions in persons with health disparities: The use of qualitative description. *Nursing Outlook, 53*(3), 127-133.

Tang, F., McBride, A. M., & Sherraden, M. (2003*). Toward measurement of civic service, research background paper*. Center for Social Development, Washington University.

Truelove, S., Vanderloo, L. M., & Tucker, P. (2017). Defining and measuring active play among young children: A systematic review. *Journal of Physical Activity and Health, 14*(2), 155-166. https://doi.org/10.1123/jpah.2016-0195

Truman, E., Lane, D., & Elliott, C. (2017). Defining food literacy: A scoping review. *Appetite, 116*, 365-371. https://doi.org/10.1016/j.appet.2017.05.007

Turnnidge, J., Côté, J., & Hancock, D. J. (2014). Positive youth development from sport to life: Explicit or implicit transfer? *Quest, 66*(2), 203-217. https://doi.org/10.1080/00336297.2013.867275

Ungar, M., Theron, L., & Didkowsky, N. (2011). Adolescents' precocious and developmentally appropriate contributions to their families' well-being and resilience in five countries. *Family Relations, 60*(2), 231-246. https://doi.org/10.1111/j.1741-3729.2010.00645.x

Vierimaa, M., Erickson, K., Côté, J., & Gilbert, W. (2012). Positive youth development: A measurement framework for sport. *International Journal of Sports Sciences & Coaching, 7*(3), 601-614. https://doi.org/10.1260/1747-9541.7.3.6

Voight, A., & Torney-Purta, J. (2013). A typology of youth civic engagement in urban middle schools. *Applied Developmental Science, 17*(4), 198-212. https://doi.org/10.1080/10888691.2013.836041

Watt, J. H., & van den Berg, S. (2002). Elements of scientific theories: Concepts and definitions. In J. Watt & S. van den Berg (Eds.), *Research methods for communication science* (pp. 11-22). Allyn & Bacon.

Weed, M. E. (2009). Research quality considerations for grounded theory research in sport & exercise psychology. *Psychology of Sport and Exercise, 10*(5), 502-510. https://doi.org/10.1016/j.psychsport.2009.02.007

Wierzbicka, A. (1992). Defining emotion concepts. *Cognitive Science, 16*(4), 539-581. https://doi.org/10.1207/s15516709cog1604_4

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner, R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic

engagement. *Journal of Youth and Adolescence, 39*(7), 736-750. https://doi.org/10.1007/s10964-010-9541-6

Zarrett, N., Lerner, R. M., Carrano, J., Fay, K., Peltz, J. S., & Li, Y. (2008). Variations in adolescent engagement in sports and its influence on positive youth development. In N. L. Holt (Ed.), *Positive youth development through sport* (1st ed., pp. 9-23). Routledge.

Appendices

Appendix A

Manuscripts included in the scoping review

Al-Nifie, S. (2012). *Adolescent developmental experiences and participation in extracurricular activities in Saudi Arabia* (Doctoral dissertation). Seattle University, Seattle, WA.

Andolina, M. W., Jenkins, K., Keeter, S., & Zukin, C. (2002). Searching for the meaning of youth civic engagement: Notes from the field. *Applied Developmental Science, 6*(4), 189-195. https://doi.org/10.1207/S1532480XADS0604_5

Balsano, A. B. (2005). Youth civic engagement in the United States: Understanding and addressing the impact of social impediments on positive youth and community development. *Applied Developmental Science, 9*(4), 188-201. https://doi.org/10.1207/s1532480xads0904_2

Bebiroglu, N., Geldhof, G. J., Pinderhughes, E. E., Phelps, E., & Lerner, R. M. (2013). From family to society: The role of perceived parenting behaviors in promoting youth civic engagement. *Parenting, 13*(3), 153-168. https://doi.org/10.1080/15295192.2013.756352

Benson, P. L., Gil Clary, E., & Scales, P. C. (2007). Altruism and health: Is there a link during adolescence?. In S. G. Post (Ed.), *Altruism and health: Perspectives from empirical research*. Oxford University Press.

Brunelle, J., Danish, S. J., & Forneris, T. (2007). The impact of a sport-based life skill program on adolescent prosocial values. *Applied Developmental Science, 11*(1), 43-55. https://doi.org/10.1080/10888690709336722

Callina, K. S., Johnson, S. K., Buckingham, M. H., & Lerner, R. M. (2014). Hope in context: Developmental profiles of trust, hopeful future expectations, and civic engagement across

adolescence. *Journal of Youth and Adolescence, 43*(6), 869-883. https://doi.org/10.1007/s10964-014-0096-9

Champagne, D. J. (2005). *The impact of an applied component of character education integrated into a general education curriculum on the moral, pro-social, and cognitive development of adolescents attending an alternative high school* (Doctoral dissertation). University of Missouri-Kansas City, Kansas City, MO.

Chan, W. Y., Ou, S-. R., & Reynolds, A. J. (2014). Adolescent civic engagement and adult outcomes: An examination among urban racial minorities. *Journal of Youth and Adolescence, 43*(11), 1829-1843. https://doi.org/10.1007/s10964-014-0136-5

Chapman, C. M., Deane, K. L., Harré, N., Courtney, M. G. R., & Moore, J. (2017). Engagement and mentor support as drivers of social development in the project K youth development program. *Journal of Youth and Adolescence, 46*(3), 644-655. https://doi.org/10.1007/s10964-017-0640-5

Chou, K.-L. (1998). Effects of age, gender, and participation in volunteer activities on the altruistic behavior of Chinese Adolescents. *The Journal of Genetic Psychology, 159*(2), 195-201. https://doi.org/10.1080/00221329809596145

Christoph, G., Gniewosz, N., & Reinders, H. (2014). How does community service promote prosocial behavior? Examining the role of agency and ideology experience. *International Journal of Behavioral Development, 38*(5), 499-508. https://doi.org/10.1177/0165025414531465

Comunian, A. L., & Gielen, U. P. (2000). Sociomoral reflection and prosocial and antisocial behavior: Two Italian studies. *Psychological Reports, 87*(1), 161-175. https://doi.org/10.2466/pr0.2000.87.1.161

Crocetti, E., Erentaitė, & Žukauskienė, R. (2014). Identity styles, positive youth development, and civic engagement in adolescence. *Journal of Youth and Adolescence, 43*(11), 1818-1828. https://doi.org/10.1007/s10964-014-0100-4

Deal, C. J., & Camiré, M. (2016a). An examination of university student-athletes' motivations to contribute. *Journal of College and Character, 17*(2), 116-129. https://doi.org/10.1080/2194587X.2016.1159227

Deal, C. J., & Camiré, M. (2016b). University student-athletes' experiences of facilitators and barriers to contribution: A narrative account. *The Qualitative Report, 21*, 2087-2102. http://nsuworks.nova.edu/tqr/vol21/iss11/11

Duncan, S. C., Duncan, T. E., Strycker, L. A., & Chaumeton, N. R. (2002). Relations between youth antisocial and prosocial activities. *Journal of Behavioral Medicine, 25*(5), 425-438. https://doi.org/10.1023/A:1020466906928

Eisenberg, N., Hofer, C., Sulik, M. J., & Liew, J. (2014). The development of prosocial moral reasoning and a prosocial orientation in young adulthood: Concurrent and longitudinal correlates. *Developmental Psychology, 50*(1), 58-70. https://doi.org/10.1037/a0032990

Eisenberg, N., Morris, A. S., McDaniel, B., & Spinrad, T. L. (2009). Moral cognitions and prosocial responding in adolescence. In R. M. Lerner and L. Steinberg (Eds.), *Handbook of Adolescent Psychology* (pp. 229-265). Wiley.

Ferguson, C. F., & Garza, A. (2011). Call of (civic) duty: Action games and civic behavior in a large sample of youth. *Computers in Human Behavior, 27*(2), 770-775. https://doi.org/10.1016/j.chb.2010.10.026

Flanagan, C., Gill, S., & Galley, L. (2005). Social participation and social trust in adolescence: The importance of heterogeneous encounters. In A. M. (Ed.), *The Claremont symposium*

on applied social psychology. Processes of community change and social action (p. 149–166). Routledge.

Flanagan, C. A., Kim, T., Collura, J., & Kopish, M. A. (2014). Community service and adolescents' social capital. *Journal of research on Adolescence, 25*(2), 295-309. https://doi.org/10.1111/jora.12137

Flanagan, C. A., Webster, N. S., & Perkins, D. F. (2006). Public policy: Encouraging adult voluntarisim with young people. In E. Gil Clary and J. E. Rhodes (Eds.), *Mobilizing adults for positive youth development* (pp. 195-210). Springer.

Frensch, K. M., Pratt, M. W., & Norris, J. E. (2007). Foundations of generativity: Personal and family correlates of emerging adults' generative life-story themes. *Journal of Research in Personality, 41*(1), 45-62. https://doi.org/10.1016/j.jrp.2006.01.005

Hardy, S. A., Bean, D. S., & Olsen, J. A. (2015). Moral identity and adolescent prosocial and antisocial behaviors: Interactions with moral disengagement and self-regulation. *Journal of Adolescence, 44*(8), 1542-1554. https://doi.org/10.1007/s10964-014-0172-1

Hardy, S. A., Dollahite, D. C., Johnson, N., & Christensen, J. B. (2014). Adolescent motivations to engage in pro-social behaviors and abstain from health-risk behaviors: A self-determination theory approach. *Journal of Personality, 83*(5), 479-490. https://doi.org/10.1111/jopy.122123

Hart, D., Atkins, R., & Ford, D. (1998). Urban America as a context of the development of moral identity in adolescence. *Journal of Social Issues, 54*(3), 513-530. https://doi.org/10.1111/j.1540-4560.1998.tb01233.x

Hazel, C. E. (2016). Student leadership and voices in schools. In C. E. Haxel (Ed.), *Empowered learning in secondary schools: Promoting positive youth development through a multitiered system of supports* (pp. 155-164). American Psychological Association.

Henderson, A., Brown, S. D., Pancer, S. M., & ellis-Hale, K. (2007). Mandated community service in high school and subsequent civic engagement: The case of the "double cohort" in Ontario, Canada. *Journal of Youth and Adolescence, 36*(7), 849-860. https://doi.org/10.1007/s10964-007-9207-1

Hershberg, R. M., Desouza, L. M., Warren, A. E. A., Lerner, J. V., & Lerner, R. M. (2014). Illuminating trajectories of adolescent thriving and contribution through the words of youth: Qualitative findings from the 4-H study of positive youth development. *Journal of Youth and Adolescence, 43*(6), 950-970. https://doi.org/10.1007/s10964-014-0102-2

Horn, A. S. (2012). The cultivation of a prosocial value orientation through community service: An examination of organizational context, social facilitation, and duration. *Journal of Youth and Adolescence, 41*(7), 948-968. https://doi.org/10.1007/s10964-011-9714-y

Kelly, D. C. (2009). In preparation for adulthood: Exploring civic participation and social trust among young minorities. *Youth & Society, 40*(4), 526-540. https://doi.org/10.1177/0044118X08327584

Koshy, S. S. (2011). *The role of social support and purpose in the promotion of character development* (Doctoral dissertation). Tufts University, Boston, MA.

Lanegrand-Willems, L., Chevier, B., Perchec, C., & CArrizales, A. (2018). How is civic engagement related to personal identity and social identity in late adolescents and

emerging adults? A person-oriented approach. *Journal of Youth and Adolescence, 47*(4), 731-748. https://doi.org/10.1007/s10964-018-0821-x

Larson, A., & Moses, T. (2017). Examining the link between stress events and prosocial behavior in adolescents: More ordinary magic? *Youth & Society, 49*(6), 779-804. https://doi.org/10.1177/0044118X14563049

Law, B. M. F., Siu, A. M. H., & Shek, D. T. L. (2012). Recognition for positive behavior as acritical youth development construct: Conceptual bases and implications on youth service development. *The Scientific World Journal, 2012*, 1-7. https://doi.org/10.1100/2012/809578

Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's Youth*. Sage.

Lerner, R. M., Alberts, A. E., Jelicic, H., & Smith, L. M. (2006). Young people are resources to be developed: Promoting positive youth development through adult-youth relations and community assets. In E. Gil Clary and J. E. Rhodes (Eds.), *Mobilizing adults for positive youth development* (pp. 19-39). Boston, MA: Springer.

Lerner, R. M., Brentano, C., Dowling, E. M., & Anderson, P. M. (2002). Positive youth development: Thriving as the basis of personhood and civil society. *New Directions for Youth Development, 95*, 11-33.

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172-180. https://doi.org/10.1207/S1532480XADS0703_8

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development,

participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17-71. https://doi.org/10.1177/0272431604272461

Maton, K. I. & Sto. Domingo, M. R. (2006). Mobilizing adults for positive youth development: Lessons from religious congregations. In E. Gil Clary and J. E. Rhodes (Eds.), *Mobilizing adults for positive youth development* (pp. 159-175). Springer.

McGinley, M., Lipperman-Kreda, S., Byrnes, H. F., & Carlo, G. (2010). Parental, social and dispositional pathways to Israeli adolescents' volunteering. *Journal of Applied Developmental Psychology, 31*(5), 386-394. https://doi.org/10.1016/j.appdev.2010.06.001

McIntosh, H., Schmidt, J. A., & Chang, F. (2001). Predictors of positive cooperative behaviors in youths. *New Directions for Child and Adolescent Development, 93*, 45-59. https://doi.org/10.1002/cd.24

McLellan, J., & Youniss, J. (2003). Two systems of youth service: Determinants of voluntary and required youth community service. *Journal of Youth and Adolescence, 32*(1), 47-58. https://doi.org/10.1023/A:1021032407300

Metzger, A., Avis, L., M., Oosterhoff, B., Babskie, E., Syversten, A., & Wray-Lake, L. (2018). The intersection of emotional and sociocognitive competencies with civic engagement in middle childhood and adolescence. *Journal of Youth and Adolescence, 47*(8), 1663-1683. https://doi.org/10.1007/s10964-018-0842-5

Obradović, J., & Masten, A. S. (2007). Developmental antecedents of young adult civic engagement. *Applied Developmental Science, 11*(1), 2-19. https://doi.org/:10.1080/10888690709336720

Pavlova, M. K., Silbereisen, R. K., Ranta, M., & Salmela-Aro, K. (2016). Warm and supportive parenting can discourage offspring's civic engagement in the transition to adulthood. *Journal of Youth and Adolescence, 45*(11), 2197-2217. https://doi.org/10.1007/s10964-016-0511-5

Pope, A., Cohen, A. K., & Duarte, C. (2018). Making civic engagement go viral: Applying social epidemiology principles to civic education. *Journal of Public Affairs, 19*(1)*,* 1-10. https://doi.org10.1002/pa.1857

Pratt, M. W., & Lawford, H. L. (2014). Early generativity and types of civic engagement in adolescence and emerging adulthood. In L. M. Padilla-Walker & G. Carlo (Eds.), *Prosocial development: A multidimensional approach* (pp. 410-432). Oxford University Press.

Reinders, H. & Youniss, J. (2006). School-based community service and civic development in adolescents. *Applied Developmental Science, 10*(1), 2-12. https://doi.org/10.1207-s1532480xads1001_1

Scales, P. C., & Benson, P. L. (2005). Prosocial orientation and community service. In K. A. Moore and L. H. Lippman (Eds.), *What do children need to flourish?* (pp. 399-356). Springer.

Schmidt, J. A., Shumow, L.& Kackar, H. Z. (2012). Associations of participation in service activities with academic, behavioral, and civic outcomes of adolescents at varying

risk levels. *Journal of Youth and Adolescence, 41*(7), 932-947. https://doi.org/10.1007/s10964-011-9694-y

Sherrod, L. (2007). Civic engagement as an expression of positive youth development. In R. K. Silbereisen & R. M. Lerner (Eds.), *Approaches to positive youth development* (pp. 59-74). https://doi.org/10.4135-9781446213803.n3

Siu, A. M. H., Shek, D. T. L., & Law, B. (2013). Prosocial norms as a positive youth development construct: A conceptual review. *Journal of Alternative Medicine Research, 5*(1), 19-27.

Stoneman, D. (2002). The role of youth programming in the development of civic engagement. *Applied Developmental Science, 6*(4), 221-226. https://doi.org/10.1207/S1532480XADS0604_9

Strachan, L., McHugh, T-. L., & Mason, C. (2018). Understanding positive youth development in sport through the voices of indigenous youth. *Journal of Sport & Exercise Psychology, 40*(6), 293-302. https://doi.org/101123/jsep.2018-0035

Stukas, A. A., Daly, M., & Gil Clary, E. (2006). Lessons from research on volunteering for mobilizing adults to volunteer for positive youth development. In E. Gil Clary and J. E. Rhodes (Eds.), *Mobilizing adults for positive youth development* (pp. 65-82). Boston, MA: Springer.

Sui, A. M. H., Shek, D. T. L., & Law, B. (2012). Prosocial norms as a positive youth development construct: A conceptual review. *The Scientific World Journal, 2012*, 1-7. https://doi.org/10.1100/2012/832026

Taylor, L. K., Merrilees, C. E., Baird, R., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2018). Impact of political conflict on trajectories of adolescent prosocial behavior:

Implications for civic engagement. *Developmental Psychology, 54*(9), 1785-1794. https://doi.org/10.1037/dev0000552

U.S. Department of Education: Office of Educational Research and Improvement, National Center for Education Statistics. (1997). *Student participation in community service activity* (NCES 97-331).

Uggen, C., & Janikula, J. (1999). Volunteerism and arrest in the transition to adulthood. *Special Forces, 78*(1), 331-362.

Van Goethem, A. A. J., van Hoof, A., Orobio de Castro, B., & van Aken, M. A. G. (2014). Quality is key – The impact of community service, community service quality, and reflection on adolescents' volunteering intentions. *International Journal of Developmental Science, 8*(3-4), 137-147. https://doi.org/10.3233/DEV-14145

Voight, A., & Torney-Purta, J. (2013). A typology of youth civic engagement in urban middle schools. *Applied Developmental Science, 17*(4), 198-212. https://doi.org/10.1080/10888691.2013.836041

Warren, A. E. A., Lerner, R. M., & Phelps, E. (). Research perspectives and future possibilities in the study of thriving and spirituality: A view of the issues. In A. E. A. Warren, R. M. Lerner, & E. Phelps (Eds.), *Thriving and spirituality among youth: Research perspectives and future possibilities* (pp.1-16). Wiley.

White, E. S., & Mistry, R. S. (2016). Parent civic beliefs, civic participation, socialization practices and child civic engagement. *Applied Developmental Science, 20*(1), 44-60. https://doi.org/10.1080/10888691.2015.1049346

Wink, P., & Dillon, M. (2007). Do generative adolescents become healthy older adults?. In S. G. Post (Ed.), *Altruism and health: Perspectives from empirical research* (pp. 43-55). Oxford University Press.

Yates, M. (1999). Community service and political-moral discussions among adolescents: A study of a mandatory school-based program in the United States. In M. Yates and J. Youniss (Eds.), *Roots of civic identity: International perspectives on community service and activism in youth* (pp. 16-31). Cambridge University Press.

Yetter, B. F. (2014). *Exploring the role of empathy and exploration behavior as meditors of the relationship between adolescent trust in a significant, nonfamilial adult and prosocial intentions and volunteer behavior* (Doctoral dissertation). Fuller Theological Seminary, Pasadena, CA.

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., Lerner, R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence, 39*(7), 736-750. https://doi.org/10.1007/s10964-010-9541-6

Zimmerman, S. M., Phelps, E., & Lerner, R. M. (2008). Positive and negative developmental trajectories in U.S. adolescents: Where the positive youth development perspective meets the deficit model. *Research in Human Development, 5*(3), 153-165. https://doi.org/10.1080/15427600802274001

Appendix B

Questionnaires, Focus Group Guides, and Interview Guides

Expert Researcher Questionnaire (Study 1)

[Participant clicks link and is take to page with the following information]
Study Title: **Defining Contribution through Sport**

Investigator:	**Supervisor:**
Colin J. Deal Child and Adolescent Sport and Activity Lab Faculty of Physical Education and Recreation University of Alberta Tel: (780) 492-5644 E-mail: deal@ualberta.ca	Dr. Nicholas L. Holt Professor and Associate Dean – Research Faculty of Physical Education and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca

Dear Participant,

Thank you for your interest in this study. The term 'contribution' appears as a part of a prominent model of youth development, the 5Cs model of positive youth development. However, despite its use in such a prominent model, the term contribution has not been well defined. Thus, the purpose of this study is to identify the properties of contribution and establish a theoretical definition of contribution through sport. You are invited to participate in this study based on your expertise as a researcher in the areas of positive youth development and youth sport.

If you choose to participate in this study, you will be asked to complete a brief questionnaire which will take approximately 15 minutes to complete. You will be asked to reflect on the term contribution before being presented with a preliminary theoretical definition of contribution through sport and a number of associated properties to comment on. Initial feedback will be integrated into the definition and properties and then you will be asked to complete a similar questionnaire to comment on the revised definition and properties.

This questionnaire uses REDcap, a secure web based application to collect data. All data you provide will be stored on a secure server owned by the University of Alberta Faculty of Medicine & Dentistry. Provided demographic information will only be used to describe the sample and individual participants will not be described. A summary of the findings of the study will be emailed to you when the study is complete upon request.

The total time commitment for this study is approximately **30 minutes**.

Benefits
There are no direct benefits to you as an individual. However, your comments will help create a theoretical definition of contribution through sport based on existing literature and expert opinion.

Risks

It is highly unlikely there are any risks associated with this study.

Freedom to Withdraw
Participation in this study is completely voluntary. This means that you do not have to participate in the study. There are no negative consequences if you choose not to participate. If you wish to withdraw from the study, you may close your browser prior to clicking 'submit.' Please be aware that after data has been submitted (i.e., after you click submit) it will no longer be possible to withdraw your data.

Anonymity and Confidentiality
Any information that you provide will remain confidential. All electronic data will be stored on the secure server or downloaded to a password protected computer within a locked office. Only the researcher and the supervisory committee will have access to the data collected. The data will be kept for five years following completion of the study, after which everything will be destroyed and/or securely deleted. Once we have finished the study we will present the results at conferences and in an academic journal. No identifying information (e.g., names, locations) will be included in any presentation of findings.

This study has been approved by the University of Alberta Research Ethics Board. Any questions you may have about this study may be directed to Colin Deal by email (deal@ualberta.ca). Questions about your rights as a research participant may be directed to the University of Alberta Research Ethics Office at (780) 492-2615. This office has no direct involvement with this project.

Informed Consent Form

Do you understand that you have been asked to take part in a research study?	Yes	No
Have you read and saved a copy of the information letter on this page?	Yes	No
Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
Do you understand that you are free to contact the researcher to ask questions and discuss this study?	Yes	No
Do you understand that you are free to refuse participation, or to withdraw prior to submitting the questionnaire, without consequence?	Yes	No
Do you understand the issues of confidentiality and do you understand who will have access to your information?	Yes	No

I agree to take part in this study: **YES** **NO**

If you have any questions regarding this study,
please contact Colin Deal at deal@ualberta.ca

Many thanks,

Colin J. Deal, MA
PhD Student
Faculty of Physical Education and Recreation
University of Alberta

PARTICPANT CLICKS CONTINUE AND IS TAKEN TO A NEW PAGE ONLINE
Demographic information
In order to adequately describe our sample of participants, we need to know a little bit about you.

How old are you (in years)?	
How long (in years) have you done research in the area of positive youth development (PYD)?	
Approximately how many journal articles, books, and book chapters have you authored on the topic of positive youth development?	1-4 5-9 10-14 15-19 20+

PARTICPANT CLICKS CONTINUE AND IS TAKEN TO A NEW PAGE ONLINE
Thank you for agreeing to take part in this study. We are interested in theoretically defining contribution through sport.

1) When you read the word contribution, what does it make you think?

2) Please provide an example of something that you believe to be a contribution.

PARTICPANT CLICKS CONTINUE AND IS TAKEN TO A NEW PAGE ONLINE
Please consider the following definition of contribution through sport and properties associated with contribution and provide your comments in the spaces provided.
[DEFINITION OF CONTRIBUTION FROM SCOPING REVIEW]
[PROPERTY 1 – SHORT DESCRIPTION
PROPERTY 2 – SHORT DESCRIPTION
Etc.]

<table>
<tr><td rowspan="4">Definition</td><td colspan="6">1) Please rate how well the definition fits with your conceptualization of contribution?</td></tr>
<tr><td>Very poorly

1</td><td>Poorly

2</td><td>Somewhat poorly

3</td><td>Somewhat well

4</td><td>Well

5</td><td>Very well

6</td></tr>
<tr><td colspan="6">2) Please comment on the wording of this definition. Are there any changes you would suggest? Does this definition raise any questions/seem to be missing something?</td></tr>
<tr><td colspan="6"></td></tr>
</table>

<table>
<tr><td rowspan="4">Property 1</td><td colspan="6">1) Please rate the extent to which this property fits with your conceptualization of contribution?</td></tr>
<tr><td>Very poorly

1</td><td>Poorly

2</td><td>Somewhat poorly

3</td><td>Somewhat well

4</td><td>Well

5</td><td>Very well

6</td></tr>
<tr><td colspan="6">2) Please comment on this property. Are there any changes you would suggest? Does this property raise any questions/seem to be missing something?</td></tr>
<tr><td colspan="6"></td></tr>
<tr><td rowspan="4">Property 2</td><td colspan="6">1) Please rate the extent to which this property fits with you conceptualization of contribution?</td></tr>
<tr><td>Very poorly

1</td><td>Poorly

2</td><td>Somewhat poorly

3</td><td>Somewhat well

4</td><td>Well

5</td><td>Very well

6</td></tr>
<tr><td colspan="6">2) Please comment on this property. Are there any changes you would suggest? Does this property raise any questions/seem to be missing something?</td></tr>
<tr><td colspan="6"></td></tr>
<tr><td colspan="7">CONTINUES FOR EACH PROPERTY IDENTIFIED IN THROUGH STUDY 1</td></tr>
</table>

PARTICPANT CLICKS CONTINUE AND IS TAKEN TO A NEW PAGE ONLINE
[DEFINITION OF CONTRIBUTION FROM SCOPING REVIEW]
[PROPERTY 1 – SHORT DESCRIPTION
Etc.]

1) With this definition in mind, please provide a few examples of contribution.

2) Does this definition change your conceptualization of contribution? If so, how?

Focus Group Questioning Route (Study 2)

Thank you for meeting with me today.

I am working on my PhD dissertation research and the purpose of this study is to identify the properties of contribution and establish a theoretical definition of contribution through sport. Currently, contribution is not defined well and creating a definition will help me in my next study to understand how contribution may be developed through sport participation. I want to know what the word "contribution" makes you and other coaches think of so that I can better define contribution through sport. Now before we get started, I want to remind you that your participation here is voluntary and you may choose not to answer a question if you are uncomfortable and may leave at any time if you need to, simply let myself or the assistant moderator know. There are no right or wrong answers; I am interested in your thoughts, opinions, and experiences. You are not being evaluated in any way. All data will remain confidential and securely stored on a password protected computer, in a locked office. Only members of the research team will have access to the data. Any identifying information will be removed from transcripts and names will be replaced with codes or pseudonyms. Are there any questions before we begin?

Before we get started I just want to quickly lay down some ground rules:

- Please respect others at all times
- Try not to interrupt others
- I want to hear from everyone, let others have a chance to talk, you will all get a turn
- While I don't expect any of what is said here to be sensitive, please respect others' privacy and keep what is said or shared here in this room.

Opening

1) To get us started let's go around the table and you can each introduce yourself. Your name, what you coach, how long you have been coaching, and what your favorite thing about coaching is.

Introductory

1) When you hear the word contribution, what does that make you think?

Key

1) What does contribution look like? What are some examples of things an athlete might do that you consider to be contribution?

- Can you describe something that you would consider to be contribution?

2) Think of someone in sport who you think contributes. This person could be a professional athlete or someone you have played with. What does this person do that you consider to be contribution?

- Why do you think they do it?

3) So thinking on those examples you gave previously, what does contribution **mean** to you?

[Provide definition and properties (from scoping review with modifications from experts) to participants]

4) When you look at this possible definition of contribution and the properties associated with it, what does it make you think of?

- How does this differ/align with what you think of when you hear the word contribution?
- How could this definition be changed to fit better with what contribution through sport means to you?

Ending

1) To start wrapping things up, would you be able to take a moment then try to summarize your thoughts at this point about what contribution means?

2) Based on the questions I've asked you in this interview, I think you understand the type of information I am trying to get at. Is there anything else you would like to add that we may have missed or that you think is particularly important?

Sample Interview Guide (Study 3)

Thank you for meeting with me today. Before we start the interview, I just want to remind you that you are not being evaluated in anyway. All data will remain confidential and securely stored on a password protected computer, in a locked office. Only myself and my supervisor, Dr. Holt, will have access to the data. Any identifying information will be removed from transcripts and names will be replaced with codes or pseudonyms. I want to remind you that your participation here is voluntary and you may choose not to answer a question if you are uncomfortable and may leave at any time if you need to.

I am working on my PhD dissertation research and the purpose of this study is to understand the process through which contribution is developed through sport. There are no right or wrong answers, I am interested in your thoughts, opinions, and experiences. Whenever possible, please use specific concrete examples from your own experience. Do you have any questions before we begin?

[SWITCH AUDIO RECORDER ON]

DEMOGRAPHICS

Next I have a few quick questions that we need to ask because when we go to publish this study we have to report basic info about the sample (e.g., average age).

- How old are you?
- Did you (a) finish high school, (b) finish a university degree or college diploma, or (c) finish a higher degree?
- What would you say is your main sport?
- How long have you played your main sport?
- About how much time per week do spend playing, competing, or practicing your main sport?

INTRODUCTION

Before we get to the main questions of the interview, I'd just like to chat with you about how your involvement in sport.

1) Can you give me a walkthrough of your sport involvement including when you got started and what sports you have played?

2) Thinking about your experiences in sport, what is one of your favorite memories? Tell me about it.

Brief Definition of Contribution

Contribution involves actions or behaviours performed intentionally with the intent of having a positive impact on others.

- This could include small/single actions affecting just one person all the way up to and including large scale contribution such as advocating for environmental policies or social justice issues.

MAIN QUESTIONS

If you recall the recruitment information you were sent before you contacted me, you may remember that I was interesting speaking to you because you are actively involved in contribution.

1) Why don't you start by telling me about the contribution you do now and have done in the past?

- How did you come to be involved in this contribution?
  - Were you invited/asked? By whom?
  - Why did you choose to make a contribution in that way?

2) Thinking back over your sport career, what experiences in sport do feel have influenced you starting to engage in contribution? How?

- Who else was involved? How were your coaches involved? Teammates? Parents?
  - What did you learn from this experience?
  - How did this affect your contribution later?

From Previous interviews

Based on the interviews I have conducted and analyzed so far, a couple ideas have stood out as being important to some others and I'd like to get your thoughts on them.

3) Can you tell me a bit about what it was like growing up in your family? Parents community involvement? Faith?
4) Contribution seen in teams (e.g., athletes on a particular soccer team always participate in a local elementary school reading program) start as a passion from an individual.
5) Early contribution experiences can help develop competence and confidence for future contribution in the future/different areas, especially when there is support/mentorship in place.
    a. In your experience, have these ideas been important or meaningful to you? How have your experiences been similar/different?
6) Other participants have commented on the idea of the initial ask/invitation being important.
    a. In your experience, has this idea been important or meaningful to you and your contribution? If so how? Why do you think it wasn't?
7) Other participants have talked about contribution being socially influenced by peers (e.g., my friends were doing this so I started doing it to)?
    a. How does this relate to your own experiences? Are your experiences similar or different? How so?
8) Receiving recognition or appreciation for a contribution seemed to play a role in sustaining a particular contribution over time (e.g., coaching). This appreciation/recognition could be both formal (awards, end of season ceremonies) or informal (a simple thank you or sharing a story of impact).
    a. In your experience, have these ideas been important or meaningful to you? How have your experiences been similar/different?

CONCLUDING QUESTIONS

- Take a moment and reflect on what we've talked about today. Are there any concepts or ideas which you think should be examined more closely?
- other types of people (e.g., coaches, parents) who may be able to help with that?
- Based on the questions I've asked you in this interview, I think you understand the type of information I am trying to get at. Is there anything else you would like to add to help me understand how contribution can be developed though sport?

Appendix C

Checkpoints That Researchers Can Use to Evaluate a Grounded Theory

The following lists of checkpoints were presented in Basics of Qualitative Research (4th ed., Corbin & Strauss, 2015).

Checkpoints That Researchers and Reviewers Can Use to Evaluate the Methodological Consistency of a Grounded Theory Study

1) What was the target sample population? How was the original sample selected?
2) How did sampling Proceed? What kinds of data were collected? Were there multiple sources of data and multiple comparative groups?
3) Did data collection alternate with analysis?
4) Were ethical considerations taken into account in both data collection and analysis?
5) Were the concepts driving the data collection arrived at through analysis (based on theoretical sampling), or were concepts derived from the literature and established before the data were collected (not true theoretical sampling)?
6) Was theoretical sampling used, and was there a description of how it proceeded?
7) Did the researcher demonstrate sensitivity to the participants and to the data?
8) Is there evidence or examples of memos?
9) At what point did data collection end or a discussion of saturation end?
10) Is there a description of how coding proceeded along with examples of theoretical sampling, concepts, categories, and statements of relationship? What were some of the events, incidents or actions(indicators) that pointed to some of these major categories?
11) Is there a core category, and is there a description of how that core category was arrived at?

12) Were there changes in design as the research went along based on findings?
13) Did the researcher(s) encounter any problems while doing the research? Is there any mention of a negative case, and how was that data handled?
14) Are methodological decisions made clear so that the readers can judge their appropriateness for gathering data (theoretical sampling) and doing analysis?
15) Was there feedback on the findings from other professionals and from participants? And were changes made in the theory based on this feedback?
16) Did the researcher keep a research journal or notebook?

Checkpoints The Researchers and Reviewers Can Use to Evaluate the Quality and Applicability of a Grounded Theory Study

1) What is the core category, and how do the major categories relate to it? S there a diagram depicting these relationships?
2) Is the core category sufficiently broad so that it can be used to study other populations and similar situations beyond this setting?
3) Are each of the categories developed in terms of their properties and dimensions so that they show depth, breadth, and variation?
4) Is there descriptive data under each category that brings the theory to life so that it provides understanding and can be used in a variety of situations?
5) Has context been identified and integrated into the theory? Conditions and consequences should not be listed merely as background information in a separate section but woven into the actual analysis with explanations of how they impact and flow from action-

interaction in the data. Describing context enables potential users of a theory to compare for fit the situations under which the theory was developed to situations to which they might want to apply it.

6) Has process been incorporated into the theory in the form of changes in action-interaction in relationship to changes in conditions? Is action-interaction matched to different situations, demonstrating how the theory might vary under different conditions and therefore be applied to different situations?
7) How is saturation explained, and when and how was it determined that categories were saturated?
8) Do the findings resonate or fit with the experience of both the professionals for whom the research ended and the participants who took part in the study? Can participants see themselves in the story even if not every detail applies to them? Does it ring true to them? Do Professionals and participants react emotionally as well as professionally to the findings?
9) Are there gaps, or missing links, in the theory, leaving the reader confused and with a sense that something is missing?
10) Is there an account of extreme or negative cases?
11) Is variation built into the theory?
12) Are the findings presented in a creative and innovative manner? Does the research say something new or put old ideas together in new ways?
13) Do findings give insight into situations and provide knowledge that can be applied to develop policy, change practice, and add to the knowledge base of a profession?

14) Do the theoretical findings seem significant, and to what extent? Is it entirely possible to complete a theory-generating study, or any research investigation, yet not produce findings that are significant.
15) Do the findings have the potential to become part of the discussions and ideas exchanged among relevant social and professional groups?
16) Are the limitations of the study clearly spelled out?

Appendix D

Information Letters and Informed Consents Forms

Focus Group Information Letter (Study 2)

Study Title: **Defining Contribution through Sport**

Investigator:	**Supervisor:**
Colin J. Deal PhD Candidate Faculty of Kinesiology, Sport, & Recreation University of Alberta Tel: (780) 492-5644 E-mail: deal@ualberta.ca	Dr. Nicholas L. Holt Professor and Associate Dean – Research Faculty of Kinesiology, Sport, & Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca

Dear Participant,

The term 'contribution' appears as a part of a prominent model of youth development, the 5Cs model of positive youth development. However, despite its use in such a prominent model, the term contribution has not been well defined. Thus, the purpose of this study is to identify the properties of contribution and establish a theoretical definition of contribution through sport.

You have been invited to participate in this study based on your experience coaching athletes up to the age of 24 years old and your reputation for facilitating athletes' contribution to others in the broader community.

If you choose to participate in this study, you will be invited to participate in a group interview called a focus group which will last approximately 40-60 minutes. You, and the other coach participants, will be asked about your thoughts and experiences pertaining to athletes' contribution to the broader community and coaches' roles in facilitating athlete contribution. The focus group will take place at the Child and Adolescent Sport and Activity lab on the University of Alberta campus

Focus groups will be audio recorded. These recordings will be transcribed verbatim to facilitate analysis. All identifying and personal information will be removed you do not want included in the study, clarify meaning, and further elaborate on any point. A summary of the findings of the study will be emailed to you when the study is complete upon request.

Therefore, the total time commitment for this study is approximately **40-60 minutes**.

Benefits

There are no direct benefits to you as an individual. However, reflecting on how you and other coaches facilitate athlete contributions may help you develop or improve the strategies that you use.

Risks

It is highly unlikely there are any risks associated with this study. However, if any question makes you uncomfortable in any way, you do not have to answer it. If at any time during the focus group you want to stop, you may inform the moderator or the assistant and you may leave.

Freedom to Withdraw

Participation in this study is completely voluntary. This means that you do not have to participate in the study. There are no negative consequences if you choose not to participate. All of your personal contact information will be deleted. However, we will be unable to withdraw your data

(i.e., comments made during the focus group) once the focus group begins as it is difficult to identify the individual who made any particular comment in a recording. If at any time during the focus group you wish to withdraw your participation, you may inform the moderator or the assistant and you may leave.

Anonymity and Confidentiality

Following the transcription of the focus group's audio recording, any personal information will be removed, and all names will be replaced with participant codes (e.g., Coach 1). Any information that you provide will remain confidential. Links between participant codes and your identity will only exist on a master list which will be securely stored on a password protected computer within a locked office. All electronic data will be stored on a password protected computer within a locked office. Hard copies of data will be securely stored in a locked file cabinet within a locked office. Only the researcher and the supervisory committee will have access to the data collected. The data will be kept for five years following completion of this study, after which everything will be destroyed and/or securely deleted. Once we have finished the study we will present the results at conferences and in an academic journal. No identifying information (e.g., names, locations) will be included in any presentation of findings.

This study has been approved by the University of Alberta Research Ethics Board. Any questions you may have about this study may be directed to Colin Deal by email (deal@ualberta.ca). Questions about your rights as a research participant may be directed to the University of Alberta Research Ethics Office at (780) 492-2615. This office has no direct involvement with this project.

Many thanks,

Colin J. Deal, MA
PhD Student
Faculty of Kinesiology, Sport, & Recreation
University of Alberta

Informed Consent (Study 2)

Informed Consent Form

Title of Project: Defining Contribution through Sport		
Investigator:	**Supervisor:**	
Colin J. Deal PhD Candidate Faculty of Kinesiology, Sport, & Recreation University of Alberta Tel: (780) 492-5644 E-mail: deal@ualberta.ca	Dr. Nicholas L. Holt Professor and Associate Dean – Research Faculty of Kinesiology, Sport, & Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca	
Do you understand that you have been asked to take part in a research study?	Yes	No
Have you read and received a copy of the attached information letter?	Yes	No
Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
Do you understand that you are free to contact the researcher to ask questions and discuss this study?	Yes	No
Do you understand that you are free to refuse participation, or to cease participation (i.e., leave the focus group), without consequence?	Yes	No
Do you understand the issues of confidentiality and do you understand who will have access to your information?	Yes	No

I agree to take part in this study: **YES** **NO**

Name: _____
Signature: _____
Date: _____

Information Letter (Study 3)

Study Title: **Grounded Theory of the Development of Contribution Through Sport**

Investigator:	**Supervisor:**
Colin J. Deal PhD Candidate Faculty of Kinesiology, Sport, & Recreation University of Alberta Tel: (780) 492-5644 E-mail: deal@ualberta.ca	Dr. Nicholas L. Holt Professor and Vice Dean Faculty of Kinesiology, Sport, & Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca

Dear Participant,

The term 'contribution' appears as a part of a prominent model of youth development, the 5Cs model of positive youth development. Within this model, contribution is presented as a positive outcome alongside reduced likelihood of engaging in risky or problematic behaviors. However, it is not known how (i.e., the process) some youth involved sport develop attitudes and behaviors consistent with contribution and what aspects of their sport participation influences this development. Thus, the purpose of this study is to create a grounded theory of the process through which contribution is developed through sport. You have been invited to participate in this study based on your experience as an athlete involved in some form of contribution.

If you choose to participate in this study, you will be invited to participate in an individual interview which will last approximately 40-60 minutes. You will be asked about your thoughts and experiences pertaining to your youth sport experience and how your experiences have affected your attitudes, motives, and behaviors relating to contribution. The interview will be conducted virtually using Skype in order to reduce your exposure to COVID-19.

Interviews will be audio recorded. These recordings will be transcribed verbatim to facilitate analysis. All identifying and personal information will be removed and replaced with participant codes (e.g., A01) or generic descriptors (e.g., 'a teammate') as appropriate. A summary of the findings of the study will be emailed to you when the study is complete upon request.

Therefore, the total time commitment for this study is approximately **60 minutes**.

Benefits

There are no direct benefits to you as an individual. However, reflecting on how you and other coaches facilitate athlete contributions may help you develop or improve the strategies that you use.

Risks

It is highly unlikely there are any risks associated with this study. However, if any question makes you uncomfortable in any way, you do not have to answer it. If at any time during the interview you want to stop, you may inform the interviewer and you may leave.

Freedom to Withdraw

Participation in this study is completely voluntary. This means that you do not have to participate in the study. There are no negative consequences if you choose not to participate. If at any time during the interview you wish to withdraw your participation, you may do so. Additionally, you will be able to withdraw your participation from the study up to four (4) weeks after the interview. Upon withdrawal from the study, all of your personal contact information will be deleted as well as any data generated from your participation (i.e., interview audio recordings and/or transcripts).

Anonymity and Confidentiality

Following the transcription of the focus group's audio recording, any personal information will be removed, and all names will be replaced with participant codes (e.g., A01). Any information that you provide will remain confidential. Links between participant codes and your identity will only exist on a master list which will be securely stored on a password protected computer within a locked office. All electronic data will be encrypted and stored on a password protected computer within a locked office. Hard copies of data will be securely stored in a locked file cabinet within a locked office. Only the researcher and the supervisory committee will have access to the data collected. The data will be kept for five years following completion of this study, after which everything will be destroyed and/or securely deleted. Once we have finished the study we will present the results at conferences and in an academic journal. No identifying information (e.g., names, locations) will be included in any presentation of findings.
This study has been approved by the University of Alberta Research Ethics Board. Any questions you may have about this study may be directed to Colin Deal by email (deal@ualberta.ca). Questions about your rights as a research participant may be directed to the University of Alberta Research Ethics Office at (780) 492-2615. This office has no direct involvement with this project.
Many thanks,

Colin J. Deal, MA
PhD Candidate
Faculty of Kinesiology, Sport, & Recreation
University of Alberta

Informed Consent (Study 3)

Title of Project: Grounded Theory of the Development of Contribution Through Sport		
Investigator:	**Supervisor:**	
Colin J. Deal PhD Candidate Faculty of Kinesiology, Sport, & Recreation University of Alberta Tel: (780) 492-5644 E-mail: deal@ualberta.ca	Dr. Nicholas L. Holt Professor and Vice Dean Faculty of Kinesiology, Sport, & Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca	
Do you understand that you have been asked to take part in a research study?	Yes	No
Have you read and received a copy of the attached information letter?	Yes	No
Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
Do you understand that you are free to contact the researcher to ask questions and discuss this study?	Yes	No
Do you understand that you are free to refuse participation, or to cease participation, without consequence?	Yes	No
Do you understand the issues of confidentiality and do you understand who will have access to your information?	Yes	No

I agree to take part in this study: **YES** **NO**

Name: _____

Signature: _____

Date: _____

Appendix E

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