

Running head: CONTRIBUTION IN UNIVERSITY ATHLETES

Positive Youth Development's 6th C:
The Nature of Contribution in University Athletes

Colin Deal

Master's thesis submitted to the Faculty of Graduate and Postdoctoral Studies in partial
fulfilment of the requirements for the degree of Master of Arts in Human Kinetics

© Colin Deal, Ottawa, Canada, 2015

Acknowledgments

I have been lucky to have had the opportunity to grow and develop as researcher and person with the guidance and support of some truly amazing people. First, I would like to thank my supervisor, Dr. Martin Camiré. Without your guidance, this thesis would not have been completed. I have learned more from you, both inside and outside of academia, in these two short years than I thought possible. I would also like to thank Drs. Tanya Forneris and Bradley Young. Dr. Young, your comments and questions helped shape this thesis and helped me dive deeper into the guiding theory. Also, without your assistance, I would not have been able to make any meaning from the statistics. Dr. Forneris, in addition to your valuable input into this thesis, I would like to thank you, and the rest of our PYD group, for the helpful readings and discussion; these meetings may have been the most impactful part of my entire time here. Next, I would like to thank my lab mates and my friends on the fourth floor. It means a lot to have people to share my struggles with, bounce ideas off, or just to take my mind off school for a while; it will be tough to move away from friends like you. Finally, I would be negligent if I did not thank my family for their love and support; without it I would not have the foundation upon which I have been able to build my life upon.

Table of Contents

Acknowledgments.....	ii
Table of Contents.....	iii
List of Appendices	v
Table of Tables	vi
Table of Figures	vii
Statement of Support.....	viii
Abstract	ix
Introduction.....	1
Research Purpose	2
Paradigmatic Position	2
Key Concepts	3
Positive Youth Development	3
Contribution	5
Emerging Adulthood.....	6
Review of Literature	8
Sport as a Tool for Development	8

Sport and Contribution.....	13
Presentation of the Articles	17
Research Note	18
Article One.....	42
Article Two	73
References	100
General Discussion	106
Limitations	111
Future Research	112
Theoretical Implications	113
Practical Implications.....	115
Conclusion	117
Statement of Contribution.....	118
References.....	119
Appendices.....	131

List of Appendices

- A. Positive Development in Sport Survey
- B. Interview Consent Form
- C. Interview Guide
- D. Approval Letter – University of Ottawa
- E. Approval Letter – Acadia University

List of Tables

Table 1.1: PYD-VSF Items and Descriptive Statistics	26
Table 1.2: Descriptive Statistics for the Subscales of the PYD-VSF and Contribution Scale	28
Table 1.3: Factor Loadings and Subscale Reliabilities of the PYD-VSF	29
Table 1.4: Bivariate Correlations	30
Table 1.5: Regression Coefficients for Original PYD-VSF onto Contribution.....	30
Table 1.6: Descriptive Statistics for the Modified Subscales of the PYD-VSF	31
Table 1.7: Factor Loadings and Subscale Reliabilities of the Modified PYD-VSF	32
Table 1.8: Bivariate Correlations.....	33
Table 1.9: Regression Coefficients for Modified PYD-VSF onto Contribution	33
Table 2.1: Participant Demographics.....	51

List of Figures

Figure 1: Hierarchy of Facilitators Supporting Contributions.....	111
---	-----

Statement of Support

Financial support for this research was provided by the Social Sciences and Humanities Research Council of Canada in the form of The Joseph-Armand Bombardier Canada Graduate Scholarship – Masters.

Abstract

The overall purpose of this Master's thesis was to gain an in-depth understanding of university student-athletes' contributions. The first manuscript included in this thesis assesses the suitability of the Positive Youth Development Very Short Form (PYD-VSF) for use with an emerging adult athlete population, using data from 74 university student-athletes who completed an online questionnaire. The findings suggest that the PYD-VSF is not an appropriate measure for this population. The second and third manuscript used data from 10 interviews. The second manuscript examined university student-athletes' motivations to contribute and found participants reported that contributing served as a way to satisfy the basic psychological needs and possessed multiple motives simultaneously. The third manuscript explored the facilitators and barriers relating to university student-athletes' contributions and found that academic and athletic time constraints were significant barriers to contribution and teammates, coaches, and staff members of the athletics department facilitated contributions.

Keywords: 5Cs model, emerging adulthood, self-determination theory, university athletes, PYD

Introduction

Research in the area of youth development has evolved over time from primarily a deficit-reduction approach to an asset-building approach where successful development is achieved by placing emphasis on the strengths present in all youth (Lerner et al., 2005). This new perspective has become known as positive youth development (PYD) (Larson, 2006). The previous deficit-reduction approaches were predominantly concerned with assessing and predicting problematic youth behaviours (Scales, Benson, Leffert, & Blyth, 2000) and failed to adequately explain development that occurred in normative or positive manners (Lerner, Dowling, & Anderson, 2003). Within PYD, successful youth are described as those who have developed the capacity to play constructive roles in their own development (Larson, 2006), referred to as thriving youth (Scales et al., 2000). Lerner, Dowling, and Anderson (2003) argued that the process of thriving is integral to youth becoming adults who act for the betterment of themselves and broader society. These acts, or contributions, have not been studied nearly as extensively as the developmental processes theorized to lead to them.

In the contexts of physical activity and sport, PYD research has been primarily concerned with the process of development and how programs may be designed to facilitate youth development (e.g., Camiré, Forneris, Trudel, & Bernard, 2011; Danish, Forneris, Hodge, & Heke, 2004; Petitpas, Van Raalte, Cornelius, & Presbrey, 2004). However, less attention has been paid to what successful youth development looks like. A few studies (e.g., Hoffman, Kihl, & Browning, 2015; Potuto & O'Hanlon, 2007) have examined associations between athletes and various types of contributions. These studies, however, have been limited to quantitative descriptions of contribution and do not provide a clear indication of what athlete contributions are, why athletes engage in contribution, or how they come to contribute.

Research Purpose

The purpose of this Master's thesis was to gain an in-depth understanding of university student-athletes' contributions. Specifically, this research was guided by the following questions: (a) Is the PYD-VSF a suitable measure for the 5Cs in an emerging adult athlete population? (b) What motivations do university student-athletes have for contributing? (c) What are the factors that facilitate or serve as barriers to university student-athletes' contributions?

Paradigmatic Position

A paradigm is the combination of ontological, epistemological, and methodological beliefs that together form a worldview (Guba & Lincoln, 1994). Ontology deals with reality and what can be known while epistemology examines the acquisition and creation of knowledge. The term methodology encompasses the procedures and techniques used to carry out an investigation (Ponterotto, 2005). This thesis used a sequential mixed methods design (Teddle & Tashakori, 2009), which involves collecting quantitative and qualitative data in separate phases that occur sequentially. Mixed methods designs allow researchers to have the flexibility to address research questions in multiple ways; allowing for stronger inferences, greater diversity of divergent views, and the ability to answer research questions that cannot be answered using a single methodology (Teddle & Tashakori, 2009).

Using mixed methods designs, thus rejecting the notion that quantitative and qualitative methods cannot be used together due to conflicting worldviews, reflects an epistemological position of pragmatism (Maxcy, 2003). Pragmatism focuses on the research question and the consequences of the research (Feilzer, 2010). This 'real-world' approach to social research lets the researcher employ post-positivism or social constructivism at different times, depending on the requirements of the research questions (Teddle & Tashakori, 2009).

In phase one, a post-positivist paradigm was adopted for the collection and analysis of quantitative survey data. In this paradigm, facts exist in reality and are separate from our conscious interpretations of them (Sparkes, 1992). This paradigm allows for discrete variables to be measured and interpreted as facts without the values and beliefs of the researcher affecting them. In phase two, a social constructivist paradigm in which multiple realities exist based on the construction of meaning by individuals was more appropriate to guide the qualitative data collection and analysis (Guba & Lincoln, 1994). As such, the athletes' perceptions of their experiences and the personal interpretation of them based on their values, thoughts, and opinions were used to construct rich accounts of athlete contributions. Thus, a basic interpretive qualitative methodology (Merriam, 2002) was used and allowed insight into the perceptions of the contribution experiences of university student-athletes.

Key Concepts

In the present section, definitions for the key concepts used in this thesis made use of are provided. Specifically, positive youth development, contribution, and emerging adulthood are defined and situated within the context of sport.

Positive Youth Development

The PYD perspective is a relatively new in the field of developmental science, emerging in the early 1990s. This perspective arose in response to the commonly used approaches that characterized youth development as the reduction of problems such as delinquency, drugs and alcohol use, and unprotected sex (Lerner et al., 2005; Pittman, Irby, Tolman, Yohalem, & Ferber, 2003; Roth & Brooks-Gunn, 2000). Such deficit-reduction approaches fail to convey that positive development entails more than reducing or eliminating negative behaviours. In essence, being free of problems does not necessarily make a youth fully prepared for adult life (Roth &

Brooks-Gunn, 2000). Within the PYD perspective, youth are viewed as assets with strengths of their own to be developed so that they emerge into adulthood as productive and thriving members of society (Lerner et al., 2003). Additionally, youth possess hopeful expectations regarding the future that can be used to drive them in their development (Lerner, Lerner, von Eye, Bowers, & Lewin-Bizan, 2011). This perspective is described as an asset-building model as opposed to a deficit-reduction model (Lee & Martinek, 2013). The assets youth should develop consist of cognitive (e.g., goal setting), behavioural (e.g., time-management), intrapersonal (e.g., self-regulation), or interpersonal (e.g., communicating with others) skills that they can use to direct their own development (Lerner et al., 2011). For youth to be in a position to direct their own development, they must be supported by role models and mentors in the various contexts in which they engage (Larson, 2006). Aligning the context and the strengths of youth creates bidirectional, mutually beneficial relationships that are referred to as individual-context relationships (Lerner et al., 2003).

One setting deemed to facilitate individual-context relationships is sport because it is viewed as an appropriate area for youth to learn and practise life skills in preparation for adulthood (Fraser-Thomas, Côté, & Deakin, 2005; Lee & Martinek, 2013). Moreover, athletes are poised to learn these skills during their involvement in sport due to the challenges they face as well as the attention and motivation needed to maintain involvement (Vella, Oades, & Crowe, 2013). Life skills differ from sport-specific skills such as skating, dribbling, and shooting because they are transferable to other life domains including school, work, and family (Danish et al., 2004). Life skills are deemed to be fundamentally important skills to learn through sport because ultimately, they can help youth develop into productive and engaged adults (Lerner et al., 2003).

Contribution

In the PYD perspective, development occurs longitudinally over the course of youth's interaction with their surrounding contexts (Lerner et al., 2005). Within the 5Cs model of PYD (Lerner et al., 2005), when contexts support and build upon the assets youth possess, mutually beneficial individual-context relationships ensue resulting in positive development (Zimmerman, Phelps, & Lerner, 2008). This positive development occurs in the five critical areas of (a) competence, (b) confidence, (c) positive connections, (d) character, and (e) caring (Lerner et al., 2005). Successful development in these areas increases the likelihood of youth engaging in a 6th C, contribution. Contribution can be defined as actions taken by an individual that benefit the contributor's well-being, or that of their families, communities, and/or wider civil society (Lerner, 2004). Thus, contribution is a broad term encompassing actions that involve youth taking the life skills they have learned and using them to improve their own life and that of others (Pittman et al., 2003). Within Lerner's 5Cs model of PYD (Lerner et al., 2005), contributions can be made to four contexts: (a) the self (e.g., pursuing higher education), (b) family (e.g., caring for sick or elderly relatives), (c) community (e.g., volunteering at a local community centre), and (d) civil society (e.g., participating in social activism movements). It is through full engagement in one's contributions that PYD is fully realized and according to Lerner and colleagues (2005), these acts stem from a civic or moral duty rooted in the identity of thriving youth.

There is an abundance of terms related to contribution and it is essential to situate where they fit within the broader scope of contribution. Such terms include volunteerism, community/youth service, civic engagement/community involvement, social activism, and philanthropy. Volunteerism has been defined as making personally satisfying and socially

beneficial contributions in voluntary activities (Barber, Mueller, & Ogata, 2013). Volunteerism is most closely associated with contributions that occur at the community level. Youth or community service also captures contributions made at the community level and is characterized by engagement through and within institutions such as schools, service learning groups, and churches (McBride, Pritzker, Daftary, & Tang, 2007). Civic engagement and social activism are forms of contributions that occur at the civil society level and are characterized by political orientation in the former or broad social changes in the later (Balsano, 2005; Harre, 2007). Philanthropy, another type of contribution which tends to be directed toward large scale social activism or community organizations, is characterized primarily by the donation of financial resources or the credibility or popularity of high profile individuals (Sports Philanthropy Project, 2007). Thus, contribution, as conceptualized in the PYD framework, encompasses each of the terms discussed. Contributions, regardless of the context in which they are made, are behavioural manifestations of positive development. When youth contribute, they are displaying progress toward becoming active and engaged adults (Lerner et al., 2003).

Emerging Adulthood

In recent years, there has been a growing research focus on the widening gap between adolescence and adulthood (Flett, Gould, Paule, & Schneider, 2010). This period, from approximately 18 to 25 years of age, has come to be known as its own distinct developmental stage, emerging adulthood (Arnett, 2007a). More than anything else, this stage of development is characterized by transitions into independent adult roles in various life realms (Hawkins, Letcher, Sanson, Smart, & Toumbourou, 2009). Some of the normative markers of adulthood include age of marriage and age of first childbirth. In Canada, the average age of first marriage has increased to 30 years of age for women and 31 years of age for men in 2008 from

approximately 23 and 25 years of age, for women and men respectively, in the 1950s (Statistics Canada, 2013b). In the same time period, women went from an average of 24 years at first child birth to 29 years (Statistics Canada, 2013a). Data pertaining to age at beginning of fatherhood has not been track as well; however, from 1995 to 2006, the average age of men becoming fathers increased from 27.8 to 29.1 years (Statistics Canada, 2010). Such figures indicate that Canadians are getting married and having children at later times in their lives compared to previous decades. Although they are not getting married and not having children, Canadians are keeping busy by attending university in greater numbers than ever before (Statistics Canada, 2009). University is a context in which students have the opportunity to engage in a variety of contribution experiences (Haski-Leventhal et al., 2008) and without the responsibilities that come with marriage and parenthood, emerging adults are exposed to different social and civil groups in university (Hawkins et al., 2009).

Emerging adulthood is also marked by psychological changes, with individuals gaining greater independence and improving in areas such as compassion, respect, and self-control (Park, 2004). Emerging adults use their increasing independence and changing life circumstances, such as entering the work force or attending university, to engage in new experiences, such as taking leading roles in community projects, in line with the bidirectional relationships described in the PYD literature (Lerner et al., 2003).

In line with Lerner's description of thriving youth (cf. Lerner, 2004), Hawkins and colleagues (2009) described the positively developing emerging adult as satisfied with his/her life, displaying social competence, and engaging with civic and social groups in meaningful ways. Thus, emerging adulthood appears to be a period when young people are likely to take a greater interest in communal needs (Lerner et al., 2003). In order for emerging adults to

contribute, they must be engaged in a context and apply the competencies gained from lasting relationships in a manner that is of benefit to others (Lerner et al., 2005). For athletes, this engagement can take the form of cross-age coaching or peer-mentoring within sport (Lee & Martinek, 2013; Pittman et al., 2003).

Review of Literature

The following literature review consists of two sections. The first section examines the role of sport as a tool for development across three life stages: (a) childhood, (b) adolescence, and (c) emerging adulthood. The second section discusses the links between sport participation and contribution as conceptualized in the PYD perspective.

Sport as a Tool for Development

Sport is a context in which youth can learn life skills through meaningful interactions with adults and peers (Rutten et al., 2007). As a result, sport has frequently been used as a context to study PYD and in this section, the literature is reviewed based on the three sub-groups typically comprised within the youth age-group.

Childhood. Childhood, a life stage spanning from approximately 5 to 12 years of age, is a period of rapid development in which children make great progress physically, cognitively, and socially (Shaffer, Kipp, Wood, & Willoughby, 2010). Physically, children grow rapidly and learn fundamental movement skills that are later developed and refined into complex motor sequences (Lubans, Morgan, Cliff, Barnett, & Okely, 2010). Cognitively, children learn and develop competencies including reading and writing, basic arithmetic, and simple logical thought patterns (Feldman, 2012). Socially, children begin to make social comparisons and experience increases in their abilities to recognize and regulate emotions (Denham, 1998; Harter, 1999). Many children begin participating in organized sport in early or mid-childhood (Coakley, 2011). One

of the main goals of sport is to have children learn and develop physical competencies and in Canada, this goal is guided by the Long Term Athlete Development (LTAD) model (Canadian Sport for Life, 2011). The second stage of the model, the FUNdamentals, is aptly named. The goal of this stage is to create a safe and fun atmosphere to foster a positive attitude toward sports and physical activity among girls six to eight years of age and boys six to nine years of age. In this stage, the physical competency goals are to introduce and develop fundamental movement skills that include motor, manipulative, and stability skills which form the building blocks of sport-specific skills developed later (Lubans et al., 2010). The next stage, Learn to Train, also applies to older children up to the onset of puberty (Canada Sport for Life, 2011). Through this stage, fine motor control and coordination skills are refined.

The gains experienced from sport participation are not limited to physical competencies. It has been documented that elementary school aged children that participate in organized sport display higher levels of self-esteem than their peers (Slutzsky & Simpkins, 2009). Another positive outcome of sport participation for children includes higher social status among peers for children that are perceived to possess higher levels of athletic ability (Chase & Dummer, 1992). This is especially important given that children become more concerned with peer acceptance and popularity as childhood progresses towards adolescence (Puckett & Black, 2005).

Sport provides an engaging context in which children can develop character (Donnelly, Darnell, & Coakley, 2007). Hedstrom and Gould (2004) concluded that the character of children can be developed in sport when aspects such as fair play, sportsmanship, and moral development are emphasized and taught systematically and consistently. It has also been reported that when children focus on the personal improvement of their skills rather than displaying greater ability than others, they are more likely to view sport as a way to foster cooperation and citizenship

(Ewing, Gano-Overway, Branta, & Seefeldt, 2002). However, other researchers have examined character development through sport in child populations and results indicate that sport can lead to increases in aggressive behaviours; prompting researchers to tentatively state that sport may be able to build character, but only under the right conditions (Bredemeier & Shields, 2006).

Adolescence. Sport has been found to positively impact adolescents' development and the PYD perspective has provided researchers with a lens through which to examine how sport influences developmental outcomes (Lerner et al., 2005). Many researchers have used this perspective to design or evaluate youth sport and physical activity programs. For example, Papacharisis, Goudas, Danish, and Theodorakis (2005) designed an intervention that focused on improving the goal setting abilities of young Greek volleyball and soccer players. After an eight week period, the intervention group displayed better goal setting and life skill knowledge, held better self-perceptions, and performed better in sport-specific drills than the control group. Another program, Play It Smart, has been shown to improve the graduation rates of participants and facilitate connections to peers by creating a 'positive gang' environment, in which at-risk youth join teams and adopt roles which give a sense of belonging, status, and identity (Petitpas et al., 2004). Strachan, Côté, and Deakin (2011) conducted qualitative interviews and observations with elite youth sport coaches and found three key elements to fostering PYD in elite youth sport contexts: (a) creating an appropriate training environment, (b) providing opportunities for youth to develop social, personal, and physical skills, and (c) fostering supportive interactions.

In a case study of a high school soccer team, athletes reported that sport allowed them to demonstrate and develop responsibility, leadership skills, and teamwork (Holt, Tink, Mandigo, & Fox, 2008). Wright and Côté (2003) interviewed six university student-athletes using a retrospective design to study developmental experiences in youth sport. Their findings indicated

athletes may develop leadership skills and behaviours through sport involvement through adolescence. In a 2009 study, Camiré, Trudel, and Forneris found that athletes reported learning or developing a number of life skills including time-management, the ability to work with others toward a common goal, and communication skills in sports. Additionally, athletes reported improved self-efficacy and that sport participation led to the formation of meaningful connections. High school athletes have reported character development occurring through sport (Camiré & Trudel, 2010). Specifically, athletes discussed both social character, such as loyalty, and moral character, such as honesty and respect, being developed in sport. Sport participation can have a positive developmental impact on adolescent athletes by helping develop goal setting, work ethic, time-management, responsibility, and meaningful connections with coaches and peers (Fraser-Thomas & Côté, 2009). However, experiences may not always be positive. Fraser-Thomas and Côté (2009) also reported how some athletes experienced excessive stress and developed negative self-perceptions. As evidenced above, the psychosocial development of adolescents has been well researched and much of this research has utilized the PYD perspective as a guiding framework.

Emerging Adulthood. In the existing literature on emerging adulthood, the majority of research has focused on describing the life stage and associated challenges (Arnett, 2007b). In this sense, much of the literature appears to have taken a ‘deficit-reduction’ approach, much like the youth development research examining adolescence before the conceptualization of PYD. Some studies, such as the 2009 study by Hawkins and colleagues, have examined the positive developmental outcomes of emerging adults. However, these studies have lacked an overarching theoretical framework to guide the research and organize the findings. Spreitzer (1994) conducted a longitudinal study that tracked high school athletes for six years following

graduation and found that individuals who were athletes through high school tended to have higher educational attainment than their non-athlete peers. Sport participation among emerging adults has also been associated with perceived increases in confidence and enhanced social relationships (Chen, Snyder, & Magner, 2010).

There has been little research on sport's role in promoting development in emerging adulthood using a theoretical framework; however, Flett and colleagues (2010) have suggested that the PYD framework may be suitable to study emerging adults' developmental experiences in sport, as they note development does not cease at the end of adolescence. Although the PYD perspective has not been used specifically to examine the development of emerging adults in a sport context, a few studies have explored character development in sport in this population. In a study on the ethical value choice development of university athletes, it was found that varsity student-athletes scored lower on measures of ethical value choices than intramural athletes (Priest, Krause, & Beach, 1999). Additionally, scores decreased over four years of university sport participation, with greater decreases observed in individual sport athletes (i.e., sports in which athletes compete against teammates, such as swimming). Character in emerging adults has also been examined in sport from the coaches' perspectives (Rudd & Mondello, 2006). Collegiate coaches defined character in terms of qualities and characteristics consistent with both social values and ethical/moral values. Also from the perspectives of coaches, Flett and colleagues (2010) examined the recruiting behaviours of university athletic coaches. It was found that coaches look for more than simply athletic and physical ability when recruiting emerging adults for their teams. Coaches emphasized that it was important to recruit and develop life skills such as effective communication, goal setting and time-management, and character traits such as honesty and integrity.

In sum, the majority of PYD research in the context of sport has been focused on adolescents, with a lesser focus on children, and very few studies examining emerging adults. Further, unlike developmental research on adolescence, research on emerging adulthood in sport has not benefited to the same extent from a theoretical perspective such as PYD, meaning that sport's connection with contribution, the positive outcome of youth development, has been sparsely explored. The next section presents a review of the few studies which have examined the relationship between sport participation and contribution.

Sport and Contribution

The following sections examine the literature that has linked sport participation with contribution. As of yet, there has not been much research examining the connections between sport participation, both school and community based, and contribution. The sections are organized following the four contexts to which contributions can be made based on Lerner's 5Cs model of PYD: the self, family, community, and civil society (Lerner et al., 2005).

Contributions to the self. High school sport participation has been linked with contributions to the self. In a six-year longitudinal study that compared high school athletic participation levels with a variety of developmental outcomes, high school sport participants had the highest level of career aspirations and higher education enrolment (Marsh & Kleitman, 2003). Pursuing higher education represents a contribution to the self as post-secondary education has been linked to higher lifetime income, increased job satisfaction, and better health outcomes for graduates than those with a high school education or less (Barrow, Brock, & Rouse, 2013). In another study, Lally and Kerr (2005) examined the identity roles and career planning of varsity student-athletes. They found that early in their university careers, varsity student-athletes perceived few opportunities to become involved in campus clubs or community

activities. However, as they neared graduation, some athletes began volunteering in settings related to their intended careers (e.g., a future teacher volunteering at a school) as a way to gain job related skills and experience.

Contributions to family. Contributions to family may include assisting sick or elderly relatives, or caring for younger siblings. There are few examples of family contributions within sport and none were found which showed youth contributing to their families. The closest link to the concept of contributions to family found in sport was parents coaching their own children (Jowett, Timson-Katchis, & Adams, 2007; Weiss & Fretwell, 2005). Weiss and Fretwell (2005) interviewed six parents who were coaching their 11 or 12 year old sons' soccer teams. They found that the parent-coaches viewed coaching their sons as an opportunity to spend quality time with them, teach skills and values, and as a way to watch their sons grow. Another study examining parent/coach-child/athlete relationships (Jowett et al., 2007) also concluded that coaching became an extension of parenting and allowed the parent-coaches to influence the development of their children.

Contributions to community. In addition to contributing to themselves and their families, individuals can also make contributions to their communities. Perks (2007) examined the sport participation of youth and its subsequent influence on community involvement as adults. His study surveyed over 13,000 Canadians over the age of 25 and found that participation in youth sport had a small predictive effect on community involvement. Interestingly, this predictive relationship between youth sport participation and contribution persisted through adulthood and even appeared to strengthen after the age of 65. In addition, it was found that former youth athletes were approximately four times more likely to be involved in a sport organization as an adult than those who did not participate in youth sport (Perks, 2007). Upon

transitioning out of competitive sport as athletes, or during the later stages of their competitive careers, some athletes were found to give back to their sport as mentors or coaches for younger athletes (Cunningham & Singer, 2010).

In addition to links between sport participation and community involvement, there are programs designed to facilitate young athletes contributing in the community (Eley & Kirk, 2002; Kay & Bradbury, 2009). Eley and Kirk (2002) examined a national program in the United Kingdom called Millennium Volunteers in which adolescents and emerging adults engaged in up to 200 hours of community sport-based volunteering. It was found that young athletes' interest in volunteering and the perceived importance of volunteering increased as a result of participation in this program. Involvement in another British government program (i.e., Step into Sport Volunteer Training Program) was found to help young athletes develop skills and social connections that are important for developing community projects (Kay & Bradbury, 2009).

Contributions to civil society. Contribution to civil society has been linked with sport participation. Former youth athletes were found to be more likely to be politically active than those who were not youth athletes (Perks, 2007). This lifetime association between sport participation and contribution can also be seen in athletes in the four major professional sports leagues in North America (Babiak, Mills, Tainsky, & Juravich, 2012). Babiak and colleagues documented how professional athletes have had over 500 charitable non-profit organizations established in their names as of 2008. Interestingly, the authors reported that these athletes established these organizations for a combination of altruistic motives in addition to promoting the individual player's brand.

The current review of the literature indicates that PYD research in sport has been mostly conducted with samples of adolescents and has focused primarily on examining the development

of assets. Few studies have examined sport participation in emerging adulthood and little research has been conducted to examine the outcomes of asset acquisition (i.e., contributions). University athletes represent an ideal group of emerging adults in which to explore contributions due to their prolonged involvement in sport, which is believed to facilitate PYD. Further, emerging adulthood has been defined as stage of life characterized greater recognition of communal needs. Thus, university athletes would be expected to be positively developing emerging adults and active contributors to their surroundings contexts.

The little research on university athletes and their contributions has focused mainly on comparing what athletes do to contribute and how frequently athletes contribute relative to their non-athlete peers. However, the findings of this research are conflicting. For example, a 2012 study by Gayles, Rockenbach, and Davis analyzed data from over 3000 university students and found that varsity student-athletes were less likely to engage in social activism or be involved in charitable activities. However, Hoffman, Kihl, and Browning (2015) surveyed approximately 500 university students and found that varsity student-athletes were over two times more likely to have volunteered in the past 12 months compared to non-athletes. These mixed findings suggest that there is a pressing need for research to go beyond simply examining what university athletes do to contribute. Therefore, the overall purpose of this Master's thesis was to gain an in-depth understanding of university student-athletes' contributions. Three research questions guided the thesis: (a) Is the PYD-VSF a suitable measure for the 5Cs in an emerging adult athlete population? (b) What motivations do university student-athletes have for contributing? (c) What are the factors that facilitate or serve as barriers to university student-athletes' contributions?

Presentation of the Articles

The findings from phase one are presented in the brief research note and the findings of phase two are presented in two articles. In the research note, the purpose was to assess the Positive Youth Development - Very Short Form (PYD-VSF) as a potential tool for measuring the 5Cs in an emerging adult athlete population. The first article presents university student-athletes' motivation to contribute and made use of two of the sub-theories that comprise self-determination theory, basic needs theory (BNT) and organismic integration theory (OIT). The second article examined the facilitators and barriers university student-athletes face in regards to contributing and relates the findings through two composite narratives.

Research Note

Assessing the suitability of the Positive Youth Development – Very Short Form
for use in an emerging adult athlete population

Colin J. Deal

Abstract

Positive youth development research in sport using the 5Cs model has become increasingly common. However, much of this research has been qualitative in nature due to a lack of succinct, valid, and reliable quantitative measures appropriate for the specific context of sport. Researchers often have to combine several existing measures, resulting in a long questionnaire, or adapt existing measures to fit the context of sport, requiring time and expertise. One measure which may provide a succinct measure of the 5Cs that could be used in sport is the Positive Youth Development – Very Short Form (PYD-VSF). The purpose of this study was to assess the suitability of the PYD-VSF for use in an emerging adult athlete population. Seventy-four university student-athletes completed an online questionnaire including the PYD-VSF. Data analyses consisted of examining the internal consistency reliability and factor dimensionality of the subscales of the PYD-VSF. Several issues concerning internal consistency reliability and factor dimensionality were found and items were eliminated to rectify these. However, even with the elimination of items problems persisted. We conclude, that in its current form, the PYD-VSF is not an appropriate measure of the 5Cs in an emerging adult athlete population. Suggestions for how it may be modified are provided.

Keywords: contribution, emerging adulthood, university athletes, 5Cs model

In recent decades, there has been a shift in how researchers approach studying youth development. Previously, adolescence was viewed by many youth development researchers as a period of “storm and stress” to be weathered (Hall, 1904). Approaches based on this view often resulted in a deficit-reduction model in which successful development was regarded as the reduction or elimination of problematic behaviours (Fraser-Thomas, Côté, & Deakin, 2005). However, being problem free does not equate to successful transitions into adult life (Pittman, Irby, Tolman, Yohalem, & Presbrey, 2003) and more recently, researchers have adopted the view of adolescence as a period of development with vast potential for personal growth (Danish, Forneris, Hodge, & Heke, 2004). This new perspective is known as positive youth development (PYD). In this perspective, youth are seen as resources to be developed and as such, an asset-promotion approach is used to focus on empowering youth and preventing problematic behaviours from even occurring in the first place (Benson, Scales, Hamilton, & Sesma, 2006).

One model which has been used to guide PYD research is the 5Cs model developed by Lerner and colleagues (2005). In this model, youth who develop in five critical (i.e., competence, confidence, connection, character, and caring) are more likely to exhibit a sixth C of contribution. However, measuring the 5Cs has been a challenge for PYD researchers. For the longitudinal 4-H study (Lerner et al., 2005), a study which has spawned numerous publications, Lerner and colleagues administered a questionnaire which included over 150 items drawn from the Profiles of Student Life – Attitudes and Behaviors Survey (Benson, Leffert, Scales, & Byth, 1998), the Teen Assessment Project Survey Question Bank (Small & Rodgers, 1995), the Child’s Report of Parenting Behaviors Inventory (Schludermann & Schludermann, 1970), the Parental Monitoring Scale (Small & Kerns, 1993), the Self-Perception Profile for Children (Harter, 1983), the Peer Support Scale (Armsden & Greenberg, 1987), the Eisenburg Sympathy Scale (Eisenberg

et al., 1996), and the Social Responsibility Scale (Greenberger & Bond, 1984). Other researchers have utilized measures of over 80 items (Bowers et al., 2010; Phelps et al., 2009) but questionnaires of such length are difficult to administer as they require much attention and energy and researchers generally only have access to participants for short periods of time (Geldhof et al., 2013). As a result of these limitations, Geldhof and colleagues created the Positive Youth Development –Very Short Forms (PYD-VSF; Geldhof et al., 2013). The PYD-VSF consists of 17 items and was determined to be a valid and reliable measure for PYD and the 5Cs among adolescents. Geldhof and colleagues (2013) performed a series of bifactor confirmatory factor analyses for school-aged adolescents in grades 6 and 7, grades 7 and 8, and grades 9 and 12 which all indicated invariance when compared with longer measures of the 5Cs.

It has been recognized that PYD research in the context of sport has faced measurement issues, resulting in much of the research in the area being qualitative in nature (Vierimaa, Erikson, Côté, & Gilbert, 2012). To date, PYD researchers in sport have primarily used a collection of existing measures of separate constructs, such as the measurement framework proposed by Vierimaa and colleagues, which includes the Sport Competence Inventory (Causgrove Dunn, Dunn, & Bayduza, 2007), the self-confidence sub scale of the revised Competitive State Anxiety Inventory (Cox, Martens, & Russell, 1983), the CART-Q (Jowett & Ntoumanis, 2004), the Peer Connection Inventory (Coie & Dodge, 1983), and the Prosocial and Antisocial Behavior in Sport Scale (Kavussanu & Boardley, 2009). However, to the knowledge of the authors, this framework has not been used and results in a total of approximately 50 items. Alternatively, other PYD researchers have adapted measures from other contexts to fit sport. For example, MacDonald, Côté, Eys, and Deakin (2012) adapted the Youth Experience Survey 2.0 (YES; Hansen & Larson, 2005) to create the Youth Experience Survey for Sport (YES-S).

However, this approach to measuring PYD concepts in sport requires time, effort, and expertise to adapt and validate measure from another context.

Although the PYD-VSF was not initially intended to be used specifically in sport, it may represent a useful measure in this setting. Furthermore, the term youth may be used to describe individuals up to 24 years old (UNESCO, n.d.). The PYD-VSF has, to date, only been validated through adolescence up to approximately 18 years of age, but the suitability for the scale has yet to be determined with a large segment of individuals who may be considered youth. This segment from approximately 18 to 24 years old are known as emerging adults (Arnett, 2000). Currently there are no succinct measures of PYD that are based on the 5Cs which have been validated for use with emerging adults in the sport context. Thus, the purpose of this paper is to assess the suitability of the PYD-VSF for use in emerging adult athlete populations. Specifically, the internal consistency reliability and factor structure of each subscale will be examined and the predictive validity of the 5Cs obtained using the PYD-VSF regarding contribution will be tested.

Methods

Participants

A total of 74 athletes ($M_{age} = 19.6$ years, $SD = 1.86$, 79.7% female) completed the online questionnaire. Athletes ranged in experience from first year through fifth year and competed in seven sports: basketball ($n = 6$), football ($n = 2$), ice hockey ($n = 3$), rugby ($n = 12$), soccer ($n = 25$), swimming ($n = 22$), volleyball ($n = 2$), multiple ($n = 1$), and unspecified ($n = 1$). Forty-nine participants attended a small Canadian university located in a rural setting and 25 attended a large Canadian university in an urban setting.

Procedure

Survey data collection took place at two Canadian universities. Prior to recruiting participants, ethics approval was obtained from both universities (see Appendices A and B for approval letters) from which participants were recruited. At the large urban university, the lead researcher was permitted to contact an administrative staff member of the athletics department directly and provide her with an information letter describing the research project. This information letter contained a link to the online questionnaire and was forwarded by email to all varsity student-athletes at the university. At the small rural university, the lead researcher individually sent copies of the information letter to the head coaches of the varsity teams, who in turn, forwarded by email the letter to their athletes. Data were collected from September to November 2014.

Instrumentation

The questionnaire (see Appendix C for complete questionnaire) consisted of three sections: (a) demographics, (b) the PYD-VSF (Appendix D; Geldhof et al., 2013), and (c) measures of contribution. The demographics section collected information including age, gender, university, current year of athletic eligibility, and sport. The second section consisted of the PYD-VSF, an instrument originally constructed and validated for use with children in grades 5 through 12 (see Geldhof et al., 2013). Participants were asked to respond to the items considering their general life experiences (i.e., not sport-specific experiences). The PYD-VSF (see Appendix) is a 17-item scale that consists of five subscales: competence (three items), confidence (three items), connection (four items), character (four items), and caring (three items). Items used several different anchors on either four or five point Likert scale. Several items used a format in which participants were first asked to identify which of two individuals

they believed they were more like, and then asked if they were somewhat or very much like that person. In the present study, the wording of items were altered slightly to reflect the older age of participants and the university setting (e.g., *Adults in my town/city* make me feel important was changed to *community members in my university's town/city* make me feel important.). Table 1.1 shows all items, including any modifications and response scales.

The final section included four items used to assess the participants' level of contribution on a Likert scale ranging from 1 (*never*) to 7 (*everyday*). These items were created based on the contexts in which contributions may be made according to the 5Cs model (Lerner et al., 2005). The four items for the contribution scale used the stem "Please rate the extent to which you engage in the following types of activities." The items in the scale were: (a) I volunteer my time at community organizations/events, (b) I participate in large social activism movements (e.g., LGBT rights, environmental causes, etc.), (c) I keep up to date on provincial or federal politics, and (d) I participate in activities in which I learn new things or improve upon things I have already learned (e.g., dance lessons, guest lectures, etc.).

Table 1.1

PYD-VSF Items and Descriptive Statistics

Item*	Subscale	M (SD)	Skewness	Kurtosis
All in all, I am glad to be me	Confidence	2.01 (1.34)	.216	.267
I get a lot of encouragement at my school	Connection	3.76 (1.00)	-.656	.114
In my family, I feel useful and important	Connection	4.50 (.74)	-1.533	2.073
<i>Community members in my university's</i> [adults in my] town/city make me feel important	Connection	3.50 (1.06)	-.422	-.372
I feel my friends are good friends	Connection	4.47 (.71)	-.980	-.334
Enjoys being with people who are of a different race	Character	4.45 (.72)	-.919	-.500
Helping to make the world a better place to live in	Character	4.23 (.75)	-.807	.535
Accepting responsibility for my actions when I make a mistake or get in trouble	Character	4.51 (.62)	-.919	-.153
When I see someone being taken advantage of, I want to help them	Caring	4.46 (.76)	-1.960	5.620
When I see someone being picked on, I feel sorry for them	Caring	4.49 (.83)	-1.865	3.852
When I see another person who is hurt or upset, I feel sorry for them	Caring	4.46 (.88)	-1.802	3.181
<i>Person A has</i> [some kids have] a lot of friends BUT <i>person B doesn't</i> [other kids don't] have very many friends	Competence	3.12 (.81)	-.705	.108
<i>Person A does</i> [some kids do] very well in his/her classwork BUT <i>person B doesn't</i> [other kids don't] do so well in his/her class work	Competence	3.31 (.74)	-.781	.018
<i>Person A feels he/she is</i> [some kids feel they are] better than others <i>his/her</i> [their] age at sports BUT <i>person B doesn't</i> [other kids don't] feel <i>he/she</i> [they] can play as well	Competence	2.84 (.77)	-.428	.048
<i>Person A is</i> [some kids are] happy with <i>himself/herself</i> [themselves] most of the time BUT <i>person B is</i> [other kids are] often not happy with <i>himself/herself</i> [themselves]	Confidence	3.24 (.84)	-.912	.201
<i>Person A is</i> [some kids are] happy with <i>his/her</i> [their] height and weight BUT <i>person B is</i> [other kids are] not happy with <i>his/her</i> [their] height and weight	Confidence	2.95 (.96)	-.551	-.656
<i>Person A rarely does</i> [Some kids hardly ever do] things <i>he/she</i> [they] knows <i>he/she</i> [they] shouldn't BUT <i>person B does</i> [other kids do] things <i>he/she</i> [they] knows <i>he/she</i> [they] shouldn't	Character	3.32 (.76)	-.820	-.115

*Modifications appear in italics followed by the replaced word(s)

Data Analysis

All analyses were performed using SPSS Version 22.0 software. Primary analyses consisted of two parts. The first part of the analysis focused on the internal consistency reliability and factor dimensionality of the PYD-VSF. Principle component analysis (PCA) was used for each subscale and a forced one factor solution was extracted for each subscale separately. Additionally, Cronbach alpha values for each subscale were reported. The second part of the analysis involved a simultaneous linear regression of the five subscales (i.e., competence, confidence, connection, character, and caring) onto contribution to assess predictive validity of the PYD-VSF.

Secondary analyses were conducted to improve the subscales of the PYD-VSF. First items that loaded poorly (i.e., factor loading of less than .60) onto the factor for that subscale were considered for elimination. In addition to the factor loading value, the conceptual importance of items was considered before deciding to eliminate an item. Second, internal consistency reliability and factor dimensionality of the modified PYD-VSF were re-examined. Finally, these modified subscales of the PYD-VSF were regressed simultaneously onto the contribution scale.

Results

Primary Analyses

Descriptive statistics for each subscale of the PYD-VSF and the contribution scale can be seen in Table 1.2. A summary of each subscale with factor loadings of each item and internal consistency reliability values can be seen in Table 1.3. The forced one factor solution for each subscale of the PYD-VSF resulted in a factor which accounted for 42.4%, 68.0%, 43.4%, 37.5%, and 86.8% of the variance for competence, confidence, connection, character, and caring,

respectively. The forced one factor solution for the four items created for the contribution scale resulted in a factor that accounted for 40.8% of the variance.

Table 1.2

Descriptive Statistics for the Subscales of the PYD-VSF and Contribution Scale

Subscale (scale)	M (SD)	Skewness	Kurtosis
Competence (4-point)	3.09 (.49)	-.642	.238
Confidence (5-point)	3.24 (.62)	-.898	.863
Connection (5-point)	4.06 (.58)	-.427	-.330
Character (5-point)	4.34 (.45)	-.711	.894
Caring (5-point)	4.49 (.77)	-2.100	5.738
Contribution (7-point)	3.47 (1.00)	-.033	-.585

Competence, confidence, connection, character, and caring were regressed onto contribution to assess the predictive validity of the PYD-VSF. The correlation matrix for the dependent and independent variables can be seen in Table 1.4. This regression was not significant, $R^2 = .046$, $F(5,68) = .649$, $p = .663$. Regression coefficients can be seen in Table 1.5.

Table 1.3
Factor Loadings and Subscale Reliabilities of the PYD-VSF

Subscale	α	Item	Factor loading
Competence	.253*	Person A has a lot of friends BUT person B don't have very many friends	.815
		Person A feels he/she is better than others his/her age at sports BUT person B doesn't feel he/she can play as well	.776
		Person A does very well in his/her classwork BUT person B doesn't do so well in his/her class work	.067**
Confidence	.580*	Person A is happy with his/her height and weight BUT person B is not happy with his/her height and weight	.876
		Person A is happy with himself/herself most of the time BUT person B is often not happy with himself/herself	.870
		All in all, I am glad to be me	-.718
Connection	.547*	I get a lot of encouragement at my school	.894
		Community members in my university's town/city make me feel important	.857
		I feel my friends are good friends	.354**
		In my family, I feel useful and important	.274**
Character	.374*	Helping to make the world a better place to live in	.804
		Enjoys being with people who are of a different race	.708
		Accepting responsibility for my actions when I make a mistake or get in trouble	.589**
		Person A rarely does things he/she knows he/she shouldn't BUT person B does things he/she knows he/she shouldn't	.084**
Caring	.923	When I see someone being picked on, I feel sorry for them	.954
		When I see another person who is hurt or upset, I feel sorry for them	.929
		When I see someone being taken advantage of, I want to help them	.912
Contribution	.508*	I participate in activities in which I learn new things or improve upon things I have already learned (e.g., dance lessons, guest lectures, etc.)	.766
		I participate in large social activism movements (e.g., LGBT rights, environmental causes, etc.)	.624
		I volunteer my time at community organizations/events	.620
		I keep up to date on provincial or federal politics	.521**

*Cronbach's alphas below acceptable level of .70 (Nunnally & Bernstein, 1994)

**factor loadings below .60

Table 1.4
Bivariate Correlations

$\alpha =$	Contribution	Competence	Confidence	Connection	Character	Caring
Contribution	--	.054	-.021	.206	.058	.071
Competence	.054	--	.280*	.469**	.345**	.088
Confidence	-.021	.280*	--	.017	-.026	.029
Connection	.206	.469**	.017	--	.238*	.212
Character	.058	.345**	-.026	.238*	--	.546**
Caring	.071	.088	.029	.212	.546**	--

* $p < .05$

** $p < .01$

Table 1.5
Regression Coefficients for Original PYD-VSF onto Contribution

	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	β		
Constant	2.059	1.440		1.430	.157
Competence	-.109	.308	-.054	-.354	.724
Confidence	-.016	.203	-.010	-.079	.937
Connection	.386	.238	.224	1.620	.110
Character	.025	.344	.011	.071	.058
Caring	.029	.190	.022	.152	.071

Secondary Analyses

A total of four items were removed to create modified subscales. One item, “Person A does very well in his/her classwork BUT person B doesn't do so well in his/her class work” was removed from the competence subscale due to poor factor loading. Two items, “I feel my friends are good friends” and “In my family, I feel useful and important” were removed from the connection subscale because the items loaded poorly onto the connection factor. Finally, two items from the character subscale were considered for removal. The first item, “Person A rarely does things he/she knows he/she shouldn't BUT person B does things he/she knows he/she shouldn't” was removed due to a factor loading value of .084. The second item, “Accepting responsibility for my actions when I make a mistake or get in trouble” was retained, despite a factor loading value below the .60 criterion because of the items theoretical importance to the

concept of character. Table 1.6 shows the descriptive statistics for the modified subscales of the PYD-VSF.

Table 1.6
Descriptive Statistics for the Modified Subscales of the PYD-VSF

Subscale (scale)	M (SD)	Skewness	Kurtosis
Competence (4-point)	3.22 (.59)	-.906	1.543
Confidence (5-point)	3.24 (.62)	-.898	.863
Connection (5-point)	3.63 (.95)	-.505	.146
Character (5-point)	4.40 (.50)	-.643	-.050
Caring (5-point)	4.49 (.77)	-2.100	5.738

Items retained in the modified PYD-VSF appear in Table 1.7 with factor loadings of each item and internal consistency reliability values for each subscale. The forced one factor solution for each subscale of the modified PYD-VSF resulted in a factor which accounted for 58.2%, 68.0%, 84.0%, 50.0%, and 86.8% of the variance for competence, confidence, connection, character, and caring, respectively.

The modified subscales were simultaneously regressed onto contribution to assess the predictive validity of the modified scales. The correlation matrix for the dependent and independent variables can be seen in Table 1.8. This regression was also not significant, $R^2 = .070$, $F(5,68) = 1.026$, $p = .410$. Regression coefficients can be seen in Table 1.9.

Table 1.7

Factor Loadings and Subscale Reliabilities of the Modified PYD-VSF

Subscale	α	Item	Factor loading
Competence	.282*	Person A has a lot of friends BUT person B don't have very many friends	.763
		Person A feels he/she is better than others his/her age at sports BUT person B doesn't feel he/she can play as well	.763
Confidence	.580*	Person A is happy with his/her height and weight BUT person B is not happy with his/her height and weight	.876
		Person A is happy with himself/herself most of the time BUT person B is often not happy with himself/herself	.870
		All in all, I am glad to be me	-.718
Connection	.809	I get a lot of encouragement at my school	.917
		Community members in my university's town/city make me feel important	.917
Character	.497*	Helping to make the world a better place to live in	.805
		Enjoys being with people who are of a different race	.726
		Accepting responsibility for my actions when I make a mistake or get in trouble	.569**
Caring	.923	When I see someone being picked on, I feel sorry for them	.954
		When I see another person who is hurt or upset, I feel sorry for them	.929
		When I see someone being taken advantage of, I want to help them	.912
Contribution	.508*	I participate in activities in which I learn new things or improve upon things I have already learned (e.g., dance lessons, guest lectures, etc.)	.766
		I participate in large social activism movements (e.g., LGBT rights, environmental causes, etc.)	.624
		I volunteer my time at community organizations/events	.620
		I keep up to date on provincial or federal politics	.521**

*Cronbach's alphas below acceptable level of .70 (Nunnally & Bernstein, 1994)

**factor loadings below .60

Table 1.8

Correlations between Modified Subscales of the PYD-VSF and the Contribution Scale

$\alpha =$	Contribution	Competence	Confidence	Connection	Character	Caring
Contribution	--	.110	-.021	.222	.165	.071
Competence	.110	--	.124	.310**	.264*	.161
Confidence	-.021	.124	--	-.137	-.113	.029
Connection	.222	.310**	-.137	--	.114	.048
Character	.165	.264*	-.113	.114	--	.521**
Caring	.071	.161	.029	.048	.521**	--

* $p < .05$ ** $p < .01$

Table 1.9

Regression Coefficients for Modified PYD-VSF onto Contribution

	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	β		
Constant	1.272	1.355		.938	.351
Competence	.008	.220	.005	.035	.972
Confidence	.040	.196	.025	.205	.838
Connection	.220	.132	.208	1.661	.101
Character	.311	.288	.154	1.078	.285
Caring	-.027	.180	-.021	-.151	.880

Discussion

The purpose of this study was to assess the suitability of the PYD-VSF for use in emerging adult athlete populations. Our primary analyses revealed a number of issues pertaining to using the PYD-VSF in this population. First, internal consistency reliability scores for four of the five subscales (i.e., competence, confidence, connection, and character) fell below the generally acceptable threshold of .7 (Nunnally & Bernstein, 1994). Although one should be prudent about rejecting questionnaire short-form scales based on reliability alone, given that internal consistency reliability measures are expected to be lower in scales that have fewer measures (i.e., Cronbach alpha is typically inflated with greater items), some of these reliability measures in the current analyses are quite concerning. The competence and character subscales, in particular, displayed very concerning reliability measures with Cronbach alphas of .253 and .374 respectively. Additionally, the one subscale which possessed an acceptable Cronbach's

alpha, the caring subscale, showed a distribution that was impacted by ceiling effects and heavily skewed in the negative direction as a result. Removal of problematic items from the competence and character subscales failed to improve their internal consistency reliability to an acceptable level. The internal constancy reliability of the connection subscale was improved from .547 to .809 by removing the items concerning connection to family and peers. However, the removal of problematic items reduced the competence and connection subscales to a total of two items each, making it difficult to properly define the factor they represent (Raubenheimer, 2004).

Second, when the factor dimensionality of each subscale was examined, items were deemed to be loading well if their factor loading was .60 or greater. It was found that each subscale, with the exception of the confidence and caring subscales, contained items which failed to load onto a single factor representative of the respective “C.” Within the competence subscale, the item “Person A does very well in his/her classwork BUT person B doesn't do so well in his/her class work” had a factor loading of .067, well below the criterion of .60 or greater, and was removed. In the connection subscale, the items “I feel my friends are good friends” and “In my family, I feel useful and important” loaded at .354 and .274 respectively and were removed. Finally, two items in the character subscale had factor loadings below .60. One of these items, “Person A rarely does things he/she knows he/she shouldn't BUT person B does things he/she knows he/she shouldn't” had a factor loading of .084 and was removed. The second item, “Accepting responsibility for my actions when I make a mistake or get in trouble” had a factor loading of .589. Despite failing to load onto the factor above the criterion of .60, this item was retained for the character subscale despite a weak factor loading because it pertained directly to a central aspect of the theoretical conceptualization of character (cf. Lerner et al., 2005).

Finally, according to the 5Cs model, individuals who have developed the 5Cs are more likely to contribute. Thus, to test the predictive validity of the PYD-VSF, the 5C subscales were regressed onto a contribution scale. This relationship has been tested with adolescent samples (Geldhof et al., 2013; Geldhof et al., 2014), but has not been tested in an older sample consisting of emerging adults. When the competence, confidence, connection, character, and caring subscales were regressed onto contribution, the resulting models were not statistically significant. Furthermore, a closer look at the correlations between variables showed no significant correlations between any of the independent variables and the dependent variable. Additionally, when the modified subscales were also regressed onto contribution, the resulting model was also not statistically significant, although marginally closer to significance and accounting for a greater amount of the variance than the original model.

However, the results of the regressions cannot be interpreted with absolute confidence as the contribution scale used in these analyses had not been previously validated. Furthermore, the scale attempted to assess contributions made to multiple contexts but few participants indicated involvement in contributions to civil society, causing two items to score much lower than the others. This may have artificially lowered contribution scores. Additionally, these items created inconsistency between items, resulting in the scale falling below the acceptable level of .70 for internal reliability consistency (Nunnally & Bernstein, 1994).

Together, the issues with internal reliability consistency, factor dimensionality, and predictive validity suggest that the PYD-VSF, in its current form, is not an appropriate measure for use in emerging adult athlete populations. Thus, although the PYD-VSF has the word *youth* in it, it does not appear to be usable with all those considered youth (i.e., emerging adults) and appears to be limited to use with adolescents. Simply eliminating poorly loading items failed to

improve the PYD-VSF, to the point that we would not recommend its use with emerging adult athlete populations. However, our analyses allow us to suggest several improvements. First, a revised PYD-VSF may benefit from a more sensitive set of response options such as a seven or nine point Likert scale. Additionally, all items should be measured on the scales with the same number of response options. The questions which used asked participants to identify which individual they were more like and to what extent, effectively creating two polarized sets of response options which drew responses away from the middle, may need to be re-phrased so a more traditional Likert scale may be used. These modifications may draw responses away from the anchors, reduce the observed ceiling effects on the caring subscale, and ease analysis and interpretation of results. Additionally, more sensitive response options may provide a more nuanced view of the subscales than the current four and five point scales can provide. Second, the subscales, with the exception of the caring subscale, displayed low internal consistency reliability and contained items with low factor loadings. Although both of these issues improved by eliminating items that loaded poorly onto a single factor, a modified PYD-VSF would be improved if additional items that loaded strongly onto a single factor for each “C” were added.

Although the purpose of the manuscript was to assess the suitability of the PYD-VSF for use in emerging adult athlete populations and concerns with the validity of the measure were noted, the findings of this manuscript contribute to the field. These findings represent the first instance in which descriptive statistics for the 5Cs and contribution have been presented in an emerging adult or university athlete population.

Our conclusions and suggested improvements cannot be viewed as definitive, as the present study had important limitations. First, the study would have benefited from a larger sample size which may have allowed for smaller relationships among variables to be detected.

Second, the four items created to assess contribution had a Cronbach's alpha of .508 which was below .7. This may have made it more difficult to observe relationships between the subscales of the PYD-VSF and contribution. As a result, we are unable to confidently comment on the predictive validity of the PYD-VSF as it relates to contribution. Future research should utilize different measures of contribution to assess the predictive validity of the PYD-VSF.

In conclusion, the current study found issues with internal consistency reliability, factor dimensionality, and predictive validity of the subscales of the PYD-VSF. As a result, we must conclude that the PYD-VSF is not an appropriate measure for use with emerging adult athlete populations in its current form. However, with modifications, an adapted tool with more items to assess each C may be created to measure the 5Cs in this population which remains brief, valid, and reliable.

References

- Armsden, G., & Greenberger, M. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-452.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi: 10.1037//0003-066X.55.5.469
- Benson, P. L., Leffert, N., Scales, P. C., & Blyth, D. A. (1998). Beyond the “village” rhetoric: Creating healthy communities for children and adolescents. *Applied Developmental Science*, 2(3), 138-159. doi: 10.1207/s1532480xads0203_3
- Benson, P. L., Scales, P. C., Hamilton, S. F., & Sesma, A. (2006). Positive youth development: theory, research, and applications. In W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology* (6th ed.). (pp. 894-941) Hoboken, NJ: John Wiley & Sons Inc.
- Bowers, E. P., Li, Y., Kiely, M. K., Brittan, A., Lerner, J. V., & Lerner, R. M. (2010). The five Cs model of positive youth development: A longitudinal analysis of confirmatory factor structure and measurement invariance. *Journal of Youth and Adolescence*, 39(7), 720-35. doi: 10.1007/s10964-010-9530-9
- 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.
- 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.

- Cox, R. H., Martens, M. P., & Russell, W. D. (2003). Measuring anxiety in athletics: The revised competitive state anxiety inventory-2. *Journal of Sport and Exercise Psychology*, 25(4), 519-533.
- Danish, S., Forneris, T., Hodge, K., & Heke, I. (2004). Enhancing youth development through sport. *World Leisure Journal*, 46(3), 38-49. doi: 10.1080/04419057.2004.9674365
- Eisenberg, N., Fabes, R. A., Murphy, B. C., Karbon, M., Smith, M., & Maszk, P. (1996). The relations of children's dispositional empathy-related responding to their emotionality, regulation, and social functioning. *Developmental Psychology*, 32(2), 195-209. doi: 10.1037/0012-1649.32.2.195
- 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. doi: 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. (2013). The creation and validation of short and very short measures of PYD. *Journal of Research on Adolescence*, 1-14. doi: 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. doi: 10.1007/s10964-014-0093-z
- Greenberger, E. & Bond, L., (1984). *Psychosocial maturity inventory*. Irvine: University of California, Irvine, Department of Social Ecology.
- Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education* (Vols. 1 & 2). New York: Appleton.

- Harter, S. (1983). Supplementary description of the self-perception profile for children: Revision of the perceived competence scale for children. Unpublished manuscript, University of Denver.
- 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://web.aces.uiuc.edu/youthdev/>.
- 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. doi: 10.1111/j.1600-0838.2003.00338.x
- Kavussanu, M., & Boardley, I. D. (2009). The prosocial and antisocial behaviour in sport scale. *Journal of Sport and Exercise Psychology*, 31, 97-117. doi: 10.1080/02640414.2013.775473
- Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., ... 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.
- 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. doi: 10.1016/j.psychsport.2011.09.001
- Nunnally, B. H., & Bernstein, J. C. (1994). *Psychometric theory* (3rd ed.). London, UK: McGraw-Hill.

- Phelps, E., Zimmerman, S., Warren, A. E. A., Jelicic, 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.
- 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. Retrieved from <http://forumfyi.org/content/preventing-problems-pr>
- Raubenheimer, J. (2004). An item selection procedure to maximise scale reliability and validity. *SA Journal of Industrial Psychology*, 30(4), 59-64. doi: 10.4102/sajip.v30i4.168
- Schludermann, E., & Schludermann, S. (1970). Replicability of factors in children's reports of parent behavior (CRPBI). *Journal of Psychology*, 76(2), 239-249.
- Small, S. A., & Rodgers, K. B. (1995). *Teen Assessment Project (TAP) Survey Question Bank*. Madison: University of Wisconsin-Madison.
- Small, S. A., & Kerns, D. (1993). Unwanted sexual activity among peers during early and middle adolescence: Incidence and risk factors. *Journal of Marriage and the Family*, 55(4), 941-952. doi: 10.2307/352774
- United Nations Educational, Scientific, and Cultural Organization. (n.d.). What do we mean by "youth"? Retrieved from <http://www.unesco.org/new/en/social-and-human-sciences/themes/youth/youth-definition>
- 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. doi: 10.1260/1747-9541.7.3.601

Article One

An Examination of University Athletes' Motivations to Contribute

Colin J. Deal

Abstract

In recent years, some studies have examined how athletes contribute back to society, but little of this research has focused on why they contribute. The purpose of the current study was to examine university student-athletes' motivations to contribute. Individual semi-structured interviews were conducted with 10 participants (three males, seven females) between 18 and 22 years of age ($M = 19.4$) who were full-time students at two Canadian universities. Findings were interpreted using two sub-theories of self-determination theory: basic needs theory and organismic integration theory. The findings indicated how university student-athletes engaged in contributions for reasons that satisfied their basic needs for autonomy, competence, and relatedness. Additionally, their motivations to contribute represented a complex interplay of intrinsic and extrinsic motives rather than a singular motive. Contribution experiences during the university years appear to be important means to help students make informed career decisions and to develop a willingness to be lifelong contributors. In addition, varsity student-athletes appear to be in ideal positions to contribute given their multi-level exposure to contribution opportunities emanating from teammates, coaches, professors, and administrative staff.

Keywords: contribution, emerging adulthood, self-determination theory, university athletes

Positive youth development (PYD) is a perspective on development that emerged in the early 1990s in response to the prevailing tendency to study youth using a deficit-reduction approach (Roth & Brooks-Gunn, 2003). Within the PYD perspective, the emphasis is placed on developing the strengths (assets) of youth, which include cognitive (e.g., problem solving), behavioural (e.g., emotional control), and social (e.g., interpersonal communication) skills (Lerner, Dowling, & Anderson, 2003; Lerner, Lerner, von Eye, Bowers, & Lewin-Bizan, 2011). The development of assets occurs in conjunction with the support of resources in the contexts in which youth live, which include home, school, and the community (Larson, 2006; Lerner et al., 2011). Thus, within the PYD perspective, successful development ensues through the acquisition of assets and thus goes beyond the simple reduction of problematic behaviours such as substance use, delinquency, and unprotected sex (Pittman, Irby, Tolman, Yohalem, & Ferber, 2003; Roth & Brooks-Gunn, 2003).

Sport, when appropriately structured, has been shown to be a practice conducive to the development of assets needed to succeed in life (Fraser-Thomas, Côté, & Deakin, 2005; Lee & Martinek, 2013). Holt, Tink, Mandigo, and Fox (2008) conducted a case study of an urban high school soccer team which included 12 players and the head coach. Findings showed that even with little direct teaching, athletes were able to develop initiative, respect, and leadership. Fraser-Thomas and Côté (2009) interviewed 22 competitive adolescent swimmers regarding their positive and negative developmental experiences in sport and found that athletes reported developing goal-setting strategies, time-management skills, commitment, and perseverance. Camiré and Trudel (2010) interviewed 20 high school athletes regarding their perceptions of character development in high school sport. The athletes reported developing elements of social

character including teamwork, perseverance, and loyalty as well as exposure to elements of moral character in the form of honesty and respect.

Although the development of youth in sport has received the attention of many researchers in recent years, few studies (e.g., Zarrett, Fay, Li, Carrano, Phelps, & Lerner, 2009) have specifically examined the outcomes of sport participation for particular sub-groups such as emerging adulthood. The term youth refers to a broad range of individuals who can be up to 24 years of age (UNESCO, n.d.), with emerging adulthood being a sub-group proposed by Arnett (2000) spanning approximately from approximately 18 to 25 years of age. This period has been proposed as a stage of development between adolescence and adulthood, largely in recognition of the delay in normative markers of adulthood such as age of marriage and age of first childbirth. In Canada, the average age of first marriage has increased from approximately 23 for women and 25 for men in the 1960s to 29.6 and 31.0 for women and men respectively by 2008 (Statistics Canada, 2013b). In the same time period, the average age of mothers at the birth of their first child changed from 23.5 to 28.5 (Statistics Canada, 2013a) and the age of fathers at first childbirth increased from 27.8 in 1995 to 29.1 in 2006 (Statistics Canada, 2010). Hawkins and colleagues (2009) describe successfully developing emerging adults as being satisfied with their life, displaying social competencies, and engaging with civic and social groups in meaningful ways. Additionally, emerging adulthood has been described as a time during which young people are more likely to take increased interest in communal needs over their own self-interests (Lerner et al., 2003).

Within the 5Cs model (Lerner et al., 2005), developed in line with PYD principles, successfully developing youth are depicted similarly to how successfully developing emerging adults are depicted (cf. Hawkins et al., 2009). In the 5Cs model, youth are said

to develop in five critical areas: competence, confidence, connection, character, and caring. Competence includes skills and abilities in the cognitive, social, academic, and vocational domains (Lerner et al., 2005). Confidence is closely related to competence but rather than being domain specific, it is intended to be more global and encompasses self-efficacy, self-worth, and self-regard (Geldhof et al., 2013). Connection refers to relationships and positive bonds established between youth and supportive adults in their surrounding contexts (Geldhof et al., 2013). Character is defined as respecting rules and norms, acting morally, and possessing integrity. Caring relates to having sympathy and empathy for others. The 5Cs model postulates that youth who are successful at developing the 5Cs are said to be more likely to demonstrate the sixth C, contribution. In the context of the 5Cs model, contribution is defined as the actions taking by individuals that benefit their own well-being, or that of their family, community, or wider civil society (Lerner, 2004). Thus, contribution is a term that encompasses a wide range of activities that can include higher education, caring for elderly relatives, volunteering with community organizations, and social activism. The 5Cs model was developed for use with youth populations and the concept of contribution as a positive outcome of development may make the model amenable to the study of successfully developing emerging adults. Hawkins and colleagues' (2009) described how successfully developing emerging adults are those who meaningfully engage in civic groups and such descriptions are analogous to the activities within Lerner's (2004) concept of contribution.

Some studies have examined the contributions of athletes, but few have specifically focused on the contributions of athletes in emerging adulthood. One study by Gayles, Rockenbach, and Davis (2012) examined the social activism and charitable involvement of university student-athletes and found that they engaged in these contributions to a lesser extent

than their non-athlete peers. Nonetheless, it was shown that these lower levels of involvement during university did not influence civic engagement after university. A study by Lally and Kerr (2005) examined university athletes' identity perceptions and career planning and found that athletes reported having little time to volunteer or take part in campus and community clubs early in their university careers. However, later in their university careers, athletes became more focused on preparing for a career and some cited volunteering in career related settings (e.g., a future teacher volunteering at a local school).

Although some studies have examined *what* athletes do to contribute, to our knowledge, very little to no research has explored *why* they contribute. The question of intent is very important to examine given that individuals' quality and quantity of motivation can play an influential role in the maintenance of behaviours over time (Rothman, Baldwin, Hertel, & Fuglestad, 2011). Self-determination theory (SDT; Deci & Ryan, 1985) may be a useful theoretical framework to examine individuals' motivations for contributions. SDT is a metatheory comprised of four sub-theories concerned with the development of individuals and the actions taken in relation to their sense of self (Ryan & Deci, 2002). Of the four sub theories, two, namely organismic integration theory (OIT) and basic needs theory (BNT), are of particular relevance for the present study.

OIT differentiates motivation into five regulatory styles, consisting of four styles that are considered extrinsic motivation and a single style of intrinsic motivation. First, external regulation is characterized by compliance to others' instructions or performing behaviours for rewards or to avoid punishments (e.g., being on time for practice to avoid having to run laps). Second, with introjected regulation, behaviours are performed to gain feelings of pride or avoid guilt (e.g., working out to obtain a fit looking beach body). Third, identified regulation is marked

by conscious valuing of the behaviour or its outcomes and a sense of personal importance (e.g., practicing free throws because of their importance in winning games). Fourth, integrated regulation occurs when actions are congruent with one's self-identity and are fully synthesised within one's sense of self (e.g., treating teammates with respect because the individual identifies as a respectful person). Finally, intrinsic regulation, the only style of intrinsic motivation, describes engaging in behaviours for the joy or pleasure that is derived from the activity itself (Ryan & Deci, 2000b).

BNT posits that optimal psychological well-being is obtained through the satisfaction of the three psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 2000a). The need for autonomy refers to individuals making decisions for themselves and acting in ways consistent with their sense of self. Competence entails having a sense of mastery through interactions with the social environment. Relatedness concerns feelings of acceptance by and connection with others (Ryan & Deci, 2000a).

Given that university student-athletes (a) have had prolonged engagement in sport, a context deemed to facilitate psychosocial development (Fraser-Thomas, Côté, & Deakin, 2005), (b) are highly visible representatives of the university on campus and in the community (Toma, 1999), and (c) are in a stage of development (i.e., emerging adulthood) when they are more likely to take interest in communal needs (Lerner et al., 2003), university student-athletes represent an ideal population in which to examine contributions. Thus, the purpose of this study was to examine university student-athletes' motivations to contribute.

Method

Context

In Canada, university sport is governed by Canadian Interuniversity Sport (CIS), which oversees competition between 55 universities divided into four regional associations: Canada West, Ontario University Athletics, Réseau du sport étudiant du Québec, and Atlantic University Sport. Each year, over 11,000 student-athletes compete for 21 national championships in 12 sports (CIS, 2014a). All sports are offered to both men and women with the exceptions of football, which is offered only to men and field hockey and rugby, which are only offered to women. CIS regulations allow for five years of eligibility and athletes must be enrolled as full-time students, defined as a minimum of nine credit hours of classes over the academic term(s) that coincide with the competitive season and a minimum of 18 credit hours per academic year (CIS, 2014b). Additional eligibility policies cover special students, graduate students, former professional and semi-professional athletes, as well as some sport-specific requirements. CIS communicates broad developmental goal through its mission to “lead, promote and celebrate excellence in sport and academics” (CIS, 2014b, p.1) and its vision to “inspire Canada’s next generation of leaders through excellence in sport and academics” (CIS, 2014b, p.1).

Participants

A total of 10 CIS student-athletes (three males, seven females) between 18 and 22 years of age ($M = 19.4$) took part in the current study. Participants were recruited from two Canadian universities; six participants from a rural university with approximately 4,000 full-time students and four participants from an urban university with approximately 40,000 full-time students. Participants competed in rugby ($n = 3$), soccer ($n = 3$), swimming ($n = 2$), basketball ($n = 1$), and

ice hockey ($n = 1$). Participants ranged from first year to fifth year of eligibility for CIS competition. The demographic information of each participant can be seen in Table 2.1.

Table 2.1
Participant Demographics

Participant	Gender	Age	CIS Year of Eligibility	Sport
1	Male	20	3	Soccer
2	Female	18	1	Rugby
3	Female	21	4	Rugby
4	Female	22	5	Swimming
5	Female	20	2	Ice Hockey
6	Female	18	1	Soccer
7	Female	18	1	Rugby
8	Male	19	1	Basketball
9	Male	18	2	Swimming
10	Female	20	3	Soccer

Procedure

Approval to conduct the study was granted by the Research Ethics Boards at the two universities from which the participants were recruited. The lead researcher began by conducting a pilot interview with a former university student-athlete to refine the interview guide (e.g., order of questions, wording of questions). In order to be eligible to participate in this study, student-athletes had to meet three criteria: (a) be currently eligible for athletic competition under CIS regulations, (b) be on the official roster of a varsity sport team at their university, and (c) be registered as a full-time student (or equivalent). The university student-athletes who took part in the current study (phase two) were recruited from a larger pool of participants who completed an online questionnaire (phase one) and indicated, at the questionnaire's end, their interest in participating in an interview. The interested participants provided their contact information and were subsequently contacted directly by the lead author (via email) to schedule an interview at a time and place convenient to them. Participants were informed of their rights to anonymity, confidentiality, freedom to withdraw from the study, and written informed consent was obtained (see Appendix E for consent form). All interviews were conducted in person by the first author

and were audio-recorded in a quiet, private area (i.e., a library study room, meeting room on campus) agreed upon by the participant. The interviews lasted between 57 and 88 minutes ($M = 71:32$).

Interview Guide

The interview guide consisted of six sections (see Appendix F for complete interview guide). The first section explored the participants' sport experiences (i.e., past and present) as well as their academic and athletic goals. The second section consisted of questions on how and why the participants chose to contribute (e.g., Why did you contribute in this way?). The third section and fourth sections explored the facilitators and barriers to contributions respectively (e.g., Are there people or things that make it easier for you to contribute?, Are there people or things that make it difficult for you to contribute?). The fifth section focused on asking the participants about the specific elements of the student-athlete experience that are conducive to contributions (e.g., Do you think that your experience as a student-athlete has given you different opportunities to contribute when compared to non-athletes?). The sixth section consisted of questions about the participants' future intentions to contribute (e.g., How do you see yourself contributing after you graduate from university?). To conclude, the participants were asked to make a summary statement and to expand on particular matters they deemed to be particularly relevant to the study.

Data Analysis

All interviews were transcribed verbatim, resulting in 204 A4 pages of size 12 single-spaced text. Following transcription, each participant was emailed his/her transcript for review. Of the 10 participants, only one asked for changes, consisting of minor grammatical errors and a few clarifications. The transcripts were uploaded into NVivo version 10 and subjected to a

hybrid (inductive-deductive) thematic analysis (Fereday & Muir-Cochrane, 2006). Initial analysis was conducted inductively during which the lead researcher noticed the emergence of many codes relating to the basic psychological needs and motivation quality. Through discussion with the second author, a decision was made to integrate BNT and OIT into further analyses and interpretation of the data. The lead researcher was responsible for the analysis and examined the data following the six steps recommended by Braun and Clarke (2006). First, the transcripts were read and re-read to become familiar with the data. Second, initial codes (e.g., team activity) were developed, forming the most basic level of organization. Third, as coding progressed, similar codes were grouped to create themes (e.g., pressure, displaying competence). Fourth, the themes were reviewed and discussed with the second author, who has extensive experience analysing qualitative data, as part of a peer debriefing process (Lincoln & Guba, 1985). Through these discussions, the themes were refined to ensure internal homogeneity (i.e., data within themes share common features) and external heterogeneity (i.e., themes are distinct from one another). Fifth, each theme discussed with the second author such that the defining aspects of each theme were identified and the themes were defined and named. Finally, in the sixth step, both authors discussed what they believed were the most prominent findings in the data and how these findings should be presented as a manuscript. The first author selected quotes from participants that best represented the findings and consulted with the second author over several drafts to retain the richest quotes for the final manuscript.

Findings

The findings are presented in four sections. The first section presents findings relating to the complexity of motives for contribution. The next three sections correspond to the three basic psychological needs of autonomy, competence, and relatedness.

Complexity of Motives

When asked why they were involved in a particular contribution opportunity, some athletes acknowledged in their descriptions that they often had multiple motives to contribute. For example, one athlete described how through her reflections, she came to realize that she contributes both for others and for herself:

I do it because I want to help them but at the same time, I do it because that makes *me* feel like a good person. So I think that's the best way to contribute to myself. Like it makes me a better person helping them than if I was focused on myself. (6)

Another athlete explained how she believed her contributions as a member of the student-athlete council benefited others but also how they were instrumental in her career progression:

Well there's always that, not selfish but I mean, yes I do the volunteering for the student council because I want to help the school to get better yes all that side, but there's also for me. I want this on my CV in order to have a better job or for my Master's if I want to apply I'll have this on my CV. (5)

Although the participants acknowledged a variety of motives for contributing, it should be noted that most athletes tended to volunteer primarily for the betterment of others, despite the social pressures that exist to contribute out of self-interest (e.g., résumé building). One participant summarized her true motives for contributing, while also recognizing other factors at play:

It wasn't like I needed to volunteer to go into med school. It was never that. It has always been, "I want to volunteer because I like to volunteer." But it's still in the back of my mind that, you know, it's good that I'm doing these things because they're going to be recognized by universities I may attend down the road. (10)

Autonomy

Many notions were discussed relating to autonomy and the participants' responses appear to be situated in varying areas along the continuum of motivation, with some reflecting external regulation and others intrinsic regulation. The theme of pressure was identified and indicates the presence of less autonomous motives to contribute on the part of some participants, especially for the younger athletes. For example, the participants discussed facing pressures and therefore being externally regulated as it relates to engagement in their community. One first-year athlete described how there was an expectation on her team that one should assist when teammates take part in volunteer events "it is fairly expected on my team that if there is a cause that one person is doing, then most of us [should] help out with the cause" (7). Another first-year athlete described the power senior athletes had over younger athletes and the pressure this created to conform as it relates to matters related to contributions and beyond "They have a lot of seniority over you and they have a lot of control over what you can and can't do. They don't actually say like if you don't do this you're in trouble, but it's implied" (2). This same participant conceptualized her role as a varsity student-athlete as a job with specific pressures and expectations associated with it. Within this conceptualization, she believed contributing was an expected requirement:

Varsity athletics is almost like a job, you have to go to practice, you have to do this, you have to do that.... So, I feel like that [contributions] should just be another thing that we have to do, like we have to get involved, we have to make the team look really good. (2)

Although many athletes described how their motives to contribute were initially less autonomous early in their varsity careers, over time, repeated exposure to contribution opportunities led to more autonomous motivations for sustained engagement. For example, one

participant described how her motives evolved as she derived pleasure from her contributions, compelling her to assume a leadership position at the organization where she volunteered:

When I initially got started with [program name] it was just because they needed another instructor. I was kind of just thrown into it... but I loved it so much and started to get as involved as I possibly could. So for that year, I was just an instructor three hours a week... This year, I applied to be a leader, so now I'm a leader on Tuesdays and Thursdays and then I'll be a sub on Saturdays. (3)

Repeated exposure to various contribution opportunities also led some participants at later stages in their varsity careers to be more selective and to demonstrate higher levels of autonomy in choosing how and where they wish to contribute. For some participants, significant past experiences inspired their choice of context in which to contribute. For example, one participant recalled a time when she supported a friend whose brother was receiving cancer treatment and how that motivated her to volunteer at a children's hospital:

One of my friend's little brother had cancer. So I was spending a lot of time with her in the hospital and I was with him in the playroom with the other kids. Oh it was so sad, and also heartwarming because they are going through so much. So that was one really big thing that pushed me to get involved with that. (6)

Another participant discussed how she chose to contribute in a particular area as a way to explore career opportunities. Specifically, this fourth-year athlete described how she sought out a particular volunteer opportunity because it related to her career interest in physiotherapy:

I was looking for volunteer opportunities. I had been interested in physio forever. So one of my professors knew the physiotherapist at the community hospital and got me in touch with her, and she said I know they would love to have a hand, so that's how I started. (3)

Finally, one participant demonstrated high levels of autonomy and initiative by approaching a local nursing home and creating her own volunteer project:

This past summer, I was working full-time. I asked for Fridays off so I could volunteer and so I would go into an old folks home in the morning on Fridays. The recreation staff said that there wasn't much that I could help out with. I said that I still wanted to come in and I ended up having a lot of one-on-one chats with a lot of the people in the secured living area. Then I decided to take on, personally, a gardening project... You know, I'm going to re-do this garden because it looked so good the year before and I feel like they neglected it a bit. Every week, I'd come back and garden. And there were huge weeds that I have no idea where they came from, they were ridiculous. So I would dig those up and try to make it look nice so that was my project this summer that I decided to do. (10)

Competence

The participants engaged in contributions for reasons that related to the basic need of competence. Specifically, some athletes deemed contributions as a way to *develop* competence. By undertaking a volunteer opportunity, the participants discussed how they developed new skills and knowledge. One participant described her experience of volunteering within an active aging program for older adults and how this experience was initially demanding but ended up benefiting her development in numerous ways:

I did [program name] last year and that was a huge struggle for me. I was given three older adults who all had arthritis or back problems, and one of them had diabetes as well. So I was given full reigns. I had no idea what I was supposed to be doing, but they were really supportive and I built up a lot of confidence throughout that program. I'm really

thankful for that experience because now, like yes I can do it, I have the knowledge to do it. I really liked that program; I'll be with it again next semester. (3)

This same participant also described how she ended up teaching a yoga class and how she viewed this contribution as an opportunity to further develop her yoga knowledge:

One of my professors said, "Does anyone here feel comfortable teaching a yoga class?"

Why not, I've done yoga a lot in the past. That was stepping out of my box and stepping out of my comfort zone. I enjoyed it a lot more than I thought I would and getting my yoga certification is something that I'm looking towards doing in the future. (3)

Contributing was also viewed by the participants as an opportunity to *display* their competence. One participant in particular explained how she used her experience as a rugby player to help younger players develop while volunteering as a coach for a community youth rugby team. By using her knowledge and experience as a player, she believed she was able to coach in a way that made the players receptive to her instructions:

I really liked coaching. I really like making them do drills. When I was helping the girls prep for rugby fitness, I would do the fitness with them. And I would tell them this is going to help them a lot, so they didn't mind doing it as much if I wasn't just preaching about it if I was kind of involved in helping them. (2)

Displaying competence was not limited to athletic-related contributions. One participant spoke of an opportunity to contribute in the academic realm by using his natural talent for math to help his friends and teammates understand the concepts that were taught:

Math has always clicked with me. I teach the concepts to people really easily. I actually enjoy it too. I was sitting there and they are all like, "How did you do that?" I'm like, "I don't know, let me explain it real quick," and they'd be like, "Oh, that makes sense." (8)

The participants discussed the benefits of being able to develop and display competence through their contributions but also how these experiences affected their future orientation in a positive manner. Some athletes talked about how developing or displaying competence through contributions motivated them to continue contributing or compelled them to pursue a career in their area of contribution. One participant stated how her experiences coaching young players during a summer camp influenced her future intentions to contribute:

Participant: I think like, just seeing these little girls looking at you and think that's the most rewarding thing because you know you're making a difference....

Researcher: So coaching is something that you'd really like to continue?

Participant: Yeah, I think the opportunity is there and the need is there too... I feel people like me [varsity student-athletes] should be contributing, because we have the knowledge and the experience to do so. (5)

Another participant spoke about how her experience as a volunteer in a cardiac rehabilitation program has influenced her career plans:

Researcher: How important is it working with older adults who've had cardiac incidents?

Participant: I love it. I want my future to kind of lead towards that path of health promotion and exercise prescription.... I didn't know I wanted to be a nurse until I started working with cardiac rehab patients and it would be cool if I could combine my kinesiology degree and nursing degree and do exercise prescription and prevent cardiovascular incidents from happening. (3)

Relatedness

The participants reported how contributing was conducive to the satisfaction of their need for relatedness. Relationships were deemed to be developed and enhanced through contributions

at three levels. First, contributions were seen as ways to forge and strengthen connections with program participants. One athlete explained how volunteering in a program that pairs university students with children with a developmental disability resulted in a friendship that extended beyond the program:

I got a message from him on Facebook, I think in October, and he was like, he was asking me when I was coming back and he's like "I miss ya." I was like aww! Once you create that kind of bond you don't really want to let go. (1)

Another participant described the pleasure she derived from developing relationships through her volunteer work with children with developmental disabilities. In particular, she expressed the great satisfaction she felt knowing she provided such a positive experience for these children:

I love kids... there's a couple kids in the program, I just love them. They're so funny and I love working with them and just playing with them. There's this little boy in a wheel chair and he loves getting in the pool and I love being in the pool it's so fun because he's so excited. You can see it in his face he's just having so much fun being out of the chair and just in the water. (2)

Second, the participants discussed how their contributions enabled them to develop relationships with the broader community. One athlete in particular explained how her volunteer work allowed her to build relationships with many community members and how important it was for her to develop this social network, seeing that she was studying far away from home:

I've started making a lot of relationships through the community. I can go most places and say hi to so many people. I'm from Alberta, so being 5000 km from home and knowing a lot of the community is really, really cool. (3)

Third, contributions were viewed by the participants as opportunities to develop stronger ties with teammates. One participant explained how she, along with other senior teammates, formalised a mentoring process as a way to contribute to the integration of first-year athletes:

On the swim team, you know, you see this wide-eyed first year come in and you want to tell them relax, it's okay. Then, they want you to look at their paper. I think as a captain and quite a young captain, I took on this kind of leadership role. I think that it's a camaraderie that's kind of intrinsic to a swim team, helping out. If the first years don't pass their classes, they can't swim right? And so we thought it would be important to kind of get [the veterans] involved and become mentors to the rookies. So, that was cool. (4)

Volunteering, when performed as a team, was also deemed to foster relatedness amongst teammates. As such, these contributions were often viewed as important team building activities. One athlete described how his team's participation in Relay for Life served the dual purpose of raising money for a great cause while allowing teammates to interact in a pleasant environment:

On the night of the event, there's so much going on... like dodge ball, broomball like it's a great time. Last year, our team raised over three thousand [dollars] so we're going to do it again this year definitely. It's nice because everyone's there, you get all twenty guys, people are playing dodge ball, it's definitely I would say a team building thing. (1)

Discussion

The current study's findings indicated that participants contributed in both formal (e.g., community programs) and informal (e.g., peer mentoring) contexts during their time as university student-athletes. However, the worth of the present study lies in having gone beyond simply examining *what* athletes do to contribute and focusing on *why* they contribute. Using OIT and BNT as theoretical perspectives, the participants indicated having a number of motives for

contributing that related to the satisfaction of the basic psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 2000a). First, the findings illustrate how university student-athletes can have multiple motives to contribute that are situated at various points on the self-determination continuum (Ryan & Deci, 2002). Motives ranged from external regulations (e.g., resume building), through introjected regulation (e.g., feeling obligated to contribute), to intrinsic regulation (e.g., enjoyment of the activity). These multiple motives were often present for an athlete within a single contribution, suggesting that contributions may be made for more and less self-determined reasons *simultaneously*.

Furthermore, athletes reported contributing to more than one of the contexts described by Lerner and colleagues (2005) with a single act. For example, the participant who described volunteering with a cardiac rehabilitation program was not only contributing to the program participants (i.e., a community contribution) but also gained a valuable learning experience which made her want to pursue additional education (i.e., a contribution to herself). However, it should be noted that these simultaneous motives and contributions to different contexts did not appear to be of equal value. Based on the athletes' statements, it appears that one motive was dominant with others as subordinate motives. For example, this was the case with the athlete who indicated primarily volunteering because she enjoyed it, but also recognized that universities may acknowledge her volunteering on professional school applications. Similar findings have been reported in education with intrinsic and extrinsic motivations being found to co-exist for a single task (Lepper, Henderlong Corpus, & Iyengar, 2005). Finkelstein (2009) provided an analogy, stating a student may study to gain admission to the college of their choice (an extrinsic motive) while still appreciating the value of studying (a more intrinsic motive). Given the important role intrinsic motivation has in sustaining behaviours over time, these

findings may open avenues for additional research on how volunteer opportunities may be structured to foster the satisfaction of the basic needs in order to improve volunteer retention.

Second, the findings of the present study indicated that the university student-athletes engaged in contributions to either develop new (e.g., learning how to work with older adults in an active aging program) or display (e.g., coaching younger athletes) their current competence. Such motives for contributing are consistent with previous findings, indicating that toward the end of their competitive careers, some athletes volunteer to develop new skills (Lally & Kerr, 2005) while others transition into coaching or mentoring roles to give back and display their existing skills with younger athletes (Cunningham & Singer, 2010). The findings suggest that the participants' ability to develop or display their competence through contribution opportunities influenced their intentions to continue to contribute as well as their future career orientation. This finding mirrors similar findings which have shown service acts provide meaningful learning opportunities to youth (Harre, 2007). Together, these findings demonstrate how contributing can not only positively impact the recipient of the contributions, but also have benefits for the individual making the contributions. As emerging adults, university student-athletes are at a life stage when they are making decisions in preparation for success in adulthood (Arnett, 2007). Therefore, contributions that allow for competence to be developed or displayed may be beneficial in that they can lead to more informed career choices and possibly foster sustained contribution into adulthood. To this end, Ostrander (2004) commented on the important role of campus centres established with the express mission of engaging the students and faculty with community members and initiatives. In Canada, some universities already have centres for community engagement or a similar body connecting students and faculty to community partners and providing contribution opportunities in the local area and abroad.

Third, the findings demonstrate how the contributions of university student-athletes can serve to satisfy the need for relatedness. Contributing within the community allows athletes to forge connections with program participants, the broader community, as well as teammates. This is consistent with past research indicating that youth can derive a sense of belonging from community volunteering (Harre, 2007). Additionally, these community contributions may further increase athletes' public visibility and create support networks, which may be particularly important for athletes attending university away from home. Besides fostering connections to the community, contributing can be a way to strengthen bonds between teammates. By contributing as a team (e.g., raising funds for cancer research, hosting youth sport summer camps), athletes have opportunities to interact with one another in contexts outside of training and competition. These additional interactions may have strong implications for team cohesion, which may lead to improved performance on the field of competition (Carron, Coleman, Wheeler, & Stevens, 2002). Thus, university varsity coaches should consider adding team bonding activities which incorporate contribution initiatives that benefit team and community relations simultaneously to their repertoire.

Fourth, the findings revealed how the participants contributed in more and less autonomous ways, largely based on their years of experience as university student-athletes. Less self-determined motives (e.g., acting from a sense of obligation, social/team norms, feeling intimidated by teammates) tended to be reported by younger athletes, while older athletes reported more self-determined motives (e.g., choosing volunteer opportunities related to personal interests). This finding demonstrates a central aspect of OIT, the process of internalization, a natural inclination for individuals to integrate their experiences with their sense of self (Ryan & Deci, 2002) and suggests motives for contributing can evolve over time. With regards to the

younger athletes reporting feeling pressured to contribute, it is important for coaches and athletic directors to work to minimise such pressuring factors. Bang and Ross (2009) have reported volunteers are more satisfied if they feel they contributed to the success of the event and event managers can facilitate feelings of satisfaction by tailoring roles to the skills and interests of their volunteers. As such, coaches may be able to reduce their athletes' pressured feelings by emphasising that there are multiple ways to contribute and by providing choices for their athletes that they may find intrinsically appealing. By providing athletes with a sense of autonomy from the onset of their university careers, coaches may be in better positions to facilitate long-term contribution behaviours.

As the present study was exploratory in nature, the findings may serve as a point of entry for future studies to examine athletes' motivations for contributing in greater depth. The findings suggest that the internalization of intrinsic motives can occur when athletes are repeatedly exposed to contribution opportunities, even if they are initially pressured to contribute. Future research should examine the internalization process of motivation to contribute longitudinally to determine the mechanisms by which it occurs. Additionally, future research is needed to measure if the satisfaction of the basic psychological needs through contributions leads to improvements in university student-athletes' psychological well-being, as suggested in BNT (Ryan & Deci, 2000a).

Despite the novel findings of this study, it is not without its limitations. Firstly, data collection occurred at a single time point, making it difficult to make definitive conclusions regarding changes in motivation over time. In the future, researchers may use multiple interviews over an academic year or multiple years in order to observe short- and long-term changes in motivation. Secondly, data were collected from a single group (i.e., the contributors). Future

research should seek triangulation by collecting data from other sources (e.g., program coordinators, teammates, etc.) and via other methods such as observation. Finally, as this study was conducted in the context of two Canadian universities with varsity athletes, these findings should not be interpreted outside this context. That is, in other contexts (e.g., NCAA, university intramurals, etc.) the different rules and level of competition may affect athletes' opportunities to contribute and their motivation to do so.

Conclusion

The current study qualitatively examined the motivations of university student-athletes to contribute. It was shown that athletes possessed complex, multiple motivations for contributing that can be placed along the self-determination continuum. Furthermore, university student-athletes' motives for contributing appeared to be related to satisfying the psychological basic needs for autonomy, competence, and relatedness. The findings of this study advance our understanding contribution by extending beyond contribution behaviours of varsity student-athletes and providing an examination of the motives behind these behaviours, from a theoretically grounded perspective. Furthermore, this study contains suggestions as to how to further encourage and maintain university athlete contributions in relation to motivation.

References

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi: 10.1037//0003-066X.55.5.469
- Arnett, J. J. (2007). Emerging adulthood: What is it and what is it good for? *Child Development Perspectives*, 1(2), 68-73. doi: 10.1111/j.1750-8606.2007.00016.x
- Bang, H., & Ross, S. D. (2009). Volunteer motivation and satisfaction. *Journal of Venue and Event Management*, 1(1), 61-77.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. doi: 10.1191/1478088706qp063oa
- Camiré, M., & Trudel, P. (2010). High school athletes' perspectives on character development through sport participation. *Physical Education & Pedagogy*, 15(2), 193-207. doi: 10.1080/17408980902877617
- Canadian Interuniversity Sport. (2014a). *Athletes Guide*. Retrieved from Canadian Interuniversity Sport website: http://en.cis-sic.ca/information/members_info/pdfs/pdf_elig_pack/14-15/athletes_guide.pdf
- Canadian Interuniversity Sport. (2014b). *CIS by-laws, policies, and procedures*. Retrieved from Canadian Interuniversity Sport website: http://en.cis-sic.ca/information/members_info/bylaws_policies_procedures
- Carron, A. V., Coleman, M. M., Wheeler, J., & Stevens, D. (2002). Cohesion and performance in sport: A meta analysis. *Journal of sport & Exercise Psychology*, 24(2), 168-188.
- 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. doi: 10.1111/j.1559-1816.2010.00636.x

- Deci, E. L., & Ryan, R. M. (1985) *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80-92.
- Finkelstein, M. A. (2009). Intrinsic vs. extrinsic motivational orientations and the volunteer process. *Personality and Individual Differences*, 46(5), 653-658. doi: 10.1016/j.paid.2009.01.010
- Fraser-Thomas, J. L., & Côté, J. (2009). Understanding adolescents' positive and negative developmental experiences in sport. *The Sport Psychologist*, 23(1), 3-23.
- 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. doi: 10.1080/1740898042000334890
- 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. doi: 10.1353/jhe.2012.0024
- Geldhof, G. J., Bowers, E. P., Boyd, M. J., Mueller, M. K., Napolitano, C. M., Schmid, K. L., Lerner, J. V., & Lerner, R. M. (2013). The creation and validation of short and very short measures of PYD. *Journal of Research on Adolescence*, 1-14. doi: 10.1111/jora.12039
- Harre, N. (2007). Community service or activism as an identity project for youth. *Journal of Community Psychology*, 35(6), 711-724. doi: 10.1002/jcop.20174

- Hawkins, M. T., Letcher, P., Sanson, A., Smart, D., & Toumbourou, J. W. (2009). Positive development in emerging adulthood. *Australian Journal of Psychology*, 61(2), 89-99. doi: 10.1080/00049530802001346
- Holt, N. L., Tink, L. N., Mandigo, J. L., & Fox, K. R. (2008). Do youth learn life skills through their involvement in high school sport? A case study. *Canadian Journal of Education*, 31(2), 281-304. doi: 10.2307/20466702
- 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. doi: 10.1080/02701367.2005.10599299
- Larsen, R. (2006). Positive youth development, wilful adolescents, and mentoring. *Journal of Community Psychology*, 34(6), 677-689. doi: 10.1002/jcop.20123
- Lee., O., & Martinek, T. (2013). Understanding the transfer of values-based youth sport program goals from a bioecological perspective. *Quest*, 65(3), 300-312. doi: 10.1080/00336297.2013.791871
- Lepper, M. R., Henderlong Corpus, J., & Iyengar, S. S. (2005). Intrinsic and extrinsic motivational orientations in the classroom: Age differences and Academic correlates. *Journal of Educational Psychology*, 97(2), 184-196. doi: 10.1037/0022-0663.97.2.184
- Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth*. Thousand Oaks CA: SAGE.
- 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. doi: 10.1207/S1532480XADS0703_8

- Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S.,... 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. doi: 01.1177/0272431604272461
- 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, 1107-1114. doi: 10.1016/j.adolescence.2011.08.001
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbery Park, CA: SAGE.
- Ostrander, S. A. (2004). Democracy, civic participation, and the university: A comparative study of civic engagement on five campuses. *Nonprofit and Voluntary Sector Quarterly*, 33(1), 74-93. doi: 10.1177/0899764003260588
- 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. Retrieved from <http://forumfyi.org/content/preventing-problems-pr>
- 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. doi: 10.1207/S1532480XADS0702_6
- Rothman, A. J., Baldwin, A. S., Hertel, A. W., & Fuglestad, P. T. (2011). Self-regulation and behavior change: Disentangling behavioral initiation and behavioral maintenance. In K. Vohs & R. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (2nd ed., pp. 106-123). New York, NY: Guilford Press.

- Ryan, R. M., & Deci, E. L. (2000a). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry*, 11(4), 319-338. doi: 10.1207/s15327965pli1104_03
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. doi: 10.1037//0003-066X.55.1.68
- Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: An organismic-dialectic perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3-33). Rochester, NY: University of Rochester Press.
- Statistics Canada. (2010). *Making father "count"* (Statistics Canada Catalogue No. 11-008-X). Ottawa, Ontario.
- Statistics Canada. (2013a). *Fertility: Overview, 2009 to 2011* (Statistics Canada Catalogue No. 91-209-X). Ottawa, Ontario.
- Statistics Canada. (2013b). *Marital status: Overview, 2011* (Statistics Canada Catalogue No. 91-209-X). Ottawa, Ontario.
- Toma, J. D. (1999). The collegiate ideal and the tools of external relations: The uses of high-profile intercollegiate athletics. *New Directions for Higher Education*, 1999(105), 81-90.
- United Nations Educational, Scientific, and Cultural Organization. (n.d.). What do we mean by "youth"? Retrieved from <http://www.unesco.org/new/en/social-and-human-sciences/themes/youth/youth-definition>
- Zarrett, N., Fay, K., Li, Y., Carrano, J., Phelps, E., & Lerner, R. M. (2009) More than child's play: Variable- and pattern-centered approaches for examining effects of sport

participation on youth development. *Developmental Psychology*, 45(2), 368-382. doi:
10.1037/a0014577

Article Two

CONTRIBUTION IN UNIVERSITY ATHLETES

University Student-Athletes' Experiences of Facilitators and Barriers to Contribution:
A Narrative Approach

Colin J. Deal

Abstract

University student-athletes' contributions in the form of volunteering, community engagement, and civic engagement have been the subject of recent research; however, no studies have specifically examined the factors that facilitate or serve as barriers to contribution in this population. The purpose of this study was to explore the facilitators and barriers relating to university student-athletes' contributions. Individual semi-structured interviews were conducted with eight university student-athletes (two males, six females) between 18 and 21 years of age ($M = 19.25$) from two Canadian universities. The analysis led to the identification of two qualitatively distinct profiles regarding how facilitators and barriers to contributions were perceived: (a) the first-year student-athletes and (b) the sustained contributors. Composite narratives were created for each profile and used to present the findings. Although the participants in each profile identified teammates, coaches, and athletics department staff as facilitators to contribution, they differed in their interpretation of how these groups of individuals facilitated contributions. First-year student-athletes were more reliant than sustained contributors on having facilitators create contribution opportunities. The profiles also differed in regards to how time constraints were overcome. First-year student-athletes utilized less complex, individual time-management strategies, while sustained contributors collaboratively made use of more advanced time-management strategies to optimize their time.

Keywords: contribution, emerging adulthood, time-management, university athletes

The desired goal of most youth sport programs is to develop in participants the technical/tactical skills necessary to be proficient in sport but also the life skills essential to thrive beyond sport (Camiré, Werthner, & Trudel, 2009). As such, sport can be used as a vehicle to help youth thrive on the road to adulthood, preparing them to take on meaningful roles in society. Part of taking on meaningful role involves making contributions to one's surrounding contexts by being of service to others. Positive youth development (PYD) represents a perspective used within sport research where the focus of successful development is based on the improvement of youth's assets (Pittman, Irby, Tolman, Yohalem, & Ferber, 2003; Roth & Brooks-Gunn, 2003). These assets include cognitive (e.g., problem solving), behavioural (e.g., emotional control), and social (e.g., communication) skills (Lerner, Dowling, & Anderson, 2003; Lerner, Lerner, von Eye, Bowers, & Lewin-Bizan, 2011), and broader psychological dispositions such as an optimistic view of the future (Gould & Carson, 2008). It was been posited that these assets develop through the mutually beneficial interactions between youth and their surrounding contexts (e.g., home, school, community programs) (Larson, 2006; Lerner et al., 2011).

Past research has demonstrated how appropriately structured sport experiences may lead to the development of the assets necessary for successful adult life (Fraser-Thomas, Côté, & Deakin, 2005; Lee & Martinek, 2013). In a case study of a high school ice hockey program intentionally structured to teach athletes life skills and values, Camiré, Trudel, and Bernard (2013) reported how athletes developed communication and goal-setting skills as well as values such as respect, discipline, and perseverance. Even in less intentionally structured environments, athletes can learn important life skills through sport that are useful in adult life. In a case study of an urban high school soccer team, Holt, Tink, Mandigo, and Fox (2008) found that even though the coaches did not intentionally plan strategies to teach life skills, athletes reported learning

initiative, respect, and leadership. In another study, Holt, Tamminen, Tink, and Black (2009) interviewed 40 young adults regarding their sport adolescent sport experiences and life skill development. The authors reported that independent of intentionality, the learning of life skills and values in sport was explained in large part by the nature and quality of the social interactions youth experience with their peers, parents, and coaches.

Although the development of youth in sport has been the focus of much research in recent years, it must be stressed that the majority of the studies in this area have been conducted with adolescent populations (Fraser-Thomas et al., 2005; Strachan, Côté, & Deakin, 2011). The term youth extends beyond adolescence as, for example, UNESCO defines youth as individuals between the ages of 15 and 24 (UNESCO, n.d.), a range that thus includes adolescence and emerging adulthood. The stage of development known as emerging adulthood was first proposed by Arnett (2000) and spans from approximately 18 to 25 years of age. Largely due to delays in recent times relating to the normative markers of adulthood (i.e., age at first marriage, age at birth of first child) and increases in postsecondary enrolment rates, this period has been proposed as a stage of development between adolescence and adulthood. Recent figures demonstrate how the delays between adolescence and full adulthood have grown significantly over the past few decades. In Canada, statistics indicate that from the 1950s to 2008, the average age of first marriage and birth of first child have shifted from the early and mid 20s to the late 20s and early 30s (Statistics Canada, 2010; Statistics Canada, 2013a; Statistics Canada, 2013b). One reason for this delay may be partially explained by increased enrolment in postsecondary education and thus a delay in entering the workforce. In Canada, enrolment rates have increased by 0.7%, 3.1%, and 5.0% per annum from 2000 to 2007 for college programs, university undergraduate programs, and university graduate programs respectively (Statistics Canada, 2009). Not only are

more emerging adults choosing to pursue higher education, but they are doing so for longer periods of time, as evidenced by the significant increase in university graduate program enrolment. Thus, during emerging adulthood, the postponement of the responsibilities that come with marriage and birth of first child provide opportunities for individuals to be exposed to civic and social groups (Hawkins, Letcher, Sanson, Smart, & Toumbourou, 2009), oftentimes through postsecondary institutions.

Although postsecondary education appears to be a context conducive to exposing emerging adults to contributions (Haski-Leventhal et al., 2008), few studies have examined the contributions of university students. Francis (2011) found that the level of volunteering for university students was highly dependent on the volunteering behaviours of surrounding reference groups such as peers, siblings, and parents. Using both surveys and focus groups, Simha, Topuzova, and Albert (2011) explained how university undergraduate students often volunteer through initial exposure to service learning centres that provide opportunities with community organizations. One important group of potential contributors among university students are varsity student-athletes. Student-athletes are public representatives of their universities (Carodine, Almond, & Gratto, 2002) and as such, they must make efforts to exhibit prosocial behaviours on and off the field of play. However, few studies have examined the contribution behaviours of university student-athletes, with the limited research conducted in this area primarily focusing on comparisons with non-athletes. One study found that university student-athletes tended to be less involved in social activism and charitable activity than their non-athlete peers during their university careers (Gayles, Rockenbach, & Davis, 2012). In contrast, a study by Hoffman, Kihl, and Browning (2015) found college student-athletes to be 2.2

times more likely to have volunteered in the past 12 month than their non-athlete peers when controlling for institution, race, sex, parental education, and self-reported GPA.

The emergence of such contrasting findings indicates a need for more research examining the facilitators and barriers to university student-athlete contributions. For their part, Lally and Kerr (2005) reported that student-athletes found it difficult to become involved on campus and in community clubs because of the time constraints imposed by their athletic training. Similarly, Potuto and O'Hanlon (2007) surveyed over 900 student-athletes who described missing out on opportunities to participate in clubs and community organizations due to their athletic participation. Together, these findings suggest that university student-athletes may be faced with unique circumstances that differ from those experienced by non-athletes. However, to date, no studies have specifically examined the circumstances experienced by university student-athletes. Therefore, the purpose of this study was to explore the facilitators and barriers relating to university student-athletes' contributions. A narrative approach was used through the creation of composite narratives which were utilized to present the findings.

Method

Context

Each year, over 11,000 student-athletes compete in university sport in Canada (CIS, 2014a). Competition between 55 universities across the country occurs in four regional associations: Canada West, Ontario University Athletics, Réseau du sport étudiant du Québec, and Atlantic University Sport. Competitions are governed by Canadian Interuniversity Sport (CIS), which awards 21 national championships each year in 12 sports. Under CIS regulations, student-athletes are eligible to compete for five years, provided they meet eligibility criteria as a full-time student. In addition to its mandate of governing interuniversity sport in Canada, CIS

communicates that it strives to attain broad developmental goals to “lead, promote and celebrate excellence in sport and academics” (CIS, 2014b, p1.) and “inspire Canada’s next generation of leaders through excellence in sport and academics” (CIS, 2014b, p.1).

Participants

The eight participants were drawn from the larger sample of ten used in article one. For the current study, two male and six female CIS athletes between 18 and 21 years of age ($M_{\text{age}} = 19.25$ years) were recruited from two Canadian universities. Six participants were from a small university with approximately 4,000 full-time students while the remaining two were from a large university with over 40,000 full-time students. Participants ranged from first-year to fourth-year student-athletes and competed in rugby ($n = 3$), soccer ($n = 3$), basketball ($n = 1$), and ice hockey ($n = 1$).

Procedure

Prior to conducting the present study, permission was obtained from the ethics review boards at the two universities where the participants were recruited. The first author conducted a pilot interview with a former university student-athlete in order to refine the order and content of questions in the interview guide. To be eligible to participate in this study, participants had to be on the official roster of a varsity team, be registered as full-time students, and compete in the CIS at the time of the study. Prior to being interviewed for the current study, the participants had completed an online questionnaire in a first study part of the researcher’s master’s thesis. At the end of the online questionnaire, the participants voluntarily opted to participate in an interview and were contacted by the researcher using the email address they provided. An audio-recorded individual semi-structured interview was scheduled with each participant to take place at a time and quiet place convenient for them. Before conducting the interview, each participant was

informed of his/her rights to withdrawal, confidentiality, and anonymity. Written consent was obtained before undertaking the interviews, which lasted between 57 and 80 minutes ($M = 70$ minutes).

Interview Guide

The interview guide consisted of six sections: (a) past and present sport experiences, (b) how and why university student-athletes contribute, (c) facilitators to contribution for university student-athletes, (d) barriers to contribution for university student-athletes, (e) difference between student-athletes and non-athletes, and (f) future contribution intentions. Data for this study primarily came from the third, fourth, and fifth sections. An example question pertaining to the facilitators of contribution was “Are there people or things that make it easier for you to contribute?” The same question, with harder substituted for easier was a question used to explore barriers to contribution. A sample question from the fifth section was “Do you think that your experience as a student-athlete has given you more or less opportunities to contribute than non-athletes?” Throughout the interview, probing questions (e.g., Could you elaborate on that point? Can you give an example?) were used to encourage participants to provide more information and refine their statements.

Data Analysis

Verbatim transcription of all the interviews resulted in 164 A4 pages of size 12, single-spaced text. Each participant was sent his/her transcript via email for review. Of the eight participants, only one returned her transcript with a few clarifications. Reviewed transcripts were uploaded to NVivo Version 10. Analysis proceeded with the lead researcher following Braun and Clarke’s (2006) thematic analysis process to generate themes inductively. To begin, transcripts were read and re-read to increase familiarity with the data. Next, the basic level of organization

of the data was formed by generating codes (e.g., captain led activity). Following initial coding, similar codes were grouped to create themes (e.g., teammates as facilitators). Then, through discussions with the second author, themes were reviewed and reorganized to ensure internal homogeneity (i.e., codes within a theme are similar) and external heterogeneity (i.e., codes forming one theme are sufficiently different from those forming other themes). Next, themes were carefully examined to precisely define what each referred to and name them appropriately. Finally, both authors discussed what they believed were the most prominent findings in the data, noting differences among participants based on their characteristics. At that point, the decision was made to form two participant profiles, marked by age and experience, and to present the findings using a narrative approach.

Narratives

Each profile is presented as a composite narrative, representing the emerging trends in the lived experiences of the university student-athletes. Narratives have been used in sport research (e.g., Rathwell, Callary, & Young, 2015; Winchester, Culver, & Camiré, 2011) and can effectively relate lived experiences by using stories that more naturally connect to readers on an emotional level (Denison & Reinhart, 2000; Sparkes, 2002). Furthermore, Denison and Reinhart contend that narratives are legitimate tools for researchers that “have the power to illustrate, illuminate, inspire, and mobilise readers to think and act critically and reflexively” (Denison & Reinhart, 2000, p. 4). The composite narratives in the present study were constructed from the common features identified in the collective experiences of the participants in each profile. Therefore, as composite narratives, the stories do not depict any one participant’s exact experience but rather form a plausible series of events that characterize the facilitators and barriers to contribution one can expect to encounter.

Findings

In the first narrative, Sarah's experiences are derived from a cluster of four, first-year student-athletes and their representation of their first-year experiences with barriers and facilitators to contribution. In the second narrative, Julia's experiences represent the collective story of a cluster of four, upper-year athletes who have demonstrated a history of sustained contributions throughout their university careers. Each narrative is constructed from the three higher order themes that were generated from the inductive thematic analysis: contribution facilitators, time constraints, and time-management. To protect the identity of the participants, pseudonyms are used and the names of programs are fictitious.

Sarah: The First-Year Student-Athlete

On a warm May afternoon, Sarah sluggishly walked up the steps to her home's front door after another tough practice. Hard practices were nothing new to Sarah, the grade 12 captain of her high school rugby team, but with playoffs coming in a couple of weeks, Sarah wanted to work extra hard and set an example for the younger girls on her team. As she walked through the door and dropped her backpack, Sarah's mother called from the next room, "Oh! Sarah, there you are. Can you come to the kitchen?"

Sarah thought to herself, "But I just want to take a shower and relax for a few minutes", as she trudged toward the kitchen. As she entered the room, Sarah looked at her parents sitting at the table and said, "I'm sorry I'm late, I know I said I'd be home at four, but—" "You're not in trouble, Sarah," her father said, cutting her off with a smile. "You have mail from Coach Dave on the counter and it looks important." Coach Dave was the head rugby coach at Sarah's first choice university. She had met Coach Dave the year before when her high school team won the

regional championship. He had been impressed with her play and had told her she showed a lot of potential to play at the university level.

As she carefully opened the envelope, Sarah could see how her parents were anxiously watching because they knew how much she wanted to play for Coach Dave. “So, what does it say?” asked her father after Sarah started reading the letter. “They are inviting me to training camp!” Sarah said and after a pause to finish reading the letter, she added, “and I’ve been offered an entrance scholarship and athletic bursary!” “Congratulations sweetie, I’m so proud of you!” her mother exclaimed. “Go take your shower and then we’re taking you out for dinner to celebrate,” added her father. “Your choice of where we go, of course.”

Sarah was proud as she had worked very hard to put herself in a position to get an offer from a university. However, after a few days of enjoying praise and congratulations from family and friends, Sarah and her father sat down at the kitchen table to take a closer look at the letter. With a worried look on his face, Sarah’s father said, “Sarah, it says here that you’ll have to maintain an 80% average to keep your scholarship for the next year. You’ll have to be careful not to overextend yourself with too many activities.” Sarah replied, “I know dad. I’m not really going to do anything like getting a job. I just want to play rugby”. In her own mind, she thought, “I’ve regularly been getting 90s in high school; keeping an 80% average in university shouldn’t be that difficult”.

The next day at school, Sarah was sitting outside eating lunch with her friends and enjoying the warm weather. Everyone was in a good mood as they all knew where they were going to university and were eagerly sharing what they were looking forward to the most. Jennifer was excited to get involved with her university’s school newspaper while Christina was looking forward to studying English Literature. Then there was Rob; he wasn’t the most

academically inclined of the group but he always knew how to have fun. Trying to make a joke, Rob told Sarah, “Hey, you better party this summer, with classes and rugby practices every day, you won’t have much of a social life!” Despite laughing off Rob’s comment, Sarah started to question whether he might be right. She thought, “What if I don’t make many friends because I’ll be training every day and traveling for games on weekends?”

The next day, Sarah and her high school rugby team ended up winning the regional championship for the second year in a row. Coach Dave sent her a short congratulatory email, telling her he was looking forward to having her at training camp at the end of the summer. Once Sarah’s final high school exams were completed, she dedicated herself to training during the whole summer to be ready to impress Coach Dave and earn a roster spot in September.

Before she knew it, it was late August and Sarah was saying goodbye to her parents and friends and embarking on this new adventure of being a university student-athlete. A few days after arriving on campus, Coach Dave had the girls fully involved in training camp, running the team hard with two intense practices a day. It wasn’t all hard work though as Sarah immediately started to make friends with her new teammates, connecting especially well with another rookie named Claire. A few days into the gruelling schedule of training camp, Sarah and her teammates sat in an auditorium waiting for the student-athlete orientation activities to start. Sarah, sitting next to Claire, said, “Boy, I’m glad classes are starting soon. I don’t know how much longer I can handle two practices a day.” Just then, the athletic director stepped on stage and addressed the crowd. “If I can have your attention please, we have a few people here today who will talk to you about some important information concerning athletic eligibility and support services available to you. But first, I want to take the opportunity to welcome you to our athletic family. We pride ourselves on helping each of you develop into complete individuals; athletically,

academically, and socially. A big part of that occurs by being involved in the community, which supports so much of what we do and we encourage all of you to give back in any way you can. We are happy to have you representing the university on the field of play, but remember that even off the field, you are always wearing an invisible jersey and we look to you to set an example.” The athletic director’s comments caught Sarah’s attention as she had never really put much thought into how her responsibilities as a student-athlete extend beyond the field and the classroom. She had not been all that active in her community growing up and had only participated in school-based fundraisers because everyone at her school had to.

A few weeks into the fall semester, Sarah was walking to class with Claire who said, “Sarah, do you remember what the athletic director said about being involved in the community? I’ve been thinking about it and I keep hearing the older girls on the team talking about volunteering a couple hours a week with kids with developmental disabilities at a local school.” Sarah replied, “Yeah, I’ve been thinking about it too and I believe that’s the sort of thing he meant. I’ve already gotten a bunch of emails from people in the athletics department telling us about community programs looking for volunteers. I’d like to do something like that but I don’t think I have the time with all the practices and weight training for rugby, on top of classes. Also, do you remember last week at the end of practice when Coach Dave asked if we could help out with the high school rugby clinic he’s running in a couple weeks? I sort of feel like we should be helping out with that.” As they were about to sit down in class, Claire turned to Sarah, “Oh yeah, you’re right, that’s something I think we sort of have to do. Oh, and don’t forget our captain, Stacy, asked if we could help her out with her class project. You know, the one where she has to organize a community fundraiser for the cancer society?” Just as the professor started his lecture, Sarah leaned over and whispered, “I know, she’s organizing a charity hockey game between the

volunteer fire department and a bunch of varsity student-athletes. She knows that I refereed hockey back in high school so she is really adamant about wanting me to ref the game.”

As the fall semester progressed, Sarah started getting more comfortable balancing her classes with her rugby training. However, as midterms approached, the balancing act started to come crashing down. Back in high school, she remembered all her assignment due dates and her practice times by heart. However, with her current volume of work, Sarah could not do that anymore. She tried writing all her due dates down on loose sheets of paper, but she lost a few of them and ended up submitting some assignments late. One Thursday night, while studying with Claire for a biology midterm, Sarah hit rock bottom. Claire noticed a piece of paper in the corner of the room with a bunch of dates written down. “What’s that?” she asked. Sarah grabbed the paper and looked at it, “Oh no! I forgot about the essay for English that was due on Monday!”

Later that evening, Sarah thought to herself, “Maybe dad was right, maybe I took on too much. I don’t have enough time to write all these assignments. We have a rugby game on Saturday and I’m supposed to ref the charity hockey game for Stacy on Sunday”. Sarah decided that her only option was to ask Stacy if she could find someone else to ref the game but she felt really scared letting her know she was no longer available. Despite being apprehensive about her decision, Sarah knew there was no other option as school comes first and she could not miss Saturday’s game. Even hours after having sent an email to Stacy explaining her situation, Sarah still felt awful for having to break a commitment and needed to vent so she called her older sister, Jessie, who surprised her by saying she was coming to campus for a visit during Thanksgiving weekend.

Jessie arrived the next weekend and walked into Sarah’s dorm room. “Look what I bought for you!” as she unrolled a huge calendar. “It’s laminated so you can write on it with

markers and just wipe it off for the next month. I thought this would help you since you are such a visual person and have been having a hard time keeping up with your obligations. Here, let's put it up on your door so you can see it from your desk." After only a few days, Sarah started writing all her assignments, labs, workouts, and social plans on it. It helped her stay on top of deadlines by letting her visualize how close her due dates were. She even found time to help Coach Dave by taking a couple recruits on a tour of campus.

Her calendar filled up quickly as playoffs neared. Coach Dave was working the team hard and his practices often lasted longer than scheduled. Sarah's classwork piled up as due dates for projects and term papers got closer. However, with the help of her calendar, some productive late nights in the library, and some lessons on effective studying from her older teammates, Sarah stayed on top of everything. She thought, "I'm finally starting to get the hang of this university thing. I may not be as involved around the community as the older girls but at least I'm not falling behind with my school work anymore. Their classes are a lot harder than mine; I really don't know how they volunteer as much as they do and keep up with everything else".

As classes for the fall semester came to an end, Sarah and Claire met up with Suzie, a fourth year player on the rugby team, who served as a mentor and helped the two rookies by giving them some tips on how to prepare for final exams. After a few hours of intense studying, they decided to take a break and headed to the cafeteria. As they walked, Suzy asked, "I was wondering if you two would like to join me and volunteer with Play Pals next semester? I'm in charge of the Tuesday and Thursday programming and I need a couple counsellors to help out on those mornings."

Claire immediately said yes but Sarah thought to herself, "Suzy has been so helpful this semester. I don't want to let her down. My courses will be a bit harder next semester, but I'll

have less rugby training and will not be travelling for games on weekends. I guess I won't be as busy next semester. I hope I'll be able to organize my schedule better than I did this semester so I can make everything work".

Julia: The Sustained Contributor

Julia was very excited as she exited her apartment, heading to the municipal offices where she was to be recognized as the volunteer of the year at the September town hall meeting. Julia was a fourth year student-athlete serving as captain of the women's soccer team. Ever since her arrival on campus as a rookie, she had embraced the community and had gotten involved with several organizations. After the award ceremony, a journalist from the local newspaper came up to her and said, "Julia, you've just received quite the honour, as a dean's list scholar and captain of the soccer team, how do you find the time to be so involved in the community?"

Julia replied, "I don't sleep!" with a little laugh. She continued, saying, "That's probably not so great... It certainly isn't easy with school, soccer, and all the amazing programs I'm involved in, but it helps to have such an amazing support system around me at the university." As much as she was joking about her "not sleeping" comment, Julia knew there was some truth to it. She reflected on the many times over the last few years when she had stayed up late to finish assignments just so she could volunteer the next morning. She continued with the interview, "If you want to have a positive impact on your community, sometimes you have to make some sacrifices."

The journalist asked, "And what are some of the sacrifices you've made over the years?" Julia responded, "Well, for one, I don't go to as many parties as some of my friends. Even in the off-season, I don't go out as much as my friends might like me to. I can't be out late partying on a Thursday night when I'm volunteering with pre-school kids the next morning. What kind of an

example would that be for my little friends? I've been working with them for two years now and I need to be a good role model. I also often have to turn down spontaneous movie nights or pick-up Frisbee games, stuff like that, because I know I only have certain blocks of time to get my schoolwork done. School and soccer come first. After that, I try to make my community contributions a priority. There is just a culture of contribution here and I try to do my part." The journalist politely thanked Julia for her time and she was happy the interview was over as talking to the media has always made her feel a little nervous.

As Julia was walking back to her apartment to get ready to volunteer at the community theater, she bumped into two of her friends. "Hey Julia!" shouted Dylan and Victoria, "We're going to see that new Superman movie at seven o'clock. Come with us. We're about to leave but we can wait a few minutes for you to get ready." Julia was a huge fan of Superman movies and quickly had an inclination to contact the community theater coordinator to tell him she was sick. The thought had barely crossed her mind before she had already pushed it away, given how she loathed backing out of commitments. Julia also appreciated the irony of this dilemma, immediately after discussing with the journalist how she prioritizes her tasks. She replied, "Sorry guys, the community theater has a show tonight and I am taking tickets at the door." "No problem. See you later Julia," Dylan and Victoria said as they headed toward the parking lot.

Later the following week, Julia was in the library sharing some time-management tips with the first-year players on her team. Julia remembered how tough it was to get used to being a student-athlete and felt it was important for her to give her rookie teammates useful tips on how to balance school and sport while still finding time to be involved in the community. Julia started with a few words of encouragement, explaining to the players how they could find time to slowly integrate volunteering into their schedule, "It isn't as bad as it seems. You just have to start small

by volunteering for one-time events. It won't be as hard to fit a one-time thing into your schedule as it is to fit weekly commitments." Julia continued by providing some strategies to help them manage their time, "I write reminders to myself on sticky notes and put them on my wall to make a timeline. Soccer stuff goes on green notes, pink is volunteering, and I have different colors for all my classes." "It looks pretty weird, but it works!" said Jenny, Julia's roommate and teammate, as she smiled and walked toward the group. Julia replied jokingly, "Yes it is a bit weird but it works for me and that's what matters. That's the most important thing; find something that works for you and stick to it. It also helps to have an awesome roommate!" Samantha, a first-year player with a confused look on her face, asked Julia, "I don't even have half the things on my schedule that you have and I'm still struggling to make it all work. What is it exactly that you do?" Julia explained, "Well, for example, on Wednesdays, I have a two hour break between classes and practice. I use that time to work on assignments and Jenny makes us supper before we go to practice. We do the same thing on Monday's, only I cook instead. Being each other's support system helps us both get our academic work done, giving us extra time to give back to the community."

A few weeks later, Julia got a concrete reminder of how her extended support system at the university has enabled her to give back to the community. At the end of a practice, the coaches gathered the team around the centre of the field. Usually, Coach Jim had something important to say when he did this, but today it was Liz, one of the assistant coaches who addressed the team, "The annual run to raise money to help cure cancer is coming up soon and as most of you know, it's a cause that is close to my heart. Nearly ten years ago, I was diagnosed with breast cancer. Fortunately, I was able to beat it. I'm on the organizing committee and we need field marshals to direct the runners around the course. I would greatly appreciate it if any of

you could help out. I'll be posting a sign-up sheet on the dressing room door." As the coaches walked off the field toward their office in the athletics complex, Julia poked Samantha on her side while she was stretching, "You see, this is your chance to get involved." "Are you going to help out too?" Samantha asked. Julia replied, "Of course, Jenny and I have been field marshals for four years now. Liz has done so much for us; it's nice to give back to a cause that means a lot to her."

After signing up to be a field marshal, Julia turned the corner to leave the athletics complex, nearly running into the athletic director. "Oh hi Mr. Carter, sorry, I didn't see you there. Why are you still at the office so late?" asked Julia. "Just finishing off some paperwork that piled up over the past week" Mr. Carter responded. "But I'm glad I bumped into you Julia. How are the visits to the elementary schools going with the anti-bullying program?" Julia said with a smile, "It's so much fun and the kids love it. It's like they are meeting their heroes. It's a really cool feeling for us to be looked up to like that. I actually ran into a teacher a few days ago and she said that she has noticed how the kids are playing together more and that there have been fewer bullying complaints since our visits." Mr. Carter replied, "That's great. We've been hearing the same sort of thing in the office. We created this program because we thought it would help the kids but I'm glad to hear you and the other athletes are finding it valuable too. Now that your season is coming to a close, I was wondering if any of the younger players might want to get involved with the program next semester? I'll have my assistant send out an email to all the student-athletes, but I figured I'd ask some of you who are currently involved with the program for recommendations." Julia said. "I'm not sure off the top of my head, but I'll definitely run it by the girls and encourage them to join. If we can get most girls on the team to come out for this, it's a great way to come together as a team and help out the community at the

same time.” As he started walking away, Mr. Carter said, “Thanks Julia, I don’t want to keep you too long. Good luck with your game tomorrow night!”

Discussion

The present study explored, using a narrative approach, the facilitators and barriers to university student-athletes’ contributions. The analysis led to the identification of two distinct profiles of participants who faced different facilitators and barriers to contribution. Key findings relating to each profile are discussed, followed by common features experienced by both first-year student-athletes and sustained contributors.

First-Year Student-Athletes

The first-year student-athletes reported three general groups of facilitators for their contributions; namely teammates, coaches, and athletic department staff members. Senior teammates and/or teammates in formal leadership roles (i.e., captains) were identified as particularly important facilitators because they created opportunities to contribute through awareness (e.g., informing of charitable organizations on campus and in the community) and direct invitations (e.g., asking first-year student-athletes for help). Coaches facilitated contributions in similar ways as teammate, inviting first-year student-athletes to contribute to causes of their own (e.g., inviting student-athletes to help out with sports clinics hosted by the coach) or causes they deemed important (e.g., annual run to raise funds for cancer research). Finally, athletic department staff members regularly communicated via email opportunities for student-athletes to contribute through the university’s established partnerships with local organizations. Taken together, teammates, coaches, and athletic department staff members represented important individuals who through awareness and invitations, provided first-year student-athletes an important point of contact to contribution opportunities.

First-year student-athletes relied on these three groups of facilitators because they most often had not yet established connections throughout the campus and community and were not cognisant of the opportunities to contribute that existed. Given their new and demanding life situation, first-year student-athletes mostly felt overwhelmed with the demands of athletic training and academic work and did not take initiative; rather, they simply waited to be asked to contribute. This finding is consistent with past research indicating how being asked to volunteer is a strong determinant of volunteering as 71% of individuals who were asked to volunteer did so, while only 25% of those who were not asked to volunteer ended up volunteering (Sundeen, Raskoff, & Garcia, 2007).

Senior teammates and coaches also had other influences on first-year student-athletes. As the first-year student-athletes looked up to their senior teammates (Miller & Kerr, 2003) and coaches and did not want to disappoint them, first-year student-athletes occasionally overcommitted to contribution activities when asked. Thus, most often unintentionally, senior teammates and coaches pressured first-year student-athletes to contribute, which in turn, lead to first-year student-athletes feeling overwhelmed and struggling to meet their demands. In order to reduce feelings of being overwhelmed and regain a sense of control, first-year student-athletes reported having to learn new time-management skills or strategies (e.g., Sarah using an erasable calendar to keep track of her due dates) or break contribution commitments (e.g., Sarah having to break her commitment to referee her teammates charity game) in order to meet the increased demands of being a university student-athlete. The transition from high school to university has been described as an important and challenging event for university student-athletes (MacNamara & Collins, 2010). The increased intensity and frequency of athletic training, combined with more demanding academic work, resulted in demands for participants' time being

perceived as a barrier to contribution for first-year student-athletes. As such, first-year student-athletes would benefit from receiving time-management training before their multiple demands cause them to fall behind academically. Time-management skills and strategies have been found to be associated with better academic performance among university students (George, Dixon, Stansal, Lund Gelb, & Pheri, 2008). One way in which such time-management training may be provided to first-year student-athletes is for athletic departments to require time-management seminars to be integrated into student-athlete orientation activities. These seminars may be led academic support staff from student services on campus. Another option that would require less resources could be to have senior teammates hold the workshops during training camps with the support of coaches. In this way, the time-management workshops could serve a second role of providing timely training while also serving as a team-building activity. Finally, these workshops could include awareness training for more senior teammates and coaches to sensitize them to the pressure they exert on first-year student-athletes.

Sustained Contributors

Like the first-year student-athletes, sustained contributors also reported teammates, coaches, and athletic department staff members as facilitators to their contributions. However, the involvement of teammates and athletic department staff members in the facilitation process differed from how they were described by first-year student-athletes. These differences may be the result of sustained contributors having established more connections throughout the campus and community, resulting in a lesser need to be made aware of new contribution opportunities to the same extent as first-year student-athletes. Rather than teammates being creators of contribution opportunities, as was the case for first-year student-athletes, sustained contributors worked collaboratively with their teammates to develop more complex time-management

strategies to optimize each other's time, such as in the case in which Julia and Jenny shared meal preparation responsibilities. By using teammates to optimize their time, not only did sustained contributors report having less trouble meeting the demands of athletic training and academic work, but they also believed they were able to contribute more as a result. Although sustained contributors were generally able to meet the demands of school and sport more efficiently than first-year student-athletes, there were still times, usually around midterms, finals, or playoffs, during which they reported time constraints serving as barriers to contribution. These occasional periods of increased barriers to contributing may add to the trend of university students engaging in occasional or periodic volunteering to a greater extent than volunteering on a regular schedule (Smith et al., 2010).

In addition to having developed time-management skills and strategies to a greater extent than first-year athletes, the sustained contributors viewed their contributions as a priority, much in the same way as athletic training and academics. Labeling contributions as a priority, as opposed to another activity performed in addition to academic and athletic requirements, placed greater importance on contributions to the point where sustained contributors willingly made sacrifices in their social lives (e.g., missing parties and spontaneous plans with peers) in order to contribute. Behaviours such as these suggest these sustained contributors may have internalized being a sustained contributor into their identity. This internalization of contributions may be reflective of their more advanced development as emerging adults, as previous research has stated that successfully developing emerging adults should be engaging with social and civic groups in meaningful ways (Hawkins et al., 2009). Additionally, this finding is in line with the 5Cs model and PYD principles in which contributions are described as signs of progression from

youth to engaged adulthood by displaying greater interest in communal needs (Lerner et al., 2003).

Common Features

Both first-year student-athletes and sustained contributors viewed coaches as important facilitators to contribution and described how they facilitated contributions in similar ways. The finding that coaches influence student-athletes' behaviours is in line with existing literature which has shown coaches to be important figures in the lives of athletes (Smoll & Smith, 2006). Coaches facilitated student-athlete contributions by directly providing opportunities to contribute, such as asking athletes to assist them with youth sports clinics or camps, and by communicating opportunities to contribute with other organizations to their athletes. Coaches provided these opportunities to all of their student-athletes who continued to take advantage of these coach created opportunities throughout their university careers as team level contributions were seen as important team-building activities. By doing so, student-athletes were made aware of opportunities they may not have otherwise known about. When coaches provide their athletes with opportunities to contribute, they display a developmental focus as these opportunities allow athletes to learn organizational skills and life skills that will serve them in life beyond sport (Camiré, Forneris, Trudel, & Bernard, 2011).

One particular factor deemed to be important for both profiles involved mentoring relationships which formed between first-year student-athletes and sustained contributors. Within these mentoring relationships, first-year student-athletes were the mentees and primary beneficiaries. This was typical of mentoring relationships in which the mentor, a more experienced individual, provides guidance and assistance to a mentee (Hoffman & Loughhead, 2015a). Sustained contributors helped their younger teammates by sharing study tips or offering

advice on time-management to help them adapt to the demands of being a university student-athlete. First-year student-athletes reported feeling more a part of the team when older teammates interacted with them in these ways but mentors also perceived benefits from the relationship. This finding is consistent with the mentoring literature (Wanberg, Kammeyer-Mueller, & Marchese, 2006), where mentors (i.e., sustained contributors) reported that these relationships helped to create a cohesive unit and were personally rewarding and satisfying. Similarly, Hoffman and Loughhead (2015b) found that athlete-to-athlete mentoring had a positive influence on the mentee's satisfaction with their work ethic in sport. As such, coaches should encourage student-athletes to develop and nurture relationships with their teammates that include mentoring functions that extend beyond the realm of athletics.

The findings of this study are not without limitations. It is important to note that the profiles upon which the composite narratives were based on do not represent all university student-athletes and other profiles likely exist, such as those who may contribute minimally and tend to do so for instrumental motives. In this regard, it is possible that the results were affected by a self-selection bias in which student-athletes who believed they contributed to a lesser extent may not have chosen to participate. Furthermore, these findings may not be representative of all athletes in university. Students competing in university clubs, community affiliated clubs, or intramurals face different requirements and rules in regards to training, competition, and academic performance and likely experience different facilitators and barriers as a result. Future research should examine other contexts (e.g., NCAA, university intramurals, etc.) as they may present athletes with different facilitators and barriers to contribution.

Conclusion

The present study explored the facilitators and barriers to university student-athlete contributions and represents the first study of its kind in a university sport context. Findings indicated how first-year student-athletes and sustained contributors identified teammates, coaches, and athletic department staff as facilitators unique to student-athletes and time constraints as the most significant barrier; however, how these affected the two groups of student-athletes were different. Finally, it was shown that through the implementation of time-management strategies, university student-athletes were able to overcome barriers to contribution.

References

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi: 10.1037//0003-066X.55.5.469
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. doi: 10.1191/1478088706qp063oa
- Camiré, M., Forneris, T., Trudel, P., & Bernard, D. (2011). Strategies for helping coaches facilitate positive youth development through sport. *Journal of Sport Psychology in Action*, 2(2), 92-99. doi: 10.1080/21520704.2011.584246
- Camiré, M., Trudel, P., & Bernard, D. (2013). A case study of a high school sports program designed to teach athletes life skills and values. *The Sport Psychologist*, 27(2), 188-200.
- Camiré, M., Werthner, P., & Trudel, P. (2009). Mission statements in sport and their ethical messages: Are they being communicated to practitioners?. *Athletic Insight*, 11(1), 75-85.
- Canadian Interuniversity Sport. (2014a). *Athletes Guide*. Retrieved from Canadian Interuniversity Sport website: http://en.cis-sic.ca/information/members_info/pdfs/pdf_elig_pack/14-15/athletes_guide.pdf
- Canadian Interuniversity Sport. (2014b). *CIS by-laws, policies, and procedures*. Retrieved from Canadian Interuniversity Sport website: http://en.cis-sic.ca/information/members_info/bylaws_policies_procedures
- Carodine, K., Almond, K. F., & Gratto, K. K. (2001). College student athlete success both in and out of the classroom. *New Directions for Student Services*, 2001(93), 19-33. doi: 10.1002/ss.2
- Denison, J. & Reinhart, R. (2000). Introduction: Imagining sociological narratives. *Sociology of Sport Journal*, 17(1), 1-4.

- 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. doi: 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. doi: 10.1080/1740898042000334890
- 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. doi: 10.1353/jhe.2012.0024
- George, D., Dixon, S., Stansal, E., Lund Gelb, S., & Pheri, T. (2008). Time diary and questionnaire assessment of factors associated with academic and personal success among university undergraduates. *Journal of American College Health*, 56(6), 706-715. doi: 10.3200/JACH.56.6.706-715
- 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. doi: 10.1080/17509840701834573
- Haski-Leventhal, D., Cnaan, R., Handy, F., Brudney, J. L., Holmes, K., Hustinx, L., ... Zrinscak, S. (2008). Students' vocational choices and voluntary action: A 12 nation study. *Voluntas*, 19(1), 1-21. doi: 10.1007/s11266-008-9052-1
- Hawkins, M. T., Letcher, P., Sanson, A., Smart, D., & Toumbourou, J. W. (2009). Positive development in emerging adulthood. *Australian Journal of Psychology*, 61(2), 89-99. doi: 10.1080/00049530802001346

- 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. doi: 10.1080/2194587X.2015.1028315
- Hoffman, M. D., & Loughead, T. M. (2015a). A comparison of well-peer mentored and non-peer mentored athletes' perceptions of satisfaction. *Journal of Sports Sciences*. doi: 10.1080/02640414.2015.1057517
- Hoffman, M. D., & Loughead, T. M. (2015b). Investigating athlete mentoring functions and their association with leadership behaviours and protégé satisfaction. *International Journal of Sport and Exercise Psychology*. doi: 10.1080/1612197x.2014999348
- 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. doi: 10.1080/19398440902909017
- Holt, N. L., Tink, L. N., Mandigo, J. L., & Fox, K. R. (2008). Do youth learn life skills through their involvement in high school sport? A case study. *Canadian Journal of Education*, 31(2), 281-304. doi: 10.2307/20466702
- 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. doi: 10.1080/02701367.2005.10599299
- Larsen, R. (2006). Positive youth development, wilful adolescents, and mentoring. *Journal of Community Psychology*, 34(6), 677-689. doi: 10.1002/jcop.20123
- Lee, O., & Martinek, T. (2013). Understanding the transfer of values-based youth sport program goals from a bioecological perspective. *Quest*, 65(3), 300-312. doi: 10.1080/00336297.2013.791871

- 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. Retrieved from http://www.tandfonline.com/doi/abs/10.1207/S1532480XADS0703_8#.UqCf8uKJ7-k
- 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*, 1107-1114. doi: 10.1016/j.adolescence.2011.08.001
- MacNamara, Á., & Collins, D. (2010). The role of psychological characteristics in managing the transition to university. *Psychology of Sport and Exercise, 11*(5), 353-362. doi: 10.1016/j.psychsport.2010.04.003
- Miller, P. S., & Kerr, G. A. (2003). The role experimentation of intercollegiate student athletes. *The Sport Psychologist, 17*(2), 196-219.
- 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. Retrieved from <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.
- Rathwell, S., Callary, B., & Young, B. W. (2015). Exploring the context of coached masters swim programs: A narrative approach. *International Journal of Aquatic Research and Education, 9*(1), 70-88. doi: 10.1123/ijare.2014-0068

- 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. doi: 10.1207/S1532480XADS0702_6
- Simha, A., Topuzova, L. N., & Albert, J. F. (2011). V is for volunteering—The journeys of undergraduate volunteers. *Journal of Academic Ethics*, 9(2), 107-126. doi: 10.1007/s10805-011-9136-1
- Smith, K. A., Holmes, K., Haski-Leventhal, D., Cnaan, R. A., Handy, F., & Brudney, J. L. (2010). Motivations and benefits of student volunteering: Comparing regular, occasional, and non-volunteers in five countries. *Canadian Journal of Nonprofit and Social Economy Research*, 1(1), 56-81.
- Smoll, F. L., & Smith, R. E. (2006). Enhancing coach-athlete relationships: Cognitive-behavioral principles and procedures. In J. Dosil (Ed.), *The sport psychologist's handbook: A guide for sport-specific performance enhancement* (pp. 19-38). West Sussex, England: Wiley.
- Sparkes, A. C. (2002). *Telling tales in sport and physical activity: A qualitative journey*. Champaign, IL: Human Kinetics Press.
- Statistics Canada. (2009). *Postsecondary enrollment and graduation* (Statistics Canada Catalogue No. 81-599-X — Issue No. 003). Ottawa, Ontario.
- Statistics Canada. (2010). *Making father “count”* (Statistics Canada Catalogue No. 11-008-X). Ottawa, Ontario.
- Statistics Canada. (2013a). *Fertility: Overview, 2009 to 2011* (Statistics Canada Catalogue No. 91-209-X). Ottawa, Ontario.
- Statistics Canada. (2013b). *Marital status: Overview, 2011* (Statistics Canada Catalogue No. 91-209-X). Ottawa, Ontario.

- Strachan, L., Côté, J., & Deakin, J. (2011). A new view: Exploring positive youth development in elite sport contexts. *Qualitative Research in Sport, Exercise and Health*, 3(1), 9-32. doi: 10.1080/19398441.2010.541483
- Sundeen, R. A., Raskoff, S. A., Garcia, M. C. (2007). Differences in perceived barriers to volunteering to formal organizations: Lack of time versus lack of interest. *Nonprofit Management & Leadership*, 17(3), 279-300. doi: 10.1002/nml.150
- United Nations Educational, Scientific, and Cultural Organization. (n.d.). What do we mean by “youth”? Retrieved from <http://www.unesco.org/new/en/social-and-human-sciences/themes/youth/youth-definition>
- Wanberg, C. R., Kammeyer-Mueller, J., & Marchese, M. (2006). Mentor and protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behavior*, 69(3), 410-423. doi: 10.1016/j.jvb.2006.05.010
- Winchester, G., Culver, D., & Camiré, M. (2011). The learning profiles of high school teacher-coaches. *Canadian Journal of Education*, 34(4), 216-233.

General Discussion

The purpose of this Master's thesis was to gain an in-depth understanding of university student-athletes' contributions. The research note included in this thesis addressed measurement concerns faced by PYD researchers using the 5Cs model by assessing the suitability of the PYD-VSF as a measure of the 5Cs in an emerging adult athlete population. However, due to issues concerning internal reliability consistency, factor dimensionality, and predictive validity, it was determined that it is not an appropriate measure in this population, in its current form.

The first article in this thesis examined the motivations of university student-athletes for contributing. Two key findings were (a) athletes had multiple and simultaneous motives to contribute, and (b) contributions appeared to be worthy opportunities for university student-athletes to satisfy their basic psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 2000a). The first key finding of the first article relates to the simultaneous presence of multiple motivations for contributing. These motivations ranged from intrinsic motivations, such as enjoyment of the activity, to more extrinsic motivations, like feeling pressured or to add to their resumes. The findings of this thesis contrast the description of motivation quality in OIT (Ryan & Deci, 2002). Rather than there being a single point representing motivation on a continuum from external regulation to intrinsic regulation, these findings suggest multiple points representing different motivations are more. The second key finding appropriate is consistent with volunteerism research which has found that university students volunteer for value-driven reasons, to build relationships (Smith et al., 2010), and to learn new skills (Harre, 2007; Lally & Kerr, 2005). Similar conclusions have also been drawn in non-university contexts (Bang & Ross, 2009).

The second article included in this thesis explored the facilitators and barriers to student-athlete contributions and two key findings emerged from the inductive thematic analysis. First, first-year student-athletes and sustained contributors differed in their experiences with facilitators. First-year athletes described needing more direct facilitation by having others create opportunities for them to contribute. The first-year student-athletes in this thesis behaved in line with findings from Francis's (2011) findings indicating that university students' level of volunteering behaviour was highly dependent on the actions of significant others. For their part, sustained contributors were less reliant on others to make them aware of opportunities to contribute, due to their more extensive social networks throughout the campus and surrounding community, and used facilitators (i.e., teammates, coaches, and athletics department staff) to optimize their time which allowed them to have more time to contribute. The second key finding from the second article was that time constraints were identified as the most significant barriers to student-athletes' contributions for both profiles. Given that university athletes have the time demands of full-time students on top of significant sport commitments (Carodine, Almond, & Gratto, 2001), it is to be expected that time would be a barrier to contribution. However, how members of each profile dealt with these time constraints differed. First-year student-athletes encountered problems balancing their responsibilities in regards to athletic training, academic work, and contributions and had to develop rudimentary time-management techniques. Sustained contributors, on the other hand, had developed more complex and anticipatory time-management strategies through their greater experience as university student-athletes and reported less difficulty meeting the demands of athletic training, academic work, and contributing. Additionally, sustained collaborators acted collaboratively to optimize each other's time, allowing more time to contribute. Therefore, the findings of this thesis demonstrate that time

constraints can be overcome with the development of more advanced time-management strategies. In regards to contribution, this is a new finding that advances the literature in the context of sport.

Together, the findings advance our understanding of university student-athletes' contributions by moving beyond a surface comparison of what athletes do or do not do. Past research in this area has principally examined university athletes' contributions from a post-positivist perspective, using quantitative methods to draw general conclusions about frequency of several types of contribution (Gayles et al., 2012; Hoffman et al., 2015), or intentions (Cruce & Moore, 2007). The findings of the current thesis extend the past literature and include a number of unique contributions to the field.

First, by drawing from established models and theories in developmental psychology (i.e., PYD framework, 5Cs model) as well as motivational psychology (i.e., BNT, OIT), it was possible to utilize a broad definition of contribution and understand the *why* of contributions. Previous research on the contributions of university student-athletes narrowly defined terms such as social activism and charitable involvement (Gayles et al., 2012) as well as volunteering (Cruce & Moore, 2007; Hoffman et al., 2015). By intentionally avoiding specific terms, student-athletes in this thesis were able to discuss a wide range of activities that aligned with the contribution contexts included in the 5Cs model (Lerner et al., 2005). Although models (i.e., the 5Cs model of PYD) serve as organising frameworks illustrating links and pathways through time, models generally do not explain why such links exist. By using OIT and BNT, the present thesis was able to examine how motivation may help explain how the 5Cs can lead to the 6th C of contribution. Moving forward, more research is needed to explore in greater detail the processes linking the 5Cs to contribution.

Second, using the 5Cs model to interpret the findings (Lerner et al., 2005) provided support for contributions occurring in some contexts more than others in a university student-athlete population. Student-athletes discussed many contributions to the community context (e.g., volunteering in a program helping children with developmental disabilities) and to the self (e.g., gaining future career related experience), with far fewer contributions occurring for civil society or for the family. Inherently, as student-athletes are pursuing higher education, we expected to find many examples of contributions to the self (Kennett, Reed, & Lam, 2011). Additionally, student-athletes are representative of the university (Toma, 1999) and contributing at the community level is important to create a positive image. In regards to contributions to civil society, student-athletes in this thesis did not report political involvement but did provide examples of participation in large scale movements, such as the Canadian Cancer Society's Relay for Life. Finally, given that many student-athletes have moved away from home to complete their studies (MacNamara & Collins, 2010), sometimes even out of province, it is not surprising that few described engaging in family-oriented contributions. Furthermore, the findings highlight how a single contribution can actually benefit multiple contexts within the 5Cs model as student-athletes often discussed how their contributions concurrently benefited them and others. For example, when working with children with developmental disabilities, one student-athlete described the benefits to the children but also described how the program made her feel good about herself and less stressed. Therefore, within the 5Cs model, participation in this particular program represented both a contribution to the community and to the self.

Third, the findings of this thesis provide a greater understanding of how university student-athletes contribute as they identified teammates, coaches, and athletics department staff members as important facilitators of their contributions. Taken together, these facilitators appear

to create a culture in which student-athletes are provided with more opportunities to contribute than their non-athlete peers. This culture upheld by the three types of actors is visually represented in a hierarchy of support that facilitates student-athletes' contributions (see Figure 1). This finding is consistent with previous research highlighting that peers (Francis, 2011) and coaches (Smoll & Smith, 2006) are influential figures in the lives of university students. Nonetheless, important differences were highlighted in terms of how contributions were actually facilitated. The findings suggest that early in their university careers, student-athletes need teammates, coaches, and athletic department staff members to create opportunities for them to contribute. However, as they adapt to the demands of university, develop more complex time-management strategies, and create for themselves social networks on campus and in the community, student-athletes can become sustained contributors. For example, findings showed how sustained contributors worked collaboratively to optimize their time, allowing for greater levels of contribution and less reliance on teammates and athletic department staff members to make them aware of contribution opportunities. By helping first-year student-athletes adapt to the demands of university earlier in their careers through the provision of time-management training, it may be possible for them to contribute in a more effective manner. This training may take the form of workshops delivered during training camp by coaches or senior student-athletes. Furthermore, the findings of the current thesis demonstrate how senior student-athletes and coaches need to be better sensitized to the pressure, intentional and unintentional, they may be putting on first-year student-athletes to contribute. Such efforts can go a long way in helping prevent first-year student-athletes from feeling overwhelmed. In and of themselves, the workshops and sensitizing efforts constitute contributions and further nourish cultures of contribution on campus.

Finally, although athletic department staff members and coaches provide numerous opportunities for student-athletes to contribute, care must be taken in regards to when these opportunities are offered. Given that first-year student-athletes reported struggling to adjust to university time constraints during their first semester that sustained contributors indicated struggling around peak times (e.g., midterms, finals, playoffs), it appears that the contribution opportunities should be promoted during times that minimally interfere with preparation for exams or important athletic competitions (e.g., off-season).

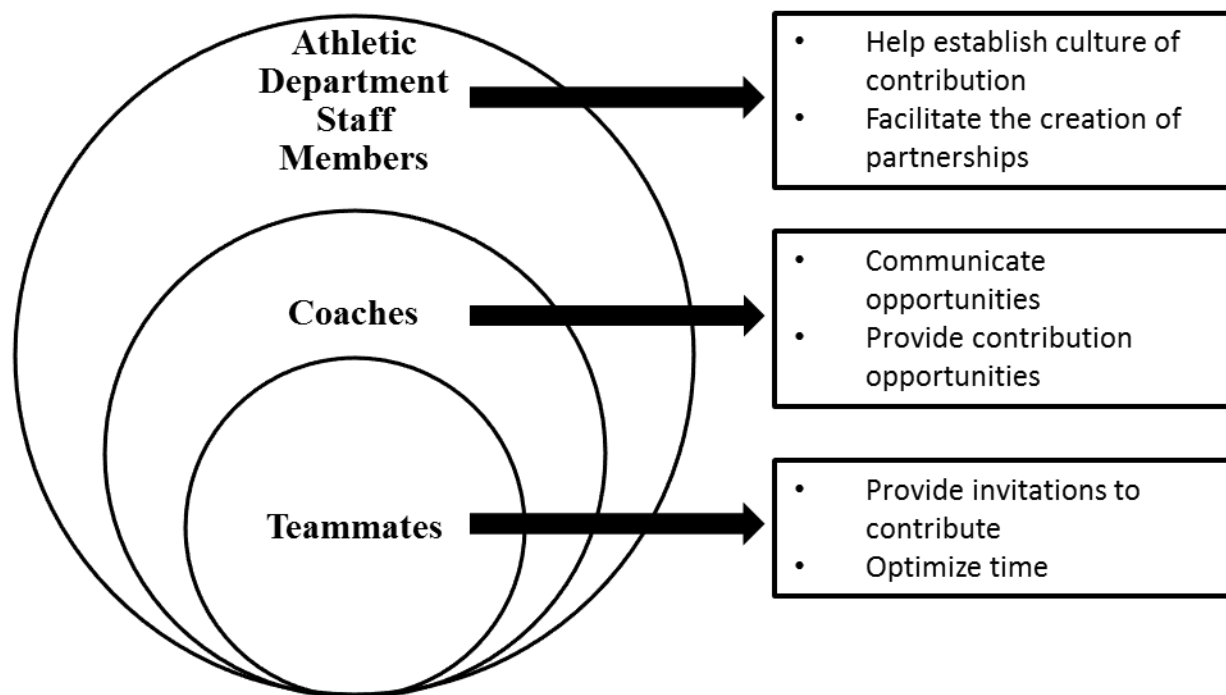


Figure 1. Hierarchy of facilitators supporting contributions.

Limitations

It is important that the limitations of this Master's thesis research are presented clearly and considered fully. First, it must be noted that all participants were university student-athletes and their perspectives are not necessarily reflective of other university athletes including competitive club, recreational club, or intramural athletes. University sport is highly structured,

highly competitive, and a significant dedication to training is demanded of the athletes. The same competitive level and training demands may not exist for competitive club athletes, and certainly does not exist for recreational athletes. Second, the participants self-selected to participate and it is possible that student-athletes who contributed to a lesser degree, possibly representing other profiles (e.g., individuals who contribute only when necessary or when they perceive a benefit for themselves), chose not to participate. Third, data were collected at a single time point. Although the findings suggest athletes' motivations and their perceptions of facilitators and barriers change over time, this cannot be confirmed without a longitudinal examination. Furthermore, collecting data from other stakeholders in the context of university sport (e.g., coaches, athletics department staff, professors, etc.) or by additional methods (e.g., observations) would have provided a more detailed understanding of contribution in this context. Finally, the first phase of this thesis research was initially intended to examine the relationship between the individual 5Cs and contribution. Then student-athletes who scored highly on contribution were to have been selected for follow-up interviews in the second phase. However, reliability issues with the PYD-VSF and the contribution scale created for the first phase prevented this. As a result, participants for the second phase had to be selected by purposeful sampling for a maximally varied sample instead.

Future Research

The findings of this Master's thesis provide an improved understanding of contribution, particularly in a university student-athlete population. However, further research questions arise from these findings which researchers may pursue. First, the findings indicate that several actors within the university setting (i.e., peers, coaches, athletics department staff, university administrators) influence the contributions of university athletes. Future research is needed to

examine more closely how contribution is promoted or hindered from an organizational perspective, which may lead to policy changes within athletic departments that further facilitate student-athlete contributions.

Second, some qualitative findings could be examined using quantitative methods. For example, findings indicate that athletes often possessed multiple motivations, both intrinsic and extrinsic, for a single contribution. However, the relative importance of these motivations was not clear. Future research should make use of quantitative measures to measure which motivations emerge as being more important. Additionally, the findings of this thesis suggest the basic psychological needs are satisfied through contributions but more research is needed to measure need satisfaction and determine if the satisfaction of the psychological needs leads to improved well-being, as posited in BNT (Ryan & Deci, 2000a).

Finally, athletes discussed the perceived benefits of contributing, which included learning or developing life skills and improving team cohesion. These findings warrant further inquiry as they may have implications for life skills research. For example, researchers could explore how contributing as a team enhances team cohesion and may ultimately lead to improvements in on-field performance.

Theoretical Implications

Research in the area of PYD in sport has predominantly focused on examining the developmental assets of youth with little focus placed on the application of these assets in life (i.e., contribution). Pittman and colleagues (2000) are often cited in the PYD literature for the phrase "problem-free is not fully prepared" (e.g., Roth & Brooks-Gunn, 2003). However, Pittman and colleagues (2003) continue, adding that youth must not only be fully prepared, but also be fully engaged through the provision of meaningful opportunities to contribute. This

Master's thesis moved beyond examining *what* athletes do to contribute and delved into *why* and *how* university athletes engage in contributions. As such, the findings provide a better understanding of contribution and how youth may become fully engaged in their community.

The contributions made by university student-athletes in this thesis did not manifest themselves evenly within the four contexts in Lerner and colleagues' 5Cs model (2005). The student-athletes predominantly discussed contributions to themselves and the community, often with a single contribution affecting both contexts simultaneously. To a lesser extent, contributions to civil society in the form of social activism were reported, but contributions to the family were rarely discussed. This may be reflective of the student-athletes' development as emerging adults, transitioning into lives in which they live much more independently of their parents (Arnett, 2007a); as well, this may reflect the geographical distances that often separates student-athletes from their families, particularly for those who attend out-of-town or out-of-province universities. As such, the findings suggest that the contexts to which contributions are made can fluctuate based on a person's life stage and roles and responsibilities that come with it.

The findings of this thesis also have implications regarding BNT and OIT (Ryan & Deci, 2000a; Ryan & Deci, 2000b). The basic psychological needs for autonomy, competence, and relatedness of the student-athletes appeared to have been satisfied through contributions. This suggests that BNT is a useful theory for guiding examinations on individual's motivations to contribute. Additionally, as contributions seemed to be a means by which the basic psychological needs were satisfied, contributions may be related to improvements in well-being through the satisfaction of the basic needs. However, as the present thesis was cross-sectional in nature, it is unclear as to the precise relationship between contribution and well-being. A bidirectional relationship may be at play, with psychological well-being leading to contribution but also

contributions leading to psychological well-being. Future research in this area is needed to more carefully delineate the nature of these potential relationships.

Although the quality of motivation for a given action is often represented as a unique point along a continuum from external regulation to intrinsic regulation, the findings of this thesis suggest that student-athletes may experience multiple, simultaneous motivations for contributing. These simultaneous motivations can have varying levels of quality along the continuum of motivation and as such, perhaps it is more appropriate to envision multiple markers on the continuum, each with fluctuating levels of perceived importance.

Practical Implications

The findings from this Master's thesis may be used by coaches as athletes indicated how they look to their coaches as facilitators to their contributions. For example, some student-athletes discussed how being provided with opportunities to coach younger athletes was a preferred way for them to display their competence and build relationships with members of the community. However, it is important to note that some of the first-year student-athletes reported feeling pressured to contribute and having low levels of autonomy in regards to their contributions. With this in mind, coaches should still see themselves as important providers of contribution opportunities for their athletes but ensure that they frame these opportunities as optional and be cognizant of particularly stressful time of the year for student-athletes (e.g., midterms, finals, playoffs). Second, coaches may be able to organize team-building activities which also serve as contributions to the local community, thereby maximizing athletes' use of their time. The findings of this thesis demonstrated how athletes regard contributing with teammates as a way of building and strengthening relationships among one another, suggesting that team-based contributions may be an effective way for coaches to improve team cohesion.

On a broader level, the findings of this thesis may be of use to athletics department staff and university administrators. Athletes commented how for many of them, it took a while before they learned proper time-management skills which allowed them to overcome time constraints. Thus, athletics department staff should develop and offer time-management workshops for varsity student-athletes while they are making the transition from high school to university. Carodine and colleagues (2001) cite the CHAPS/Life Skills program as an exemplarily student-athlete support program which includes “study skills, goal setting and time-management” (p.26) training. One way these workshops could be implemented would be to integrate them in pre-season training camps and have them framed as important initiatives that can influence both on- and off-field performance. Second, administrators and staff of athletics departments should continue to develop and foster a culture of contribution, which was reported to exist by student-athletes at both institutions. The findings of this thesis suggest that communicating the value of contributing, at varying levels within the university structure, facilitated university student-athlete contributions. However, more important than simply encouraging athletes to contribute was the creation of partnerships with community organizations with the explicit purpose of providing athletes with meaningful opportunities to contribute.

Finally, programs seeking volunteers may also find useful applications for the findings of this master's thesis. Athletes acknowledged having multiple motivations for contributing which included a full spectrum from enjoyment and satisfaction of the basic psychological needs to résumé building. Additionally, motivations for contributing may change over time, becoming more or less important over the course of a person's involvement within a contribution setting. For program administrators, it may be beneficial to keep the presence of multiple motivations in mind when promoting their program. By making student-athletes aware that not only will

volunteering with the program look good on a résumé, but also specify the specific skills which can be developed through volunteering. As skills improve, student-athletes gain confidence and begin to internalize the contribution and then derive more pleasure from it, leading to intrinsically motivated sustained contributors

Conclusion

The findings of this Master's thesis advance the literature by providing a more in-depth understanding of contribution among university student-athletes. Specifically, the thesis allowed for the identification of athletes' motivations to contribute as well as the facilitators and barriers to their contributions. These findings may be used by coaches, athletics department staff members, and university administrators to facilitate meaningful contributions by university student-athletes. Future research is needed to examine the outcomes athletes experience through contributions.

Statement of Contribution

I, Colin J. Deal, was responsible for collecting and analyzing the data used in this Master's research. I was responsible for writing the two articles and research note which appear within this Master's thesis. Dr. Martin Camiré supported all aspects of the conceptualization, analysis, and provided assistance in writing by reviewing multiple drafts of each component of this thesis. Dr. Bradley Young helped conceptualize the research note and guided the quantitative analysis.

References

- Arnett, J. J. (2007a). Emerging adulthood: What is it and what is it good for? *Child Development Perspectives*, 1(2), 68-73. doi: 10.1111/j.1750-8606.2007.00016.x
- Arnett, J. J. (2007b). Suffering, selfish, slackers? Myths and reality about emerging adults. *Journal of Youth and Adolescence*, 36, 23-29. doi: 10.1007/s10964-006-9157-z
- 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.
- 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. doi: 10.1207/s1532480xads0904_2
- Bang, H., & Ross, S. D. (2009). Volunteer motivation and satisfaction. *Journal of Venue and Event Management*, 1(1), 61-77.
- Barber, C., Mueller, C. T., & Ogata, S. (2013). Volunteerism as purpose: Examining the long-term predictors of continued community engagement. *Educational Psychology*, 33(3), 314-333. doi: 10.1080/01443410.2013.772775
- Barrow, L., Brock, T., & Rouse, C. E. (2013). Postsecondary education in the United States: Introducing the issue. *The Future of Children*, 23(1), 3-16. doi: 10.1353/foc.2013.0006
- Bredemeier, B. L., & Shields, D. L. (2006). Sports and character development. *President's Council on Physical Fitness and Sports Research Digest*, 7(1), 1-8. doi: 10.103/e60322007-001

- Camiré, M., & Trudel, P. (2010). High school athletes' perspectives on character development through sport participation. *Physical Education & Sport Pedagogy*, 15(2), 193-207. doi: 10.1080/17408980902877617
- Camiré, M., Forneris, T., Trudel, P., & Bernard, D. (2011). Strategies for helping coaches facilitate positive youth development through sport. *Journal of Sport Psychology in Action*, 2(2), 92-99. doi: 10.1080/21520704.2011.584246
- Camiré, M., Trudel, P., & Forneris, T. (2009). High school athletes' perspectives on support, communication, negotiation and life skill development. *Qualitative Research in Sport and Exercise*, 1(1), 72-88. doi: 10.1080/19398440802673275
- Canadian Sport for Life. (2011). Retrieved from <http://canadiansportforlife.ca>
- Carodine, K., Almond, K. F., & Gratto, K. K. (2001). College student athlete success both in and out of the classroom. *New Directions for Student Services*, 2001(93), 19-33. Doi: 10.1002/ss.2
- Chase, M. A., & Dummer, G. M. (1992). The role of sports as a social status determinant for children. *Research Quarterly for Exercise and Sport*, 63(4), 418-424. doi: 10.1080/02701367.1992.10608764
- Chen, S., Snyder, S., & Magner, M. (2010). The effects of sport participation on student-athletes' and non-athlete students' social life and identity. *Journal of Issues in Intercollegiate Athletics*, 3, 176-193. Retrieved from http://csri-jiia.org/documents/puclications/research_articles/2010/JIIA_2010_3_10_176_193_Athletic%20Identity.pdf
- Coakley, J. (2011). Youth sports: What counts as "positive youth development?". *Journal of Sport and Social Issues*, 35, 306-324. doi:10.1177/0193723511417311

- Cruce, T. M., & Moore, J. V. (2007). First-year students' plans to volunteer: An examination of the predictors of community service participation. *Journal of College Student Development, 48*(8), 655-663. doi: 10.1353/csd.2007.0063
- 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. doi: 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. doi: 10.1080/04419057.2004.9674365
- Denham, S. A. (1998). *Emotional development in young children*. New York: Guilford Press.
- Donnelly, P., Darnell, S., & Coakley, J. (2007). The use of sport to foster child development and education. *Sport for Development and Peace International Working Group, 7*-47.
- Eley, D., & Kirk, D. (2002). Developing citizenship through sport: The impact of a sport-based volunteer programme on youth sport leaders. *Sport, Education, and Society, 7*(2), 121-166. doi: 10.1080/1357332022000018841
- Ewing, M., Gano-Overway, L., Branta, C., & Seefeldt, V. (2002). The role of sport in youth development, 31-47. In M. Gatz, M. Messner, & S. Ball-Rokeach (eds.), *Paradoxes of Youth and Sport*. Albany, NY: State University of New York Press.
- Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research, 4*(1), 1-16. doi: 10.1177/1558689809349691
- Feldman, R. S. (2012). *Child development* (6th ed.). Boston, MA: Pearson.

- Flett, M. R., Gould, D. R., Paule, A. L., & Schneider, R. P. (2010). How and why university coaches define, identify, and recruit 'intangibles'. *International Journal of Coaching Science*, 4(2), 15-35.
- 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. doi: 10.1002/nvsm.390
- Fraser-Thomas, J. L., Côté, J. (2009). Understanding adolescents' positive and negative developmental experiences in sport. *The Sport Psychologist*, 23(1), 3-23.
- 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. doi: 10.1080/1740898042000334890
- 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. doi: 10.1353/jhe.2012.0024
- 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). Thousand Oaks: CA: SAGE.
- Harre, N. (2007). Community service or activism as an identity project for youth. *Journal of Community Psychology*, 35(6), 711-724. doi: 10.1002/jcop.20174
- Harter, S. (1999). Symbolic interactionism revisited: Potential liabilities for the self constructed in the crucible of interpersonal relationships. *Merrill-Palmer Quarterly*, 45(4), 677-703. Retrieved from <http://www.jstor.org/stable/23093377>

- Haski-Leventhal, D., Cnaan, R., Handy, F., Brudney, J. L., Holmes, K., Hustinx, L., ... Zrinscak, S. (2008). Students' vocational choices and voluntary action: A 12 nation study. *Voluntas*, 19(1), 1-21. doi: 10.1007/s11266-008-9052-1
- Hawkins, M. T., Letcher, P., Sanson, A., Smart, D., & Toumbourou, J. W. (2009). Positive development in emerging adulthood. *Australian Journal of Psychology*, 61(2), 89-99. doi: 10.1080/00049530802001346
- Hedstrom, R., & Gould, D. (2004). *Research in Youth Sports: Critical Issues Status*. East Lansing: MI, Institute for the Study of Youth Sports.
- 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. doi: 10.1080/2194587X.2015.1028315
- Holt, N. L., Tink, L. N., Mandigo, J. L., & Fox, K. R. (2008). Do youth learn life skills through their involvement in high school sport? A case study. *Canadian Journal of Education*, 31(2), 281-304. doi: 10.2307/20466702
- Jowett, S., Timson-Katchis, M., & Adams, R. (2007). Too close for comfort? Dependence in the dual role parent/coach-child/athlete relationship. *International Journal of Coaching Science*, 1(1), 57-77.
- Kay, T., & Bradbury, S. (2009). Youth sport volunteering: Developing social capital?. *Sport, Education, and Society*, 14(1), 121-140. doi: 10.1080/13573320802615288
- Kennett, D. J., Reed, M. J., & Lam, D. (2011). The importance of directly asking students their reasons for attending higher education. *Issues in Educational Research*, 21(1), 65-74.

- 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. doi: 10.1080/02701367.2005.10599299
- Larsen, R. (2006). Positive youth development, wilful adolescents, and mentoring. *Journal of Community Psychology*, 34(6), 677-689. doi: 10.1002/jcop.20123
- Lee., O., & Martinek, T. (2013). Understanding the transfer of values-based youth sport program goals from a bioecological perspective. *Quest*, 65(3), 300-312. doi: 10.1080/00336297.2013.791871
- Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth*. Thousand Oaks CA: SAGE.
- 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. doi: 10.1002/yl.14
- Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S.,... 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. doi: 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, 1107-1114. doi: 10.1016/j.adolescence.2011.08.001

- Lubans, D. R., Morgan, P. J., Cliff, D. P., Barnett, L. M., & Okely, A. D. (2010). Fundamental movement skills in children and adolescents: Review of associated health benefits. *Sports Medicine*, 40(12), 1019-1035. doi: 10.2165/11536850-000000000-00000
- MacNamara, Á., & Collins, D. (2010). The role of psychological characteristics in managing the transition to university. *Psychology of Sport and Exercise*, 11(5), 353-362. doi: 10.1016/j.psychsport.2010.04.003
- Marsh, H. W., & Keiltman, S. (2003). School athletic participation: Mostly gain with little pain. *Journal of Sport and Exercise Psychology*, 25, 205-228.
- Maxcy, S. (2003). Pragmatic threads in mixed methods research in the social sciences: The search for multiple modes of inquiry and the end of the philosophy of formalism. In C. Teddlie, & A. Tashakkori (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 51-90). Thousand Islands, California: Sage.
- McBride, A. M., Pritzker, S., Daftary, D., & Tang, F. (2007). Youth service. *Journal of Community Practice*, 14(4), 71-89. doi: 10.1300/J125v14n04_05
- Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass.
- Papacharisis, V., Goudas, M., Danish, S. J., & Theodorakis, Y. (2005). The effectiveness of teaching a life skills program in a sport context. *Journal of Applied Sport Psychology*, 17(3), 247-254. doi:10.1080/10413200591010139
- Park, N. (2004). Character strengths and positive youth development. *The Annals of the American Academy of Political and Social Science*, 591(1), 40-54. doi: 10.1177/0002716203260079

- Perks, T. (2007). Does sport participation foster social capital? The contribution of sport to a lifestyle of community participation. *Sociology of Sport Journal*, 24, 378-401.
- Petitpas, A. J., Van Raalte, J. L., Cornelius, A. E., & Presbrey, J. (2004). A life skills development program for high school student-athletes. *The Journal of Primary Prevention*, 24(3), 325-334. doi: 10.1023/B:JOPP.0000018053.94080.f3
- 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. Retrieved from <http://forumfyi.org/content/preventing-problems-pr>
- Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology*, 52(2), 126-136. doi: 10.1037/0022-0167.52.2.126
- 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.
- Priest, R. F., Krause, J. V., & Beach, J. (1999). Four-year changes in college athletes' ethical value choices in sports situations. *Research Quarterly for Exercise and Sport*, 70(2), 170-178. doi: 10.1080/02701367.1999.10608034
- Puckett, M. B., & Black, J. K. (2005). *The young child: development from prebirth through age eight*, (4th ed.). Upper Saddle River, NJ: Pearson-Merrill Prentice Hall.
- Roth, J. L., & Brooks-Gunn, J. (2000). What do adolescents need for healthy development?: Implications for youth policy. *Society for Research in Child Development Social Policy Report*, 14(1), 3-19. doi: 10.1037/e640342011-002

- 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. doi: 10.1207/S1532480XADS0702_6
- Rudd, A., & Mondello, M. J. (2006). How do college coaches define character? A qualitative study of division 1A head coaches. *Journal of College & Character*, 7(3), 1-10. doi: 10.2202/1940-1639.1524
- Rutten, E. A., Stams, G. J. J. M., Biesta, G. J. J., Schuengel, C., Dirks, E., & Hoeksma, J. B. (2007). The contribution of organized youth sport to antisocial and prosocial behaviour in adolescent athletes. *Journal of Youth and Adolescence*, 36, 255-264. doi: 10.1007/s10964-006-9085-y
- Ryan, R. M., & Deci, E. L. (2000a). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry*, 11(4), 319-338. doi: 10.1207/s15327965pli1104_03
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. doi: 10.1037//0003-066X.55.1.68
- Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: An organismic-dialectic perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3-33). Rochester, NY: University of Rochester Press.
- Scales, P. C., Benson, P. L., Leffert, N., & Blyth, D. A. (2000). Contribution of Developmental Assets to the Prediction of Thriving Among Adolescents. *Applied Developmental Science*, 4(1), 27-46. doi: 10.1207/S1532480XADS0401_3

- Shaffer, D. R., Kipp, K., Wood, E., & Willoughby, T. (2010). *Developmental psychology: Childhood and adolescence* (3rd Canadian ed.). Toronto, ON: Nelson Education.
- Slutzsky, C. B., & Simpkins, S. D. (2009). The link between children's sport participation and self-esteem: Exploring the mediating role of sport self-concept. *Psychology of Sport and Exercise*, 10(3), 381-389. doi: 10.1016/j.psychsport.2008.09.006
- Smith, K. A., Holmes, K., Haski-Leventhal, D., Cnaan, R. A., Handy, F., & Brudney, J. L. (2010). Motivations and benefits of student volunteering: Comparing regular, occasional, and non-volunteers in five countries. *Canadian Journal of Nonprofit and Social Economy Research*, 1(1), 56-81.
- Smoll, F. L., & Smith, R. E. (2006). Enhancing coach-athlete relationships: Cognitive-behavioral principles and procedures. In J. Dosil (Ed.), *The sport psychologist's handbook: A guide for sport-specific performance enhancement* (pp. 19-38). West Sussex, England: Wiley.
- Sparkes, A. (1992). The paradigms debate: An extended review and a celebration of difference. In A. Sparkes (Ed.), *Research in physical education and sport: Exploring alternative visions* (pp. 9-60). London: Falmer.
- Sport Philanthropy Project. (2007). Sports philanthropy project helps teams and athletes partner with community groups to promote health and well-being. Report to Robert Wood Johnson Foundation.
- Spreitzer, E. (1994). Does participation in interscholastic athletics affect adult development? A longitudinal analysis of an 18-24 age cohort. *Youth Society*, 25(3), 368-387. doi: 10.1177/0044118X94025003004
- Statistics Canada. (2009). *Postsecondary enrollment and graduation* (Statistics Canada Catalogue No. 81-599-X — Issue No. 003). Ottawa, Ontario.

Statistics Canada. (2010). *Making father "count"* (Statistics Canada Catalogue No. 11-008-X).

Ottawa, Ontario.

Statistics Canada. (2013a). *Fertility: Overview, 2009 to 2011* (Statistics Canada Catalogue No.

91-209-X). Ottawa, Ontario.

Statistics Canada. (2013b). *Marital status: Overview, 2011* (Statistics Canada Catalogue No. 91-

209-X). Ottawa, Ontario.

Strachan, L., Côté, J., & Deakin, J. (2011). A new view: Exploring positive youth development in elite sport contexts. *Qualitative Research in Sport, Exercise and Health*, 3(1), 9-32.

doi: 10.1080/19398441.2010.541483

Teddlie, C., & Tashakkori, A. (2009). The fundamentals of mixed methods research. In C.

Teddlie, & A. Tashakkori (Eds.), *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioural science* (pp. 19-39). Thousand Oaks, CA: Sage.

Vella, S. A., Oades, L. G., & Crowe, T. P. (2013). The relationship between coach leadership, the coach-athletes relationship, team success, and the positive developmental experiences of adolescent soccer players. *Physical Education and Sport Pedagogy*, 18(5), 549-561.

doi: 10.1080/17408989.2012.726976

Weiss, M. R., & Fretwell, S. D. (2005). The parent-coach/child-athlete relationship in youth

sport: Cordial, contentious, or conundrum?. *Research Quarterly for Exercise and Sport*, 76(3), 286-305. doi: 10.1080/02701367.2005.10599300

Wright, A., & Côté, J. (2003). A retrospective analysis of leadership development through sport.

The Sport Psychologist, 17, 268-291.

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. doi: 10.1080/15427600802274001

Appendices

Appendix A

Approval Letter – University of Ottawa

File Number: H05-14-04

Date (mm/dd/yyyy): 07/07/2014



Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

Ethics Approval Notice**Health Sciences and Science REB****Principal Investigator / Supervisor / Co-investigator(s) / Student(s)**

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Martin	Camiré	Health Sciences / Human Kinetics	Supervisor
Colin J.	Deal	Health Sciences / Human Kinetics	Student Researcher

File Number: H05-14-04**Type of Project:** MA Research Paper**Title:** Positive Youth Development's 6th C: The Nature of Contribution in University Athletes

Approval Date (mm/dd/yyyy)	Expiry Date (mm/dd/yyyy)	Approval Type
05/30/2014	05/29/2015	Ia

(Ia: Approval, Ib: Approval for initial stage only)

Special Conditions / Comments:As of May 30th, 2014 → Recruitment and data collection may only begin at the University of Ottawa.As of July 7th, 2014 → Recruitment and data collection may now also begin at Acadia University.

File Number: H05-14-04

Date (mm/dd/yyyy): 07/07/2014



Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement and other applicable laws and regulations in Ontario, has examined and approved the application for ethical approval for the above named research project as of the Ethics Approval Date indicated for the period above and subject to the conditions listed the section above entitled "Special Conditions / Comments".

During the course of the study the protocol may not be modified without prior written approval from the REB except when necessary to remove participants from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the study (e.g. change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, information/consent documentation, and/or recruitment documentation, should be submitted to this office for approval using the "Modification to research project" form available at: <http://www.research.uottawa.ca/ethics/forms.html>.

Please submit an annual status report to the Ethics Office four weeks before the above-referenced expiry date to either close the file or request a renewal of ethics approval. This document can be found at: <http://www.research.uottawa.ca/ethics/forms.html>.

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5387 or by e-mail at: ethics@uOttawa.ca.

Signature:

Kim Thompson

Protocol Officer for Ethics in Research
For Daniel Lagarec, Chair of the Health Sciences and Sciences REB

Appendix B

Approval Letter – Acadia University

Research Ethics Board

Acadia University Box 181
Wolfville, Nova Scotia
Canada B4P 2R6
Email: smaitzen@acadiau.ca
Telephone: (902) 585-1407
<http://reb.acadiau.ca>



5 July 2014

Mr. Colin J. Deal
School of Human Kinetics
University of Ottawa

Re: "Positive Youth Development's 6th C: The Nature of Contribution in University Athletes"
(REB 14-34, as revised 2 July 2014)

Dear Mr. Deal,

At its meeting of 3 July 2014, the Acadia University Research Ethics Board granted ethics approval to your above-referenced, revised research proposal. In the judgment of Dr. Anna Robbins, a Representative of Faculty on the Board, the proposed research poses no more than minimal risk of harm to research subjects. Accordingly, your application received delegated ethics review and approval by Dr. Robbins and subsequent ratification by the entire Board, as provided for in Articles 2.9 and 6.12 of the Tri-Council Policy Statement (TCPS2) governing research on human subjects.

This approval is for a term of one year. If your project will not conclude before 5 July 2015, please contact me at that time for an extension of this term of approval. Please inform me of any significant changes to the research before they are implemented. Please also note this additional requirement: In accordance with Article 6.14 of TCPS2, the Board must be promptly notified when each project concludes; an email notification sent to me will suffice.

The Board extends its best wishes for a successful project.

Sincerely,

Stephen Maitzen, Ph.D.
Chair, Research Ethics Board

cc: Division of Research and Graduate Studies

Appendix C

Positive Development in Sport Survey

Dear Varsity Athlete,

Thank you for your interest. In order to be eligible to complete the survey, you must satisfy the following criteria: (1) I am currently eligible for athletic competition under CIS regulations. (2) I am on the official roster of a varsity sport team at my university. (3) I am registered as a full-time student (or equivalent) as defined by my university.

Do you meet all of the above criteria and wish to continue?

- ☐ Yes
- ☐ No

Section 1 - Demographic Information

What is your age (years)?

How would you identify your gender?

- ☐ Female
- ☐ Male
- ☐ Transgender - female to male
- ☐ Transgender - male to female
- ☐ Other, please specify... _____

Please identify the province/territory you are from

- | | |
|--|---|
| ☐ British Columbia | ☐ Prince Edward Island |
| ☐ Alberta | ☐ Nova Scotia |
| ☐ Saskatchewan | ☐ Yukon |
| ☐ Manitoba | ☐ Northwest Territories |
| ☐ Ontario | ☐ Nunavut |
| ☐ Quebec | ☐ Newfoundland and Labrador |
| ☐ New Brunswick | |

What is the population of the town/city where you come from?

- | | |
|-------------------------------------|---|
| ☐ 1-1000 | ☐ 50 001-100 000 |
| ☐ 1001-5000 | ☐ 100 001-500 000 |
| ☐ 5001-10 000 | ☐ 500 001-1 000 000 |
| ☐ 10 001-20 000 | ☐ 1 000 000+ |
| ☐ 20 001-50 000 | |

Please identify the province/territory where your university is located

- | | |
|--|------------------------------------|
| ☐ British Columbia | ☐ Saskatchewan |
| ☐ Alberta | ☐ Manitoba |

- ☐ Ontario
- ☐ Quebec
- ☐ New Brunswick
- ☐ Prince Edward Island
- ☐ Nova Scotia

- ☐ Yukon
- ☐ Northwest Territories
- ☐ Nunavut
- ☐ Newfoundland and Labrador

Section 1 - Demographic Information

Please identify the faculty in which your program of study is a part of and specify your major

- | | |
|---|--|
| ☐ Faculty of Arts | ☐ Faculty of Medicine |
| ☐ _____ | ☐ _____ |
| ☐ Faculty of Science | ☐ Faculty of Social Sciences |
| ☐ _____ | ☐ _____ |
| ☐ Faculty of Professional Studies | ☐ Faculty of Civil Law |
| ☐ _____ | ☐ _____ |
| ☐ Telfer School of Management | ☐ Faculty of Common Law |
| ☐ _____ | ☐ _____ |
| ☐ Faculty of Education | ☐ Faculty of Graduate and Postdoctoral Studies _____ |
| ☐ _____ | ☐ Faculty of Pure & Applied Science |
| ☐ Faculty of Engineering | ☐ _____ |
| ☐ _____ | ☐ Faculty of Theology |
| ☐ Faculty of Health Sciences | ☐ _____ |
| ☐ _____ | |

Year of study

- | | |
|---|--|
| ☐ Undergraduate, 1st year | ☐ Undergraduate, 5th+ year |
| ☐ Undergraduate, 2nd year | ☐ Masters |
| ☐ Undergraduate, 3rd year | ☐ Doctorate |
| ☐ Undergraduate, 4th year | ☐ Professional programs |

What sport(s) do you compete in as a varsity athlete? NOTE: the sport must be varsity status at your university, not a competitive club (check all that apply)

- | | |
|--|--|
| ☐ Basketball | ☐ Soccer |
| ☐ Cross Country | ☐ Swimming |
| ☐ Curling | ☐ Track & Field |
| ☐ Field Hockey | ☐ Volleyball |
| ☐ Ice Hockey | ☐ Football |
| ☐ Rugby | |

Please indicate your current year of CIS eligibility

- ☐ 1st year
- ☐ 2nd year
- ☐ 3rd year
- ☐ 4th year
- ☐ 5th year

On average, how many hours per week you do you spend on the following

Activities related to your varsity sport during the COMPETITIVE season

(includes competition, practice, team & individual workouts, travel, etc.)

Activities related to your varsity sport during the OFF season (includes

practice, team & individual workouts, etc.)

Activities related to your program of study (includes attending

lecture/lab/tutorials, reading, assignments/projects, etc.)

Leisure activities (includes reading for pleasure, spending time with

friends, going out, etc.)

Section 2 - Competence

Please rate the extent to which you believe you are competent in the following areas as a university varsity athlete

	Not at all competent						Extremely competent
Technical skills (e.g., shooting, passing, blocking, etc.)	☐		☐	☐	☐	☐	☐
Tactical skills (e.g., decision making, strategy, reading the play, etc.)	☐		☐	☐	☐	☐	☐
Physical skills (e.g., strength, speed, agility, endurance, etc.)	☐		☐	☐	☐	☐	☐

Section 3 - Confidence

Please rate the extent to which you agree with the following statements in your role as a university varsity athlete

	Strongly disagree						Strongly agree
I generally feel self-confident	☐		☐	☐	☐	☐	☐
I'm generally confident I can meet the challenge	☐		☐	☐	☐	☐	☐
I'm generally confident about performing well	☐		☐	☐	☐	☐	☐
I'm confident because I generally picture myself reaching my goal mentally	☐		☐	☐	☐	☐	☐
I'm generally confident of coming through under pressure	☐		☐	☐	☐	☐	☐

Section 4 - Connection

Please rate the extent to which you agree with the following statements in your role as a university varsity athlete

	Strongly disagree						Strongly agree
I feel close to my coach	☐		☐	☐	☐	☐	☐
I get a lot of encouragement at my school	☐		☐	☐	☐	☐	☐

[illegible]

Section 5 - Character

Please rate the extent to which you engaged in the following in your last season as an athlete

[illegible]

[illegible]

	Strongly disagree						Strongly agree
When I see someone being taken advantage of, I want to help them	☐		☐	☐	☐	☐	☐
It bothers me when bad things happen to any person	☐		☐	☐	☐	☐	☐
I feel sorry for other people who don't have what I have	☐		☐	☐	☐	☐	☐
When I see someone being picked on, I feel sorry for them	☐		☐	☐	☐	☐	☐
It makes me sad to see a person that doesn't have friends	☐		☐	☐	☐	☐	☐
When I see another person who is hurt or upset, I feel sorry for them	☐		☐	☐	☐	☐	☐

	Never						Everyday
I take part in activities that increase my well-being (e.g., spending time with friends, doing hobbies, etc.)	☐		☐	☐	☐	☐	☐
I help relatives with chores or tasks around the house	☐		☐	☐	☐	☐	☐
I volunteer my time at community organizations/events	☐		☐	☐	☐	☐	☐
I participate in large social activism movements (e.g., LGBT rights, environmental causes, etc.)	☐		☐	☐	☐	☐	☐
I keep up to date on provincial or federal politics	☐		☐	☐	☐	☐	☐
I participate in activities in which I learn new things or improve upon things I have already learned (e.g., dance lessons, guest lectures, etc.)	☐		☐	☐	☐	☐	☐

Section 8 - Development Outside of Sport

Questions in this section are to be answered in reference to your GENERAL life experiences (not specifically related to sport)

Please select the response which best describes you based on the following comparisons of two different people

	I am very much like person A	I am somewhat like person A	I am somewhat like person B	I am very much like person B
Person A has have a lot of friends BUT person B doesn't have very many friends	☐	☐	☐	☐
Person A does very well in his/her classwork BUT person B doesn't do so well in his/her class work	☐	☐	☐	☐
Person A is happy with himself/herself most of the time BUT person B is often not happy with himself/herself	☐	☐	☐	☐
Person A is happy with his/her height and weight BUT person B is not happy with his/her height and weight	☐	☐	☐	☐
Person A rarely does things he/she knows he/she shouldn't BUT person B does things he/she knows he/she shouldn't	☐	☐	☐	☐
Person A feel he/she is better than others his/her age at sports BUT person B doesn't feel he/she can play as well	☐	☐	☐	☐

Please rate the extent to which you agree with the following statement

	Strongly disagree					Strongly agree
All in all, I am glad I am me	☐		☐	☐	☐	☐

Please rate the extent to which the following statements describe you

	Not well					Very well
When I see someone being taken advantage of, I want to help them	☐		☐	☐	☐	☐
When I see someone being picked on, I feel sorry for them	☐		☐	☐	☐	☐
When I see another person who is hurt or upset, I feel sorry for	☐		☐	☐	☐	☐

them

Please rate the extent to which you agree with the following statements

	Strongly disagree				Strongly agree
I get a lot of encouragement at my school	☐		☐	☐	☐
In my family, I feel useful and important	☐		☐	☐	☐
Community members in my university's town/city make me feel important	☐		☐	☐	☐
I feel my friends are good friends	☐		☐	☐	☐

Please rate the extent to which the following are important in your life

	Not important				Extremely important
Helping to make the world a better place to live in	☐		☐	☐	☐
Accepting responsibility for my actions when I make a mistake or get in trouble	☐		☐	☐	☐

Please rate the extent to which someone that who knows you well would rate you on the following

	Not at all like me				Very much like me
Enjoys being with people who are of a different race	☐		☐	☐	☐

In order to better understand the contributions of university varsity athletes, we will be conducting follow-up interviews

Please note: Only a few participants will be interviewed and only those selected to take part in a follow-up will be contacted

Would you be interested in participating in an interview?

Please note: Interviews will be conducted in-person and will occur at a time and place that is most convenient to the participants

☐ Yes

☐ No

Please provide your contact information that we may use to schedule an interview in the event that you are selected

Name

E-mail address

Phone number (optional)

Appendix D

PYD – Very Short Form

The following pairs of sentences are talking about two kinds of kids. We'd like you to decide whether you are more like the kid on the left side, or you are more like the kid on the right side. Then we would like you to decide whether that is sort of true for you or really true for you and mark your answer.

Really true for me [4]	Sort of true for me [3]				Sort of true for me [2]	Really true for me [1]
		Some kids have <i>a lot</i> of friends.	BUT	Other kids <i>don't</i> have very many friends.		
		Some kids are <i>happy</i> with their height and weight.	BUT	Some kids are <i>not happy</i> with their height and weight.		
		Some kids are <i>happy</i> with themselves most of the time.	BUT	Other kids are often <i>not happy</i> with themselves.		
		Some kids feel that they are <i>better</i> than others their age at sports.	BUT	Other kids <i>don't</i> feel they can play as well.		
		Some kids do <i>very well</i> at their class work.	BUT	Other kids <i>don't</i> do very well at their class work.		
ITEM REVERSE CODED		Some kids do things they know they <i>shouldn't</i> do.	BUT	Other kids <i>hardly ever</i> do things they know they shouldn't do.		

How much do you agree or disagree with the following?

	Strongly agree [5]	Agree [4]	Not sure [3]	Disagree [2]	Strongly disagree [1]
All in all, I am glad I am me.					

How important is each of the following to you in your life?

	Not important [1]	Somewhat important [2]	Not sure [3]	Quite important [4]	Extremely important [5]
Helping to make the world a better place to live in.					
Accepting responsibility for my actions when I make a mistake or get in trouble.					

Think about the people who know you well. How do you think they would rate you on each of these?

	Not at all	A little	Somewhat like	Quite like	Very much
--	------------	----------	---------------	------------	-----------

	like me [1]	like me [2]	me [3]	me [4]	like me [5]
Enjoying being with people who are of a different race than I am.					

How well do each of these statements describe you?

	Not well [1]	[2]	[3]	[4]	Very well [5]
When I see someone being taken advantage of, I want to help them.					
When I see someone being picked on, I feel sorry for them.					
When I see another person who is hurt or upset, I feel sorry for them.					

How much do you agree or disagree with the following?

	Strongly agree [5]	Agree [4]	Not sure [3]	Disagree [2]	Strongly disagree [1]
I get a lot of encouragement at my school.					
In my family, I feel useful and important.					
Adults in my town or city listen to what I have to say.					

How true is each of these statements for you?

	Always true [5]	Usually true [4]	Sometimes true [3]	Seldom true [2]	Almost never or never true [1]
I feel my friends are good friends.					

Appendix E

Interview consent form



uOttawa

Université d'Ottawa
Faculté des sciences
de la santé

Cabinet du doyen

University of Ottawa
Faculty of Health
Sciences

Office of the Dean

Principal Investigator:

Colin J. Deal MA Student
School of Human Kinetics, University of Ottawa
tel: 613-562-5800 (extension) e: @uottawa.ca

Supervisor:

Martin Camiré Ph.D.
School of Human Kinetics, University of Ottawa
tel: 613-562-5800 (extension) e: @uottawa.ca

The purpose of the current study entitled: "Positive Youth Development's 6th C: The Nature of Contribution in University Athletes," is to explore the positive development and contributions of Canadian university athletes. The study is being conducted as a part of Mr. Deal's master's thesis under the supervision of Dr. Camiré. The study is funded by a Joseph-Armand Bombardier Canada Graduate Scholarship – Masters.

My participation consists of taking part in one (1) individual interview. The interview (lasting approximately 60 minutes) will be audio-recorded and focuses on (a) how and in what contexts I contribute, (b) why I contribute, (c) what facilitates my contributions, and (d) what are the barriers that may hinder my contributions. My participation can help better our understanding of (a) university athletes' contributions, and (b) identify factors that promote and hinder university athletes' contributions.

I understand that the contents related to my participation in this study will only be used by Colin J. Deal and Dr. Martin Camiré. My participation in this study is voluntary and I am free to withdraw from the study at any time or refuse to answer questions without consequences. If I choose to withdraw from the study, the data collected from my interview until the time of withdrawal will be destroyed and will not be used. Withdrawal of data will only be possible until submission of Colin Deal's thesis, approximately June/July 2015. I acknowledge that I am receiving no compensation for participating in this study. There are no foreseeable risks associated with participation in this study. By agreeing to participate in this study, I am not waiving my right to legal recourse in the event of research related harm. I have received assurance from the researchers that the information I will share will remain strictly confidential. Anonymity will be assured through the use of a code number on all documentation, including original transcripts. Audio recordings of interviews and other data collected will be stored at the University of Ottawa, in a locked filing cabinet in the researcher's office and will be kept for five (5) years after which they will be destroyed. The transcription of my interview will be returned to me by email in order to verify the accuracy of my responses. I will have two weeks to make revisions/clarifications to my transcripts. The transcription will not be protected by a password and I recognize the associated risks. Results of

☎ 613-562-5432
📠 613-562-5437

451 Smyth (3028)
Ottawa ON K1H 8M5 Canada
www.uOttawa.ca



uOttawa

Université d'Ottawa
Faculté des sciences
de la santé

Cabinet du doyen

University of Ottawa
Faculty of Health
Sciences

Office of the Dean

this study will be published in academic journals and presented at conferences. Any quotations will be identified by code (e.g., A1) to ensure anonymity of participants. If I have any questions about the study I may contact the researcher at the contact information provided above.

If I have any questions with regards to the ethical conduct of this research, I may contact (1) the Office of Research Ethics and Integrity, University of Ottawa, Tabaret Hall, 550 Cumberland Street, Room 154, Ottawa, ON K1N 6N5, tel.: 613-562-5387, email: ethics@uottawa.ca, or (2) the Research Ethics Board at Acadia University, 214 Horton Hall, Wolfville, NS B4P 2R6, tel.: _____, email: _____@acadiau.ca.

There are two copies of the consent form, one of which I may keep. I, _____, agree to participate in the research conducted by Colin J. Deal (Principal Investigator) from the University of Ottawa's School of Human Kinetics.

Participant: _____ Date: _____

Researcher: _____ Date: _____

Appendix F

Interview Guide

INTERVIEW GUIDE

- Provide informed consent form & set up audio recorder

“Thank you for meeting with me today and before we start the interview, I just want to remind you that you are not being evaluated and your participation will have no effect on your academic, sport, or social life. 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. All data will remain confidential and securely stored on a password protected computer, in a locked office. Only myself and my supervisor will have access to the recordings. Any identifying information will be removed from transcripts and names will be replaced with codes or pseudonyms. If you have any questions before we start, I’m happy to answer them”

- 1) Introduction - I just have a few questions to better understand the events that brought you to where you are today.

- a. Can you provide me with details on your experiences participating in sport during the time you were in primary and secondary school?
 - i. What do you believe you learned/got out of those experiences?
- b. Tell me about your experiences as a university varsity student-athlete?
 - i. What are your goals as a student and athlete?
 - ii. How are you managing your dual role as student and athlete?

In this next section, I’m going to ask you questions to better understand your experiences related to making contributions...

- 2) Contexts & Motivation

- a. What does ‘making contributions’ mean to you?
- b. How did you start contributing?
 - i. School project, community outreach from sport team, family experience, etc.
- c. Do you have examples of initiatives you were a part of in the past that allowed you to contribute?
 - i. How important was it to you?
 - ii. What drove/motivated you to contribute in this way? Why did you contribute this way?
- d. Describe how you contribute now as a varsity student-athlete?
 - i. What drove/motivated you to contribute in this way? Why did you contribute this way?

ii. SELF, FAMILY, COMMUNITY, CIVIL SOCIETY

1. Probe into contexts (↑) that haven't been mentioned
2. Does contributing to the self should count or be viewed as a 'contribution'? Why/why not?

3) Facilitators

- a. Are there contexts (out of the 4 in the model) in which it is easier to contribute? Why?
- b. In which context do you prefer to contribute?
- c. Are there people or things that make it easier for you to contribute?
- d. Are certain types of contributions more rewarding than others?

4) Barriers

- a. What are some of the things that make it hard for you to contribute?
- b. Does anybody make it harder for you to contribute? If so who and how?

5) Student-athlete experience

- a. Do you think that your experience as a student-athlete has given you different/more opportunities to give back than your non athlete peer?
 - i. How so?
- b. Is there more pressure for you to be contributing as a result of your role?

6) Future Outlook

- a. Do you intend on contributing in the future?
- b. How do you see yourself contributing when you graduate from university and become an independent adult?
- c. Do you have any recommendations on how we could make it easier for a greater number of university athletes to contribute?
- d. Do you have any recommendations on how we could make it easier for a greater number of Canadians to contribute?

7) Final Statement

- a. 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. If there are any questions I haven't asked you that you feel are important concepts that you want to share, the floor is yours.
- b. If you can make a final statement, a summary of your thoughts as it relates to contribution.