THE ROLE OF ENJOYMENT, MOTIVATIONAL CLIMATE, AND COACH TRAINING IN PROMOTING THE POSITIVE DEVELOPMENT OF YOUNG ATHLETES

by

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Abstract

Structured sports are the most common activity in which youth participate. Research links sport participation to positive and negatives outcomes; however few studies have investigated the processes that affect positive and negative experiences. Considering that enjoyment, motivational climate, and coach behaviors are factors that are known to affect participation, it is of interest to determine if these factors can contribute to increased positive experiences for youth sport participants.

Study 1 investigated the psychometric properties of the Youth Experience Survey 2.0 with a group of athletes. This instrument was originally designed to investigate experiences across a range of structured activities; however its psychometric properties had yet to be reported. Results of confirmatory factor analyses did not show strong psychometric support for the instrument. Follow-up exploratory analyses resulted in the instrument being modified and renamed the Youth Experience Survey for Sport. The revised scaled showed improved psychometric properties compared to the original instrument which makes it a preferred tool for investigation of personal development of youth sport participants.

Study 2 explored the role of enjoyment and motivational climate on the personal development of team sport athletes. Stepwise multiple regression analyses were used to examine the relationships. Results demonstrated that positive experiences in sport were most strongly predicted by affiliation with peers, self-referenced competency, effort expenditure, and a task climate. Negative experiences were most strongly predicted by an ego climate and other-referenced competency.

Study 3 examined differences on personal development and motivational climate for athletes in programs where coaches received positive youth development training and athletes in programs that did not provide training to coaches. Results showed that personal and social skills were higher for athletes of trained coaches. Cognitive skills and task climate did not reach significance but can be considered as marginal effects.

Results from these studies provide researchers with an instrument to measure positive youth development in sport. In addition, results demonstrate that enjoyment, motivational climate, and coach training are important factors in promoting personal development. Youth sport program administrators that wish to incorporate positive development in their programs should consider these findings.

Co-Authorship

Dr. Jean Côté and Dr. Janice Deakin are co-authors on the manuscripts in chapters 2, 3,

and 4 while Dr. Mark Eys is a co-author on the manuscripts presented in chapters 2 and 3.

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Chapter 2

Chapter 1: General Introduction

The majority of Canadian youth participate in structured physical activity. Guèvremont, Findlay, and Kohen (2008) report that 76.4% of Canadian youth between the ages 6 and 17 years participated in organized sports in 2001-2002. While most often constructed as a good thing, participation in sport is linked to both positive and negative outcomes in youth. Positive outcomes on physical (Côté & Hay, 2002), intellectual (Eccles & Barber, 1999), psychological (Hansen, Larson, & Dworkin, 2003), and social development (Wright & Côté, 2003) are noted as are negative outcomes on physical (Anshel, 2004), psychological (Gould, Udry, Tuffey, & Loehr, 1996), and social development (Eccles, Barber, Stone, & Hunt, 2003). Research by Eccles and Barber (1999) found that adolescent sport participants report higher levels of school enjoyment and grade point average combined with higher reports of alcohol consumption compared to non-sport participants. Alternatively, Lemyre, Roberts, and Ommundsen, (2002) found a positive relationship between participation in sport and decreased moral reasoning. These differing results illustrate that involvement in sports can result in vastly different effects on youth development. Fraser-Thomas, Côté, and Deakin (2005) suggest that when properly structured, organized sport programs are an ideal environment to teach youth positive outcomes. However, there is nothing special about sports per se that result in increased positive development (Danish, Forneris, Hodge, & Heke, 2004); simply participating in organized sports is not sufficient to develop positively, rather it provides a setting that has the potential to foster positive outcomes.

Recent application of positive psychology to the sport domain (positive youth development through sport) provides researchers with a framework to evaluate the

personal development of sport participants. Given that development is a complex process that occurs through the constant interaction between the person and his/her environment, the theoretical framework of developmental systems theory (Ford & Lerner, 1992; Lerner, 2002) is particularly useful for understanding the processes of personal development in youth.

Developmental Systems Theory

Developmental systems theory (Ford & Lerner, 1992) suggests a complex interaction between the individual and his/her environment that evolves over time. Both individual level variables (i.e. motivation) and environmental variables (i.e. settings) interact to create growth experiences for individuals that are carried throughout the developmental process. Proponents of developmental systems theory argue that development is based on an individual's *relative plasticity*. This concept suggests that each person has the ability to change and that ones development is a function of each person's interaction with its environment. An individual's development will be the product of an individual adapting to the different environments encountered.

Six guiding principles are proposed in developmental systems theory. The first is that the individual receives information from multiple levels, namely in terms of biological, psychological, and behavioral processes. This implies independence of all the systems that contribute to an individuals functioning. The second principle is that these independent systems work together and interact to further development over time. The third principle outlines how biological and environmental constraints exist within each individual. This means that an individual's developmental potentials are limited by their genetic makeup and the settings to which they are exposed. The fourth principle suggests

that all individuals differ in their developmental paths. More specifically, there is no

specific path that one must follow, but instead there is a wide range of ways through

which individuals can develop. The fifth principle is that individuals self-organize and

construct their development through their interaction with each environment. The

assumption of self-organization is important since it allows the person to grow as he/she

faces new situations. Finally, the sixth principle is that the person is constantly working

towards a coherent interaction between the self and their environment. This reiterates the

complexity of the person-environment relationship and demonstrates that development

evolves over time. In sum, the developmental systems theory proposes mechanisms for

understanding the complex person-environment relationship. Since sport is a context in

which many youth take part (Guèvremont et al., 2008), it is important to consider how

individual and environmental factors affect the positive development of youth in this

domain. Specifically, sport is a setting where individuals are part of a team or training

group which implies that there may be something unique about the environment that

affects youth development. Therefore, combining individual factors with environmental

factors will provide a greater understanding of the impact of sport participation on youth

development.

Positive youth developmental through sport

Positive youth development through sport is a framework that has received

increased amounts of research attention over the past 20 years. Advocates of positive

youth development argue that all children have the potential to develop in a positive

manner and that youth should be considered resources to develop rather than burdens to

society (Damon, 2004). More specifically, Damon proposes that "the positive youth

development approach aims at understanding, educating, and engaging children in productive activities rather than at correcting, curing, or treating them for maladaptive tendencies or so-called disabilities" (p.15). As outlined by Larson (2000), structured leisure activities such as sports are productive since they engage the child over time, are high on intrinsic motivation, and are high on concentration. Activities with these three characteristics promote the development of initiative, a core quality which prepares youth to deal with the challenges of adulthood.

Petitpas, Cornelius, Van Raalte, and Jones (2005) proposed a framework for developing programs that promote positive psychosocial development in youth. They suggest that positive development is enhanced when (i) the child participates in the activity within an appropriate environment, (ii) the child is surrounded by caring adults, (iii) the child acquires skills related to dealing with life challenges, and (iv) the program grows from evaluation and research findings. These conditions are consistent with tenets of developmental systems theory (Ford & Lerner, 1992) and imply that positive development through sport results from on-going interactions between the person and the environment.

Although the conditions outlined by Petitpas et al. (2005) provide a description of settings that will favor positive development, best practices for attaining such goals are unknown. Lerner (2002) suggests that attention should be given to programs that are already well-established. Investing resources into programs that are known to be sustainable increases the long term impact on youth. Lerner argues that new programs are often developed from grant money and that once financial resources subside, so do

program operations. This suggests that rather than developing new programs, existing programs should be revised to include aspects of personal development.

Given that little is known about which factors promote positive development in sport, research on sport participation can serve as a starting point. In their review of why youth participate in sports, Weiss and Williams (2004) identify categories of physical skills, social acceptance and approval, and enjoyment as primary factors. Physical skills relate to issues of performance and excelling in sport. Enjoyment relates to individual factors of having fun and releasing energy while social acceptance/approval consists of individual factors such as making new friends and environmental issues of team atmosphere. Since sport participation occurs in a context where individuals train together, it is possible to investigate development from individual and environmental perspectives. More specifically, identifying how varying levels of enjoyment (individual factor), motivational climate (perceived environment), and coach training (environmental factor) affect personal development would be of interest to gain a holistic understanding of how different factors affect personal development in sport participants.

One issue related to the investigation of positive development through sport is the lack of a psychometrically valid instrument for use in the sport domain (Gould & Carson, 2008; Holt & Jones, 2007). Recent studies (Hansen & Larson, 2007; Larson, Hansen, & Moneta, 2006; Strachan, Côté, & Deakin, 2009) have relied on the Youth Experience Survey 2.0 (YES; Hansen & Larson, 2005); an instrument originally developed for use across a range of structured activities. There is currently a lack of psychometric evidence for this instrument. However, it is believed that once validated in sports the YES 2.0 may be a useful instrument to measure positive development in youth sport.

Based on the information presented above, the line of research presented in this dissertation aims to increase our understanding of the processes that lead to increased positive development in youth sport participants. Prior to investigating factors of positive development, a psychometrically valid instrument will be presented. Subsequent studies will investigate how individual and environmental factors relate to the positive development of youth sport participants.

Study 1: Instrumentation

Study 1 modifies an existing instrument to measure positive youth development in the sport domain. Research on positive youth development through sport has relied on instruments created for the study of experiences within a range of structured activities (Strachan et al., 2009). Given the increased interest in youth development within the sport domain (Holt, 2007), combined with the lack of a valid instrument to assess such issues (Gould & Carson, 2008; Holt & Jones, 2007), the development of this instrument is an important contribution to further our understanding of how sport affects the positive and negative development of youth. The validation of this instrument will provide subsequent research with an instrument designed for the study of positive development in the sport domain.

Study 2: Individual Factors

Research on sport participation has identified a number of factors important for prolonged engagement in sport. The constructs of enjoyment and motivational climate are both consistently identified as reasons that affect participation (Weiss & Williams, 2004). However, the impact of these constructs on the personal development of youth is currently unknown. Therefore, the purpose of this second study is to examine how

enjoyment and motivational climate relate to the personal development of youth sport participants. Personal development will be measured using the instrument developed in the first study while enjoyment will be measured by the Sources of Enjoyment in Youth Sport Questionnaire (Wiersma, 2001), and motivational climate by the Motivational Climate Scale for Youth Sport (Smith, Cumming, & Smoll, 2008). This study will help understand whether an individual's perceptions of their enjoyment and motivational climate affect personal development.

<div align="center">Study 3: Environmental Factors</div>

The coach created environment has the potential to impact the development of youth (Cushion, Armour, & Jones, 2003). To this effect, the purpose of study 3 is to determine if program initiated coach training affects the personal development of athletes within the sport context. Reports of athlete's positive development will be assessed with the instrument from study 1 and will be compared in programs where training is offered to coaches against programs that do not offer training. Results of this study will help understand how coach created environments impact the personal development of athletes.

Since a majority of youth participate in organized sport (Guèvremont et al., 2008), it is necessary to understand the processes that lead to positive and negative development. Findings from this dissertation will achieve multiple goals. First, it will present an instrument capable of measuring positive youth development in sport participants. Second, it will establish relationships between enjoyment, motivational climate and personal development. Finally, it will investigate the potential of coach training as a contributor to positive personal development in well-established youth sport programs.

Chapter 2: Psychometric Properties of the Youth Experience Survey with Young Athletes

Abstract

The topic of positive youth development through sport has received much research attention in recent years. However, a specific tool that measures this construct has yet to be fully developed. The purpose of this study was to test the factor structure of the Youth Experience Survey 2.0 (Hansen & Larson, 2005) in a sample of 637 youth sport participants. This tool was originally developed to assess experiences across any type of structured activity. Results of the analyses did not provide strong support for any of the models tested. Subsequent analyses were performed to investigate possible alternative structures. These analyses identified areas where modifications could be made to the scale, which resulted in a revised version of the questionnaire that contained 37-items. The Youth Experience Survey for Sport (YES-S) is proposed as a tool that can measure positive and negative developmental experiences occurring in the youth sport domain.

Participation in sport is often seen as a vehicle toward the development of physical and psychosocial skills in children of all ages. Evidence exists to suggest that sport has the capacity to influence youth in both positive and negative ways (Fraser-Thomas, Côté, & Deakin, 2005). Whether participation results in positive or negative outcomes depends on the complex interaction of any number of factors including participant and program characteristics. The development of appropriate psychometric tools to assist in the assessment of the influence of sport participation on positive youth development has lagged far behind the proliferation of participatory programs available to youth today (Gould & Carson, 2008). A common feature of many programs includes both claims that their programs promote positive outcomes and an absence of any empirical evidence to substantiate the claim.

Many validated tools exist in sport psychology to measure a variety of constructs within the sport domain (Ostrow, 2002). However, a limited number of instruments focus on measurement in children and youth. Examples of tools which have been developed and validated for youth include the Task and Ego Orientation in Sport Questionnaire (TEOSQ; Duda, 1989), the Sources of Enjoyment in Youth Sport Questionnaire (SEYSQ; Wiersma, 2001), and the Sport Imagery Questionnaire for Children (SIQ-C; Hall, Munroe-Chandler, Fishburne, & Hall, 2009). These measures demonstrate that constructs pertaining to youth sport participation can be assessed with psychometrically valid instruments. However, there is a lack of psychometrically valid tools within the positive youth development in sport literature (Holt & Jones, 2007). The Youth Experience Survey (YES) 2.0 (Hansen & Larson, 2005) appears to be a promising

tool that, once validated, will augment our understanding of positive youth development through sport.

Recent work by Hansen and Larson (2005) targeted the measurement of youth experiences in structured activities with the development of the YES 2.0. The YES was originally designed to assess the experiences of youth participating in different structured activities that include performance and fine arts, academic clubs and organizations, community organizations, sports, service organizations, and faith-based groups. Although not developed for the assessment of participation in sport per se, the Hansen and Larson (2005) scale has recently been used exclusively with a sample of athletes (Strachan, Côté, & Deakin, 2009).

Initial item development of the YES (version 1.0; Hansen & Larson, 2002) was based on focus group research with 55 youth between the ages of 14-18 years. These focus groups provided information about how youth describe their learning experiences during different structured activities (Dworkin, Larson, & Hansen, 2003). In its fully developed form, the YES 1.0 contained a total of 89 questionnaire items. Further refinement of the scale resulted in the current version (YES 2.0) that contains 70-items assessing positive and negative experiences in structured activities in seven life domains. Specifically, positive experiences encompass six domains related to identity, initiative, basic skills, interpersonal relationships, teamwork and social skills, and adult networks. Each positive life domain is measured by subscales that are believed to represent these latent constructs. The seventh domain of negative experiences includes the five subscales of stress, negative influences, social exclusion, negative group dynamics, and inappropriate adult behavior.

Hansen and Larson (2005) conducted a confirmatory factor analysis on the YES

2.0 to determine which factor structure best represented the scale. They tested models for

the 6 positive life domains, the 5 negative subscales, 1 positive latent construct (six

positive domains together), and 1 negative life domain (five negative subscales together).

Comparison between the different models demonstrated that the goodness of fit indices

(GFI) were best for the six positive life domains and the five negative subscale models.

The YES (1.0 and 2.0) have been used in different studies involving youth

(Hansen & Larson, 2007; Hansen, Larson, & Dworkin, 2003; Larson, Hansen, & Moneta,

2006). The Hansen et al. (2003) and Larson et al. (2006) studies investigated how

different structured activities (i.e., faith-based activities, performance and fine arts,

sports) affected development. Results of both studies demonstrated that sport

participation was linked to a mix of positive and negative experiences. Further, Hansen

and Larson (2007) evaluated how youth experiences were affected by variations in

dosage, motivation, leadership roles, and adult-child ratio. They reported that sport

participants had more positive experiences when they spent more time in the activity,

participated more frequently, and had higher motivation levels. In a recent application of

the YES 2.0 with exclusively sport participants, Strachan et al. (2009) investigated

differences between a group of young athletes who sampled multiple sports and a group

who specialized in one sport during childhood. Using discriminant function analysis,

results demonstrated that athletes who specialized had more diverse peer relationships

while samplers had higher rates of integration with family and linkages to community.

Although this study suggests that the YES 2.0 can be used to understand sport

participation, the psychometric properties of the instrument within the sport setting are still unknown.

The flexibility of the YES 2.0 to measure developmental experiences across different domains (i.e., music, sports) suggests that experiences within a specific domain may not be captured by the instrument (Hansen & Larson, 2002). This implies that modifications to the scale that would make it more specific to the sport domain may allow for better evaluation of experiences. This would provide the field with a much needed tool that measures positive youth development in sport. Therefore, the purpose of this study was to evaluate the psychometric properties of a modified version of the YES 2.0 used exclusively with a group of sport participants.

Method

Participants

A sample of 637 athletes (52.3% male, 47.7% female) between the ages of 9 and 19 years ($M = 15.0$, $SD = 1.5$) participated in the study. Athletes were sampled from a variety of recreational, competitive, single-gender, and co-ed sport programs. A total of 32 sports were represented in the sample. Ice hockey was the most represented sport (21.7%), followed by soccer (15.5%), basketball (11%), volleyball (8.9%), and football (6.6%). All other sports were represented at frequencies below 5%. Within the sample, 17 individuals (2.7%) did not specify which sport they participated in.

Measure

Modified version of the YES 2.0. A modified version of the YES 2.0 was used to assess the experiences of youth sport participants. Since the present sample contained

youth younger than the age of 14 – the age for which the instrument was developed – modifications were made to the language of the tool.

Prior to administration of the instrument, a group of five youth sport researchers gathered to discuss the 70 items of the YES 2.0. The language of each item and its relevance to sport was discussed. A total of 20 modifications were made to the instrument (see Table 1). Of these, 14 were related to the language of the instrument. For example, item #46 was changed from 'Had the opportunity to be in charge of a group of peers' to 'Had an opportunity to lead a group of peers'. Five other modifications were related to the meaning of the items. These modifications were aimed at making each item more relevant for younger sport participants. An example of this is item #52 where 'This activity helped prepare me for college' was changed to 'This activity helped prepare me for college or high school '. This allowed younger athletes to relate with items in a more meaningful way when reflecting on their experience. The final modification was to reverse the Likert scale of the instrument from '1 = Yes, definitely, to 4 = Not at all' to '1 = Not at all to 4 = Yes, definitely'. After all modifications had been incorporated, the Flesch-Kincaid readability score (Kincaid, Fishburne, Rogers, & Chissom, 1975) of the instrument was grade 4.7, which makes the tool appropriate for the athletes included in our sample.

Item #	Original Item	Revised Item
5	This activity got me thinking about who I am	This activity got me thinking about who I am as a person
6	This activity has been a positive turning point in my life	This activity has been a positive experience in my life
8	Learned to find ways to achieve my goals	Learned to find ways to reach my goals
9	Learned to consider possible obstacles when making plans	Learned to consider challenges when making future plans
16	Learned about organizing time and not procrastinating (not putting things off)	Learned about organizing time and not putting things off
26	Artistic/creative skills	Improved creative skills
32	Made friends with someone from a different social class (someone richer or poorer)	Made a new friend
34	I was able to change my school or community for the better	I was able to impact my school or community for the better
46	Had an opportunity to be in charge of a group of peers	Had an opportunity to lead a group of peers
51	This activity opened up job or career opportunities for me	This activity opened up job opportunities for me
52	This activity helped prepare me for college	This activity helped prepare me for college or high school
54	Demands were so great that I didn't get homework done (skip this item if your Target activity is a class)	Demands were so great that I didn't get homework done
59	I was ridiculed by peers for something I did in this activity	I was laughed at by peers for something I did in this activity
64	I get stuck doing more than my fair share	I got stuck doing more than my fair share
66	Was discriminated against because of my gender, race, ethnicity, disability, or sexual orientation	Was treated differently because of my gender, race, ethnicity, disability, or sexual orientation
67	Adults in this activity are controlling and manipulative	Adults in this activity were controlling and manipulative
68	Adult leaders "hit" on me (made sexual advances)	Adult leaders scared me
69	Adult leaders made inappropriate sexual comments or jokes	Adult leaders made personal comments that made me mad
23-28	Added 'Improved' before each statement and removed 'In this activity I have improved:'	
All	Reverse coding of the scoring to: 1 = Not at all; 4 = Yes, definitely	

Table 1. List of modification made to the YES 2.0

Procedure

Prior to data collection, the study was reviewed by the University ethics board. Upon approval, participants were recruited in two separate ways. First, community youth sport programs and clubs were contacted by e-mail or telephone and invited to participate. Second, high schools were recruited to allow students to participate. The recruitment process resulted in 11 community programs ($n = 120$) and three high schools ($n = 517$) as sources of participants for the study. All programs and schools were located in the province of Ontario, Canada.

Once a sport program agreed to participate, the primary researcher met with the team at a time convenient for them. This occurred at the end of a practice or game. The purpose of the study and the instructions for completing the questionnaire were verbally explained to the athletes and any questions were addressed at that time. Participants were told that their responses should be based on their experiences in the program they were in at that moment. Athletes were provided with all the necessary documentation to complete the study (i.e., child assent, parental consent, questionnaire, and letter of information). Athletes completed the questionnaire and consent forms and returned them to the primary researcher in a sealed envelop. It was recommended that athletes complete the questionnaire at that time, however this was not always possible and athletes who could not do so were given the option of completing the questionnaire at home and returning it at the following game or practice. In this case, the primary researcher met with the team after a subsequent game or practice to collect the completed forms.

For participants recruited in high schools, data collection occurred during a designated class period. A letter of information was sent home and parents had to option

of withdrawing their child from participation in the study. On the day of data collection, the child could also decide to not participate in the study. A research assistant proceeded with this phase of the data collection. He provided an explanation of the study to athletes and instructed them to complete the questionnaire with their main sport in mind. The sport was identified by each participant and listed on the questionnaire. This allowed each athlete to focus on their main sport. Once completed, questionnaires were placed in a sealed envelop and collected by the research assistant. Participants were thanked for their efforts and provided with the opportunity to ask further questions. In all cases, completion of the questionnaire took approximately 20 minutes.

Data analyses

Confirmatory factor analyses testing the models outlined by Hansen and Larson (2005) were conducted to evaluate the factor structure of the instrument. Four different models were compared to the data. First, a model with one positive latent factor was tested. Second, a model with one negative latent factor was tested. Other models represented the breakdown of the positive and negative factors with the third model comprising of six positive factors and the fourth model consisting of five negative factors. These analyses were done in a manner akin to those described by Hansen and Larson (2005). Other models not tested by Hansen and Larson (2005) but believed to make theoretical sense were compared to the data. These models combined the positive and negative factors tested independently in the previous analyses. Therefore, the following three models were analyzed: (a) one-positive/one negative factor, (b) six positive/one negative, and (c) six positive/five negative. Considering that positive and negative experiences were collected using a single scale, it was believed that testing the

factor structure of positive and negative models combined was worthwhile. For each

model tested, co-variances were included between the latent factors while the variance of

the factors was set to one. Each item was related to one factor, and the estimation method

used for each model was maximum likelihood.

Analyses were performed using AMOS 17. Since there has been debate about

adjudging model fit (Barrett, 2007; Hu & Bentley, 1999; Markland, 2007), multiple

indices were used for this study. The χ^2 value has been identified as potentially

problematic due to sample size sensitivity, but its value is reported since it is the only true

inferential statistic of model testing (Markland, 2007). Given its sensitivity to sample

size, the Q statistic (χ^2/df) was also used as a measure of model fit. Additionally, the

Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA)

are also reported as indicators of model fit. Research practices using these indices state

that values above .90 for the CFI and below .05 for the RMSEA represent good fit

(Marsh, 2007).

Results

Prior to the analyses, the data were inspected for signs of non-normality,

heterogeneity of variance, and patterns of missing data. No anomalies were identified

across the range of scores for normality and variance distributions. Missing data analyses

revealed that 0.7% of the data were randomly missing and were treated using a mean

replacement technique. To maintain consistency between missing scores and actual

responses, imputed values were rounded to the whole number closest to the mean. These

scores represented acceptable values similar to ones provided by the participants who

completed the questionnaire. With a negligible amount of missing data and the use of

rounding to whole numbers, it is believed that this imputation technique did not have a significant impact on the results of our analyses.

Means, standard deviations, and internal consistency scores of the subscales are provided in Table 2. All subscales demonstrated good reliability with Cronbach alpha values all greater than .70 (Baumgartner & Hensley, 2006). Correlations between subscales ranged from .12 - .82.

	M	SD	α
Positive subscales	2.86	.59	.97
Identity Experiences	2.89	.64	.73
Initiative Experiences	3.06	.63	.91
Basic Skills	2.70	.69	.87
Positive Relationships	2.84	.69	.83
Teamwork and Social Skills	2.99	.71	.91
Adult Networks and Social Capital	2.56	.80	.86
Negative subscales	1.79	.80	.96
Stress	2.14	.95	.83
Negative Influences	1.77	.89	.87
Social Exclusion	1.73	.87	.85
Negative Group Dynamics	1.74	.91	.84
Inappropriate Adult Behavior	1.62	.90	.92

Table 2. Descriptive statistics of the modified YES subscales

Summary statistics for the confirmatory factor analyses of the different models tested are presented in Table 3. For all the models tested the χ^2 values were found to be significant. When the data were fitted independently for positive and negative factors following methods outlined by Hansen and Larson (2005), it was found that the six positive and five negative factor structures represented the data better than the one positive and one negative structure. This was evidenced by $Q = 4.34$, CFI = .768, and RMSEA = .072 values for the six positive structure and values of $Q = 3.73$, CFI = .965, and RMSEA = .066 for the five negative structure. By comparing these to the minimum acceptable values of model fit outlined by Marsh (2007), it was concluded that the six positive factors structure did not fit the data particularly well. Alternatively, the five negative factors structure provides an adequate fit to the data.

Model	χ^2	Q	CFI	RMSEA
1-positive	7540.3*	5.69	.669	.086
1-Negative	1147.3*	9.64	.879	.117
6-Positive	5679.5*	4.34	.768	.072
5-Negative	406.6*	3.73	.965	.066
1-Positive/1-Negative	10306.9*	4.40	.716	.073
6-Positive/1-Negative	8337.4*	3.59	.786	.064
6-Positive/5-Negative	7499.6*	3.27	.814	.060

Note. * $p < .001$

Table 3. Fit indices for all models tested

Considering that positive and negative items are combined into a single questionnaire, it was believed that models containing both types of factors should be

tested. Consistent with the results outlined above, results indicate that the 11-factor model (six positive and five negative) fits the data best. Summary statistics for the model were $Q = 3.27$, CFI = .814, and RMSEA = .060. As the number of factors in each model tested increased (Table 3), summary statistics came closer to acceptable values (Marsh, 2007). Although the 11-factor model provided the best results of all the models which tested positive and negative domains together, fit indices showed moderate support of the factor structure for the questionnaire. This was demonstrated by a CFI value considerably below .90 and a RMSEA value within the acceptable range (.05 – 0.8) of fit values. Good model fit should yield a CFI value above .90 and a RMSEA value below .05.

Since the fit indices of the confirmatory analysis did not produce convincing evidence of the factor structure outlined by Hansen and Larson (2005), an exploratory factor analysis was conducted to determine if a different factor structure would best represent our sample of sport participants. This secondary analysis also provided us with the opportunity to refine the instrument. Hansen and Larson (2002) noted that the YES may benefit from modifications if used in a specific setting. The moderate success of the CFA performed above justified the exploration of an alternative factor structure.

A critical decision that has to be made in exploratory analyses concerns the number of factors to retain. Many researchers have relied on the 'eigenvalues greater than one rule' (O'Connor, 2000). However, this technique has been criticized for overestimating the number of factors retained (Zwick & Velicer, 1986). Zwick and Velicer demonstrated that parallel analysis is a more reliable method of deciding the number of factors to retain. In addition, they recommend that inspection of the Scree test

be used to support the results of parallel analysis. Based on these recommendations, the use of parallel analysis and Scree test was preferred over the 'eigenvalues greater than one rule' in determining the number of factors. For a description of parallel analysis, see O'Connor (2000) and Zwick and Velicer (1986).

Using the parameters of the current study (sample size and number of questionnaire items), parallel analysis recommended that five factor be retained. The cutoff used to determine the number of factors was based on comparing our eigenvalues with the 95th percentile scores of the parallel analysis. Inspection of the Scree test supported the results of the parallel analysis suggesting four or five factors as best representing the data. Therefore, an exploratory analysis retaining five factors was conducted using the maximum likelihood extraction method with direct oblimin rotation. Items with a factor loading of .32 or above were retained (Tabachnick & Fidell, 2007) and items that had cross-loadings greater than .30 were removed. The .30 cutoff for cross-loadings was selected as a conservative criterion to minimize the impact of the changes that would be made to the instrument.

The analysis revealed that all of the items loaded significantly on at least one factor. However, many items did have cross-loadings above .30 and were subsequently removed. After items were removed, the remaining items were put through subsequent analyses and inspections of the loadings occurred. This process was repeated until each item loaded significantly only on one factor with no cross-loadings (for a list of items removed at each step, see Appendix K). The analysis resulted in 33 items being removed due to low factor loadings or high cross-loadings, which created a revised version of the YES containing 37 items named the Youth Experience Survey for Sport (YES-S). The

factors of the YES-S were labeled (i) Personal and Social Skills, (ii) Cognitive Skills, (iii) Goal Setting, (iv) Initiative, and (v) Negative Experiences.

Loadings and communalities for items across the five factors of the YES-S are presented in Table 4. Variables are ordered by factor and size of loadings. Reliability analyses of these factors showed high internal consistency scores with Cronbach Alpha values of .92, .94, .85, .82, and .82 respectively. As a check to evaluate if the proposed factor structure of the YES-S was acceptable, a random sub sample of 400 individuals was selected from our sample and an additional CFA was conducted using the five factor model. Although this test does not confirm the factor structure since the data were selected within our data set, this subsequent analysis helped understand how the proposed factor structure compared to previous models fit to the data. With our random sample of 400 participants, fit indices of $Q = 2.32$, CFI = .906, and RMSEA = .058 were obtained. From these results it is believed that the YES-S is the preferred model to use when interested in understanding the experiences of youth who participate in sports. As mentioned, this preliminary evidence does not validate the YES-S, meaning that additional testing of the factor structure with a different sample of sport participants is needed to substantiate this claim.

			Factors			h^2
	Personal & Social Skills	Cognitive Skills	Goal Setting	Initiative	Negative Experiences	
Item 1	.761					.637
Item 2	.723					.629
Item 3	.715					.564
Item 4	.707					.527
Item 5	.700					.602
Item 6	.685					.564
Item 7	.640					.497
Item 8	.637					.579
Item 9	.628					.393
Item 10	.574					.495
Item 11	.554					.469
Item 12	.482					.420
Item 13	.397					.383
Item 14	.334					.424
Item 15		.872				.677
Item 16		.860				.659
Item 17		.749				.614
Item 18		.530				.461
Item 19		.335				.371
Item 20			.845			.617
Item 21			.672			.579
Item 22			.482			.446
Item 23			.359			.490
Item 24				.857		.593
Item 25				.651		.523
Item 26				.647		.463
Item 27				.526		.446
Item 28					.843	.710
Item 29					.840	.707
Item 30					.821	.725
Item 31					.807	.690
Item 32					.805	.752
Item 33					.780	.608
Item 34					.774	.667
Item 35					.752	.569
Item 36					.654	.445
Item 37					.528	.389

Table 4. Factor loadings and communalities (h^2) of the 37 items retained across five factors

Discussion

The purpose of this study was to test the factorial validity in the sport domain of the YES 2.0 originally developed by Hansen and Larson (2005). The modified version of the YES 2.0 that was administered to a sample of athletes between the ages of 9 and 19 years did not produce conclusive support to the factor structure proposed by Hansen and Larson (2005). Additional analyses allowed for modifications to the scale that resulted in a shorter questionnaire containing 37 items representing 5 factors. These modifications, combined with the specificity of its use within the context of sport, led to the Youth Experience Survey for Sport (YES-S).

Results from the present study did not reproduce the identical factor structure outlined by Hansen and Larson (2005). In their analyses, the obtained GFI values of .73 and .92 for the six positive and five negative factor structures respectively are comparable to our CFI values of .77 and .97. However, the consistency of these results suggests that although there may have been differences in the two samples, the overall fit of the model did not differ dramatically in both cases. It is possible that the modifications brought to the original instrument helped in maintaining the consistency. More specifically, since the present sample included youth up to five years younger than the sample recruited by Hansen and Larson (2005), it was necessary to modify the language of the tool to make the items relatable to younger athletes. The consistency of model fit between the revised version and the YES 2.0 suggests that the language modifications served their intended purpose without changing the meaning of the questionnaire.

When the positive and negative factors were tested in combined models, results were only marginally better than when tested individually (Table 3). Of the three models

tested, the six positive/five negative model produced the best fit. Similar to the results above, fit indices did not provide equivocal support for the factor structure. The CFI value was low (.814) with an acceptable RMSEA value of .060 (Marsh, 2007). These results were further indication that the factor structure outlined by Hansen and Larson (2005) could potentially be modified to better understand the experiences of young athletes.

The lack of strong statistical support for any of the models led to an exploratory analysis that investigated an alternative structure to best represent the sample of athletes. This process led to the development of the YES-S with the 5 factors of (i) Personal and Social Skills, (ii) Cognitive Skills, (iii) Goal Setting, (v) Initiative, and (v) Negative Experiences. Although theoretically different, the YES-S and YES 2.0 share similarities. As can be seen in Figure 1, items from the factors of 'positive peer relationships', 'adult network and social capital', and 'teamwork and social skills' combined into the factor labeled 'personal and social skills'. The 14 items that make up this factor deal with issues of social development (i.e., making new friends, working together requires compromises) and personal development (i.e., emotions affect behavior, better at taking feedback). When considering issues of youth development, facing these types of experiences in sport can have positive effects and be applicable to life outside sport. For example, individuals are often asked to work as a team within their school or work environment. If youth sport participants learn how their emotions affect their behavior and others, they can incorporate these experiences into other facets of their life. Similarly, young athletes continually receive feedback from coaches or team members. These experiences in dealing with others can prove beneficial for the challenges of life

outside sport. The construct of 'personal and social skills' is closely related to the work of Hellison (2003). In his work with youth, Hellison outlined that participation in physical activity has the ability to teach youth personal and social responsibility. By providing youth with a positive environment, participants learn how to impact their environment by being responsible young adults. It is possible that the results of the present analysis point to a similar construct, however further investigation of this factor is warranted. It is believed that if youth score high on the items included in the 'personal and social skills' subscale, they may develop skills akin to the concept of responsibility outlined by Hellison (2003).
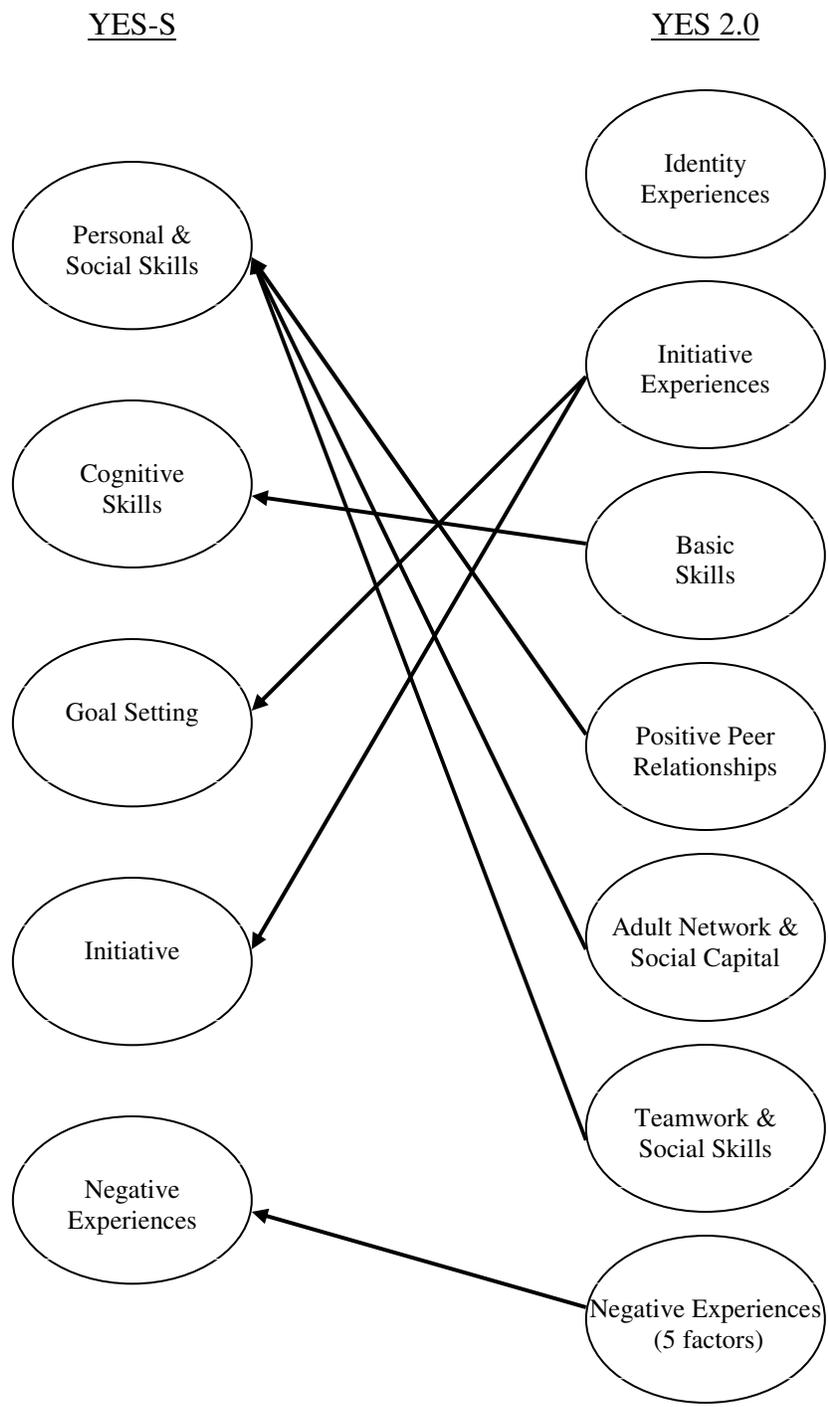
Figure 1. Visual representation between factors of the YES-S and YES 2.0.

The second positive factor of the YES-S is cognitive skills. This factor consists

of YES 2.0 items originally related to the concept of 'basic skills'. Sports are mainly a

physical undertaking; however, youth can develop cognitive abilities within this setting (Dwyer, Sallis, Blizzard, Lazarus, & Dean, 2001; Eccles & Barber, 1999). Creating a sport environment that allows youth to try different things (i.e., positions, tactics) can develop creative skills. Additionally, research has demonstrated that youth who participate in sport show increased academic performance and desire to stay in school (Eccles & Barber, 1999). This may reflect the time management skills required to balance sport and academics.

The third and fourth positive factors of the YES-S were created by breaking down the construct of 'initiative experiences' outlined by Hansen and Larson (2005) in the YES 2.0. Results suggest that this construct should be considered as two factors which have been termed 'goal setting' and 'initiative'. The creation of a goal setting subscale makes sense since athletes often make specific goals within the sport domain (Burton & Weiss, 2008). When one considers the development of youth outside of sport, it is likely that young athletes can benefit from these experiences. More specifically, youth can apply these experiences to school or part-time work by setting performance goals with respect to their academic undertakings and evaluating the effort needed to reach these goals. In their implementation of a life skills program with athletes, Danish, Forneris, and Wallace (2005) teach the principles of goal setting and show how it can be applicable to different facets of a person's life. It is believed that the goal setting subscale can be useful for evaluating such programs by measuring changes in goal setting behaviors. Also, coaches interested in sport-specific goal setting behaviors may utilize this construct to quantify an athlete's progress or development.

With respect to the 'initiative' subscale of the YES-S, items represent the notion of initiative as defined by Larson (2000). Larson argues that initiative will develop in youth who are intrinsically motivated by the activity, who invest high amounts of attention and effort, and participate in an activity for a significant amount of time. Assuming that youth sport participants will engage in the activity for an extended period of time, it is conceivable that high scores on the four items of the subscale represent the construct well.

Finally, the five negative experiences outlined in the YES 2.0 grouped together to form one negative factor in the YES-S. Although it may only consist of one factor, it is possible to inspect each of the negative items to determine the extent certain negative experiences are present. For example, increased alcohol consumption has been reported in grade 12 youth sport participants (Eccles & Barber, 1999) and this experience is represented by one item. The fact that the YES-S covered a wide age range may explain why the negative experiences grouped into a single factor. Youth of different ages may not have the same experiences – evidenced by Eccles and Barber (1999) who found no differences in alcohol consumption in grade 10, but differences in grade 12. However, results of this study suggest that the current negative experiences subscale has the flexibility to cover the entire span of adolescence.

The results of the current study provide an instrument for evaluating the positive and negative developmental experiences of youth sport participants and fill an identified gap in the literature (Holt & Jones, 2007). The five subscales identified by the YES-S cover a range of constructs consistent with existing frameworks within the positive youth development through sport literature (Danish et al., 2005; Hellison, 2003; Larson, 2000).

The development of the YES-S provides a new measure to researchers interested in positive youth development in sport.

Finally, there are limitations that need to be acknowledged. First, there was a large age range in the present study and it is not known if athletes of different ages have differing experiences. Future research should investigate if and how differences exist in athlete experiences across varying age. Second, the proposed structure of the YES-S is not definitive and needs further validation. Although the initial version of the YES-S can be useful in understanding positive and negatives developmental experiences of young athletes, it would be worthwhile to further investigate its structure. Considering the growing interest given to positive youth development through sport (Holt, 2007), the current form of the YES-S brings a much needed instrument to the field.

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Chapter 3: The Role of Enjoyment and Motivational Climate in Relation to the Personal Development of Team Sport Athletes

Abstract

Sport has been identified as a context in which youth can learn positive values such as leadership and initiative. However, relatively little is known about the factors that lead to personal development among sport participants. The purpose of this study was to investigate the role of enjoyment and motivational climate on the personal development of team sport participants. A sample of 510 athletes between the ages of 9 and 19 completed questionnaires on positive and negative personal development, enjoyment, and motivational climate. Stepwise multiple regression analyses examined the effects of enjoyment and motivational climate on the personal development of the athletes. Results demonstrated that positive experiences in sport were most strongly predicted by affiliation with peers, self-referenced competency, effort expenditure, and a task climate. Negative experiences were most strongly predicted by an ego climate and other-referenced competency. Results suggest that creating an environment that encourages peer affiliation and personal achievement can result in the positive development of youth sport participants.

Sport has been identified as the most popular structured activity for youth participation (Mahoney, Larson, Eccles, & Lord, 2005). Recently, Guèvremont, Findlay, and Kohen (2008) reported that approximately 76% of Canadian youth between the ages of 6 and 17 years participated in at least one structured sport activity in the past year. In the United States, it is estimated that approximately 62% of high school students participated on at least one school or non-school sport team in the previous year (Pate, Trost, Levin, & Dowda, 2000). These data demonstrate that the majority of North American youth have some experience with organized sport.

Weiss and Williams (2004) summarized the reasons why youth participate in sport. They suggested that youth participate for reasons of physical competence/adequacy (i.e., improve skills, achieve goals), social acceptance (i.e., make new friends, team atmosphere), and enjoyment (i.e., energy release, excitement). These reasons point to the complexity of youth sport involvement, and demonstrate that both individual (i.e., enjoyment) and environmental (i.e., team atmosphere) factors are important for understanding participation. Weiss and Williams concluded that participation in youth sport can be enhanced by (a) making sure the sport is enjoyable, (b) creating a task-oriented motivational climate, (c) providing social support, and (d) helping children help themselves. These recommendations highlight enjoyment and motivational climate as critical factors for prolonged participation of youth in sport. The subsequent paragraphs briefly elaborate on the concepts of enjoyment and motivational climate as they pertain to youth sport.

Enjoyment is consistently associated with continued sport participation (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993; Scanlan, Stein, & Ravizza, 1989; Weiss,

Kimmel, & Smith, 2001; Wiersma, 2001). To explain why youth commit to sport,

Scanlan and colleagues (Scanlan et al., 1989; 1993) developed the sport commitment

model. They argued that sport commitment is influenced by five constructs. Four of

these constructs – enjoyment, personal investment, social constraints, and involvement

opportunities – were positively associated with commitment, while involvement

alternatives were negatively related to sport commitment. Results of their analyses

pointed to enjoyment as the most important component linked to youth's commitment to

sports. Subsequent work by Weiss et al. (2001) extended the sport commitment model

(Scanlan et al., 1993) by including enjoyment as a mediating variable rather than a direct

predictor of sport commitment. Although not statistically more predictive than the model

developed by Scanlan et al. (1993), Weiss and colleagues (2001) suggested that

enjoyment could be conceived as a partial mediator in conceptualizing sport commitment.

Both models support the contention that enjoyment plays an important role in youth's

decision to participate in sport for an extended period of time. What is less clear is how

an individual's enjoyment levels influence their experience in sports.

        Motivational climate is another important factor that is known to influence sport

participation (Balaguer, Duda, & Crespo, 1999; Duda & Balaguer, 2007; Smith, Smoll, &

Cumming, 2007). Operationalized as either task or ego, motivational climate reflects an

individual's perception of the sport setting. A task climate is created when the focus is on

personal skill development regardless of how others perform. Conditions where coaches

and/or peers encourage athletes to give their best effort in attaining challenging but

realistic goals facilitate a task oriented climate. Alternatively, an ego climate is formed

when the focus is on demonstrating superior ability over others (Smith et al., 2007). In

general, research on motivational climate suggests that a task climate has a positive effect on athletes while an ego climate can result in negative sport experiences (Duda & Balaguer, 2007). In a study investigating the effects of a motivational climate intervention with coaches on athlete anxiety levels, Smith et al. (2007) found that athletes who played for coaches who received task climate training decreased in anxiety throughout the season. Athletes who played for coaches who did not receive any training increased in anxiety as the season progressed. Balaguer et al. (1999) investigated perceptions of motivational climate on satisfaction and coach ratings in a group of 219 tennis players and found that task climate was linked to increased perceptions of ability to use psychological skills, satisfaction with level of play, and match results. Their results were corroborated by Cumming, Smoll, Smith, and Grossbard (2007) who found that a task climate was significantly related to an athlete's satisfaction with the coach. Cumming et al. also found that a task climate was related to win-loss records and enjoyment. Alternatively, perceptions of an ego climate are associated with negative experiences such as peer conflict (Ommundsen, Roberts, Lemyre, & Miller, 2005), negative perceptions of the coach (Smith, Fry, Ethington, & Li, 2005), and increased anxiety (Pensgaard & Roberts, 2002). Overall, these studies suggest that a task oriented motivational climate is beneficial for sport participation while an ego climate can reduce participation in youth.

While the above research studies pertaining to enjoyment and motivational climate are largely framed around sport participation, it has been suggested that another primary goal of youth sport programs should be the development of positive personal skills such as leadership and initiative (Côté & Fraser-Thomas, 2007). Authors argue that

a properly structured youth sport program is an ideal setting in which youth can learn valuable skills that can be applied to other facets of their lives (Fraser-Thomas, Côté, & Deakin, 2005; Petitpas, Cornelius, Van Raalte, & Jones, 2005). Hansen and colleagues (Hansen & Larson, 2007; Hansen, Larson, & Dworkin, 2003; Larson, Hansen, & Moneta, 2006) tested this assumption with a series of studies that examined the experiences of youth in different structured activities (i.e., sports, arts, faith groups, academic programs, community groups). Hansen et al. (2003) found that sport participants and faith groups developed higher emotional regulation than academic groups. They also found that sport participants reported higher rates of negative peer interactions than faith, academic, and arts groups and that inappropriate adult behavior was higher in sports than in faith groups. In another study of 2280 11th grade youth who participated in the same activities outlined above, Larson et al. (2006) found that sport participants reported higher rates of goal setting and effort; however athletes also reported higher levels of the negative experiences in stress and social exclusion compared to other activities.

A more recent study by Strachan, Côté, and Deakin (2009) assessed positive development between groups of athletes aged 12-16 years who *sample* (athletes who participate in multiple sports) or *specialize* (athletes heavily invested in only one sport). They found that athletes in the sampling group reported stronger links to their sport, family, and community whereas specializers reported higher rates of diverse peers groups, but also higher rates of physical and emotional exhaustion. These results demonstrate that sports are related to a range of positive and negative developmental experiences.

Given that enjoyment and motivational climate are established predictors of sport participation, they may also be useful in predicting other youth sport outcomes such as personal development. However, these relationships have yet to be investigated. One possible explanation for the lack of research on this topic is the shortage of tools available to measure positive personal development in sport participants. Until recently, a positive development measure designed specifically for sport participants had yet to be developed. MacDonald, Deakin, Eys, and Côté (2009) created the Youth Experiences Survey for Sport (YES-S) by modifying the more general Youth Experience Survey (YES; Hansen & Larson, 2002; 2005). The YES-S is a 37-item scale that measures developmental experiences of sport participants on the five dimensions of personal and social skills, cognitive skills, goal setting, initiative, and negative experiences. As a result, the purpose of the present study was to examine the effects of enjoyment and motivational climate on the personal development of youth sport participants. Hypotheses for this study were that higher reports of enjoyment and task climate would be associated with greater positive developmental experiences and that higher reports of an ego climate would be associated with greater negative experiences.

Methods

Participants

The participants in the study were 510 male (47.5%) and female (52.5%) athletes between the ages of 9 and 19 years ($M = 14.9$, $SD = 1.6$). Athletes participated in school sports or non-elite community programs across the sports of baseball (9), basketball (68), curling (6), dance (29), football (55), hockey (132), lacrosse (13), ringette (11), rowing (2), soccer (99), softball (20), synchronized swimming (10), and volleyball (56).

Measures

      Youth Experience Survey for Sport. Athlete experiences were assessed using the Youth Experience Survey for Sport (YES-S; MacDonald et al., 2009). The YES-S was developed by adapting the Youth Experience Survey 2.0 (YES; Hansen & Larson, 2005) to a group of 637 youth sport participants. The YES-S is a 37 item questionnaire that measures experiences of youth sport participants on the five dimensions of personal and social skills (14 items; i.e., "I became better at giving feedback"), cognitive skills (5 items; i.e., "this activity increased my desire to stay in school"), goal setting (4 items; i.e., "I set goals for myself in this activity"), initiative (4 items; i.e., "I put all my energy into this activity"), and negative experiences (10 items; i.e., "I got stuck doing more than my fair share"). Athletes reflect on their current or recent sport involvement in a given setting and respond to each statement using a 4-point Likert-type scale anchored by 'Not at all' to 'Yes definitely' as representing experiences that occurred during their sport involvement. Results of psychometric evaluations of the YES-S showed acceptable values of $Q = 2.32$, CFI = .91, and RMSEA = .06. Reliability analyses of the subscales in the present study produced Cronbach alpha values between .79 and .90.

      Sources of Enjoyment in Youth Sport Questionnaire. The second measure used was the Sources of Enjoyment in Youth Sport Questionnaire (SEYSQ; Wiersma, 2001). The SEYSQ is a 28 item scale that measures enjoyment on the six dimensions of self-referenced competency (4 items; i.e., "playing well compared to how I've played in the past"), other-referenced competency and recognition (6 items; i.e., "being better in my sport than other athletes my age or in my league"), effort expenditure (5 items; i.e., "playing hard during competition"), competitive excitement (4 items; i.e., "the

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excitement of competition"), affiliation with peers (5 items; i.e., "being with friends on my team"), and positive parental involvement (4 items; i.e., "getting support from my parent(s) for playing my sport"). Each statement is preceded by the stem "During the times when I most enjoy sport, I usually experience that enjoyment from…". Responses on the SEYSQ are given using a 5-point Likert-type scale that ranges from 'Not at all' to 'Very much'. The six-factor structure of the SEYSQ has been validated by Wiersma (2001) with a sample of 896 young athletes between the ages of 12 and 18 years. Results of the confirmatory factor analysis demonstrated good fit parameters with a RMSEA = .05 and a CFI = .97. Reliability analyses demonstrated acceptable values ranging between .65 and .85. In the current study, reliability coefficients for the different subscales of the SEYSQ were between .74 – .84.

Motivational Climate Scale for Youth Sport. The final measure used was the Motivational Climate Scale for Youth Sport (MCSYS; Smith, Cumming, & Smoll, 2008). The instrument was developed with 992 young athletes between the ages of 9 and 16 years and measures two dimensions of motivational climate (task and ego) present in the youth sport domain. The two factor model tested by Smith et al. (2008) demonstrated strong psychometric properties with values of $Q = 1.52$, CFI = .97, GFI = .97, and RMSEA = .04. Specifically, the MCSYS asks athletes to rate 12 statements related to the sport climate on a 1 (Not at all true) to 5 (Very true) Likert-type scale. Six statements are linked to a task climate while six are related to an ego climate. In the present study, task and ego subscales showed reliability coefficients of .82 and .79 respectively.

Procedure

Data were collected from community sport programs and high schools located in the province of Ontario, Canada. Following university ethics approval, sport programs and high schools were contacted for participation in the study. When a school or program agreed to participate, arrangements were made to secure a time during which data collection could occur.

For the athletes in the schools, data collection occurred during a designated class time. Prior to data collection, letters of information and consent were sent home with students. A research assistant then proceeded with the data collection phase with those who agreed to participate. Athletes were given the opportunity to withdraw from the study on the day of data collection if they did not want to participate. Those who agreed to participate were given instructions about the purpose of the study and asked to fill out each questionnaire with their primary sport in mind. This allowed athlete's to choose the sport in which they are most involved and reflect on the experiences that occurred in that environment. Any questions that were raised during this phase of data collection were addressed. All questionnaires were completed during the designated time and collected by the research assistant. The time needed for participants to complete the questionnaires was approximately 30 to 40 minutes.

Once sport teams agreed to participate, a meeting time was arranged to explain the purpose of the study and provide athletes the opportunity to complete the questionnaires. This typically occurred at the end of a practice or game. During this meeting, the purpose was explained and appropriate documentation was provided to the participants. Participation was voluntary and athletes could withdraw at any moment

without consequence. A copy of each questionnaire, letter of information, and consent/assent forms were distributed to athletes who agreed to participate. Each participant was encouraged to complete the questionnaires on location however some could not commit the 30-40 minutes required to complete the forms and completed the questionnaires at home. When this occurred, the primary researcher returned after a subsequent practice or game to collect the completed documents. Athletes returned the completed documents to the primary researcher in a sealed envelope.

Data analysis

Data were entered into a spreadsheet and cleaned to contain only valid cases. A research assistant double checked the data for entry errors. With incomplete cases removed, normality and homoscedasticity were assessed across variables of interest. No variables had to be recoded due to non-normal or heteroscedastic patterns.

Stepwise multiple regression analysis was used to assess the relationships between subscales of the SEYSQ and MCSYS on developmental experiences outlined by the YES-S. The entry criteria for variables were set at .05 whereas the removal criteria were set at .10. Stepwise regression was selected over other approaches since the relationships between experiences, enjoyment, and motivational climate have yet to be established. Therefore, a method which builds a model was preferred over a method that tests a model (Tabachnick & Fidell, 2007). Five separate models using each subscale of the YES-S as the dependent variable tested the relationships.

Results

Mean and standard deviation values for each subscale with corresponding reliability coefficients are presented in Table 1. Mean values demonstrate that youth

experiences were quite positive but that athletes also faced negative experiences. The

climate in which these activities took place were mainly task oriented and athletes

reported high levels of enjoyment on all subscales. Reliability analyses showed

acceptable values for each of the subscales. Inspection of correlations between subscales

showed low to moderate relationships with Pearson coefficients between .006 and .626.

The personal experiences of athletes were investigated using stepwise multiple

regressions. Five models, using each subscale of the YES-S as a dependent variable,

were tested with MCSYS subscales and SEYSQ subscales as independent variables to

determine which predicted positive and negative experiences. Results of the models are

presented in Table 2.

	M	SD	α
Youth Experience Survey for Sport [a]			
Personal and social skills	2.98	.63	.90
Cognitive skills	2.26	.87	.84
Goal setting	3.06	.69	.81
Initiative	3.47	.56	.79
Negative experiences	1.71	.79	.93
Motivational Climate Scale for Youth Sport [b]			
Task climate	4.11	.71	.82
Ego climate	2.24	.86	.79
Sources of Enjoyment in Youth Sport Questionnaire [b]			
Self-referenced competency	4.24	.65	.74
Other-referenced competency	3.52	.94	.85
Effort expenditure	4.03	.75	.79
Competitive excitement	4.30	.71	.78
Affiliation with peers	4.05	.71	.77
Positive parental involvement	4.08	.86	.84

[a]Likert scale anchors between 1-4
[b]Likert scale anchors between 1-5

Table 1. Descriptive statistics and Cronbach reliability coefficients of the YES-S,

MCSYS, and SEYSQ subscales

Personal and Social Skills

Five variables significantly predicted personal and social skills. The strongest

predictor, which explained approximately 27% of the variance, was affiliation with peers.

The variables of effort expenditure, task climate, competitive excitement, and ego climate also predicted personal and social skills and accounted for an additional 10% of the variance. The relationship between the predictors and dependent variable were positive meaning that high scores on these scales predicted higher reports of personal and social skills.

Cognitive Skills

Three variables significantly contributed to the explanation of cognitive skill development and accounted for 13.9% of the variance. Other-referenced competency was the strongest predictor and accounted for approximately 9% of the variance in cognitive skills. Conceptualized as comparing one's ability to others, this result suggests that comparison between athletes is beneficial to the development of cognitive skills. Similarly, the construct of self-referenced competency, which is manifested through an individual's attainment of personal performance goals, was negatively related to the development of cognitive skills. Finally, high effort expenditure was positively related to the development of cognitive skills.

Goal Setting

Approximately 27% of the variability in goal setting was explained by four variables. Self-referenced competency, affiliation with peers, task climate, and effort expenditure were found to be positively related to goal setting behaviors. Self-referenced competency and task climate are complimentary concepts and deal with reaching one's potential by achieving personal performance benchmarks. Affiliation with peers and effort expenditure are two constructs that relate to goal setting. Team sport participants need to function as a unit and invest similar amounts of effort to reach their goals. The

results of this model suggest that high levels of connectedness with peers and higher effort during an activity is related to more opportunities for goal setting.

Initiative

High reports of competitive excitement, effort expenditure, task climate, and self-referenced competency combined to explain approximately 29% of the variance in initiative. Experiencing enjoyment from upcoming competitions explained the most variance in initiative with 22%. Similar to goal setting, effort expenditure, a task climate, and self-referenced competency combined to explain part of the variability in initiative.

Negative Experiences

The strongest predictor of negative experiences was an ego climate. This suggests that climates which place emphasis on evaluating their ability based on outperforming others (i.e., winning) promote negative experiences in young athletes. Related to an ego climate, results indicate that having high scores on other-referenced competency also predict negative experiences. Considering that both of these constructs are similar in nature, this result was not entirely surprising. Athletes who reported high levels of self-referenced competency reported lower rates of negative experiences.

YES-S subscales	Significant predictors	F	MS	B	p	r^2
Personal and social skills	Affiliation with peers	59.43	54.61	.271	.000	.272
	Effort expenditure		33.84	.175	.000	.336
	Task climate		23.93	.147	.000	.357
	Competitive excitement		18.37	.104	.012	.365
	Ego climate		14.92	.058	.036	.371
Cognitive skills	Other-referenced competency	27.15	34.43	.250	.000	.090
	Effort expenditure		23.14	.330	.000	.121
	Self-referenced competency		17.63	-.233	.002	.139
Goal setting	Self-referenced competency	45.61	46.96	.228	.000	.191
	Affiliation with peers		29.21	.182	.000	.238
	Task climate		20.80	.125	.002	.254
	Effort expenditure		16.31	.134	.005	.265
Initiative	Competitive excitement	51.98	35.43	.191	.000	.224
	Effort expenditure		20.60	.119	.002	.260
	Task climate		14.86	.114	.000	.281
	Self-referenced competency		11.56	.123	.007	.292
Negative experiences	Ego climate	24.62	28.84	.201	.000	.091
	Other-referenced competency		19.25	.213	.000	.122
	Self-referenced competency		15.91	-.331	.000	.151
	Effort expenditure		12.92	.153	.006	.163

Table 2. Stepwise multiple regression analyses predicting YES-S subscales

Discussion

Across the positive domains of the YES-S, results identified affiliation with peers, effort expenditure, self-referenced competency, and task climate as the important predictors of positive development in youth sport participants. This supports the first hypothesis of this study by linking high rates of enjoyment and a task climate to positive experiences. Conversely an ego climate was found to be the strongest predictor of negative experiences, which supports the second hypothesis of the study.

Positive Development

The strongest predictor of personal and social skills was affiliation with peers. This suggests that creating opportunities for positive peer interactions in the sport domain is beneficial for the development of personal and social skills. This finding adds to our understanding of peer relationships in sport by demonstrating that positive relationships with peers are not only important for participation purposes (Smith, 2007; Weiss & Williams, 2004) but can are also associated with positive development in youth.

The benefit of establishing positive and strong relationships with peers may well be responsible for the finding of task and ego climates as positive contributors to the development of personal and social skills. This finding differs from the work of Duda and Balaguer (2007) and Cumming et al. (2007) who report that task climates are associated with positive emotional and cognitive development in athletes while ego climate is related to negative development (for a review, see Duda & Balaguer, 2007) and imply that ego climates may promote positive experiences. Results suggests that peer relationships within the sport setting play a larger role (Holt, Black, Tamminen, Fox, & Mandigo, 2008) than the perceived climate which would explain why personal and social skills developed across both task and ego climates. However, further investigations of the relationship between affiliation with peers and motivational climates are necessary to substantiate this claim.

Eccles and Barber (1999) link sport participation with increased grade-point average and subsequent college enrolment. The relationship between sport and school success suggests that processes within the sport environment help athletes develop cognitive abilities. The present study found that other-referenced competency and effort

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expenditure are positively related to cognitive skills while self-referenced competency is negatively related. These findings imply that comparison with others and effort relates to greater cognitive skill development than other aspects of enjoyment and motivational climate. Although it is unclear why this is the case, it is possible that other-referenced competency and effort serve as moderating variables between participation in sport and a child's cognitive development. In addition, it is unclear if the findings of this study would be supported for youth who participate in different structured activities such as arts or faith-based programs. It would be worthwhile for future studies to examine the relationship between comparisons to others and cognitive development across different domains to further understand the role of structured activities on cognitive development.

Approximately 25% of the variance in goal setting is explained by positive reports of self-referenced competency, affiliation with peers, and task climate. It is believed that the predictors of goal setting identified in this study reflect how athletes use individual and team goals in the sport environment (Dawson, Bray, & Widmeyer, 2002). Individual goals reflect self-referenced competency and can be used to set personal standards of performance or desired outcomes of sport participation (Burton & Weiss, 2008). Team goals, which are related to affiliation with peers, are important for team success (Prapavessis, Carron, & Spink, 1996) and should be used by coaches and teams to set performance standards. The present results suggest that goal setting behaviors can be enhanced by creating a task-oriented environment that stresses positive affiliation with peers and self-referenced competency.

Applications of goal setting behaviors in youth sport programs are related to the positive development of children. Danish and colleagues (Danish, Forneris, Hodge, &

Heke, 2004; Danish, Forneris, & Wallace, 2005) developed Sports United to Promote Education and Recreation (SUPER; see Danish, Fazio, Nellen, & Owen, 2002); a program which teaches youth sport participants a number of life skills within the sport setting by providing workshops to participants. Of the 18 workshops that makeup the SUPER program, seven deal with goal setting and discuss how goals are created/reached in sport and in other aspects of life (Danish et al., 2005). Brunelle, Danish, and Forneris (2007) assessed the impact of the SUPER program on adolescent development and found that the program had a positive effect on youth's prosocial behavior and social responsibility. Although the impact of goal setting modules was not teased out, their results support the findings of this study and identify goal setting as a component of personal development.

Competitive excitement, effort expenditure, task climate, and self-referenced competency are positively related to the construct of initiative. This demonstrates that initiative can be promoted in sport by creating an environment that promotes excitement, effort expenditure, and self-referenced competency within a task climate. Coaches and sport programs interested in the development of initiative in youth should consider these factors if they want to create an environment consistent with principles of positive youth development through sport. Larson (2000) argues that youth will develop initiative if they are intrinsically motivated, invest high amount of effort in the activity, and participate over time. The strongest predictor of initiative, which is competitive excitement, shares similarities with intrinsic motivation. Scanlan and Lewthwaite (1986) argue that enjoyment and intrinsic motivation are related and require athletes to develop positive perceptions of competence before an activity is deemed enjoyable and

intrinsically motivating. Given the connection between enjoyment and intrinsic motivation, the present results suggest that increased enjoyment may have a role in the development of initiative. Another predictor of initiative is effort expenditure. This construct reflects Larson's (2000) notion of investing high amounts of energy in the activity. Given that athletes typically participate in sport for an extended period of time (i.e., at least one season), the current predictive model supports the three conditions identified by Larson (2000) for the development of initiative.

Negative Development

The strongest predictors of negative experiences were an ego climate and other-referenced competency. This suggests that focusing one's attention on comparison with others rather than personal achievement is associated with negative experiences in the sport domain. The link between ego climates and negative sport experiences is well documented (Balaguer et al., 1999; Cumming et al., 2007; Smith et al., 2008; Vazou, Ntoumanis, & Duda, 2006) and implies that an environment emphasizing comparisons with others leads to negative experiences. Although an ego climate was found to be a positive predictor of personal and social skill development, it is recommended that ego climates be implemented with caution as results point to negative experiences as an additional outcome of these climates. In contrast, self-referenced competency was negatively related to negative experiences meaning that environments which focus on mastery of skills and personal achievement can reduce negative experiences in youth.

Summary and Conclusion

The results of this study are important for understanding the positive and negative development of young athletes; however limitations exist. The relationships were found

in team sport athletes and may not necessarily reflect the developmental experiences of individual sport athletes. For example, it is possible that affiliation with peers is not a significant predictor of goal setting in individual sports. Future research is needed to understand how climate and enjoyment affect personal developmental experiences across individual and team sports. A second limitation is that total weekly involvement in sport programs was not taken into account. It is possible that differences exist between athletes who invest more time in their program compared to athletes who spend less time. Analyses of how much time spent in the sport affects personal development is an interesting avenue of future investigation. Finally, it is important to acknowledge that the current study used a cross-sectional design. Although relationships between enjoyment, motivational climate, and personal development were found, future studies should attempt to determine if enjoyment and motivational climate cause increased personal development in youth sport participants.

The findings of the present study identify affiliation with peers, effort expenditure, self-referenced competency, and task climate as the most important predictors of personal development in young athletes. Research on motivational climate and enjoyment has linked these constructs to sport participation (Duda & Balaguer, 2007; Weiss & Williams, 2004); however their impact on the personal development of youth was unknown. The findings of this study strengthen the understanding of the role of motivational climate and enjoyment on the personal development of youth sport participants. Sport programs and coaches who wish to increase the personal development of athletes can consider these factors and incorporate them into their sport environment. This can be achieved by fostering an environment of personal success by promoting the

use of personal achievement goals within the sport setting. Creating an environment that focuses on the child reflects the factors of task climate and self-referenced competency. In addition, if athletes are encouraged to share their goals with others and support each other in achieving them, stronger peer relationships and increased motivation to participate may ensue, which are important factors identified as predictors of the personal development of young athletes.

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Chapter 4: The Impact of Program-Based Coach Training on the Personal Development of Youth Sport Athletes

Abstract

The role of adults has been outlined as a critical aspect of positive development of young athletes (Fraser-Thomas, Côté, & Deakin, 2005). Youth sport coaches constantly interact with athletes and hence have the potential to significantly impact the experiences of youth. Formal coach training has been proposed as a method for helping coaches interact effectively with athletes (Conroy & Coatsworth, 2006), however research shows that many coaches learn through experience and interactions with other coaches (Trudel & Gilbert, 2006). The purpose of this study was to determine if coach training provided by in programs positively impacts the personal development of youth. Results suggest that athletes who played for coaches that received informal training reported higher rates of personal and social skills than athletes who played for untrained coaches. Implications for sport programs administrators are discussed along with recommendations for incorporating positive development principles within a sport program.

Throughout development, youth engage in a number of different environments such as school, sports, and family. The sport environment constitutes the most popular structured extracurricular activity in which youth participate (Mahoney, Larson, Eccles, & Lord, 2004). Research shows that 51% of Canadian children aged 5-14 regularly took part in at least one organized sport during the previous year (Clark, 2008). Although sport is identified as an ideal environment in which to promote positive skills such as leadership and cooperation, sport participation can also lead to negative outcomes (Fraser-Thomas, Côté, & Deakin, 2005). One of the key issues for researchers and practitioners is to work together to ensure that youth have positive rather than negative experiences in sport.

In their development of a framework for planning sport programs that focused of the psychosocial development of youth, Petitpas, Cornelius, Van Raalte, and Jones (2005) suggest that one condition necessary for positive development is the presence of caring adults. They argue that caring adults, which they referred to as external assets, assist youth in developing skills that are transferable to domains other than sport. As stated by Petitpas, Giges, and Danish (1999), it is the quality of the relationships with influential adults that will have the greatest impact on the development of positive characteristics. In addition, Petitpas et al. (2005) state that adult-child interactions need to be sustained over time to maximize the opportunities of positive development. Similarly, Fraser-Thomas et al. (2005) proposed an applied sport-programming model highlighting the vital role of sport organizations in designing programs that develop healthier, more psychosocially competent people. The model outlined the critical role of coaches in implementing programs on a day-to-day basis.

Coaches have ongoing interactions with athletes and hence have the potential to significantly impact the development of youth (Conroy & Coatsworth, 2007). In a landmark study by Smith, Smoll, and Curtis (1979) 31 coaches were randomly assigned to either a 2-hour Coach Effectiveness Training (CET) session or a control group. The goal of the CET session was to instruct coaches on how to relate to children more effectively. Smith et al. (1979) found that athletes who played for trained coaches developed higher levels of self-esteem over the course of the season compared to athletes of untrained coaches. They also found that athletes of trained coaches rated their coach more positively and had a more positive perception of the coach-created interpersonal climate compared to athletes of the control group. These results are corroborated by Smoll, Smith, Barnett, and Everett (1993) and Smith and Smoll (1990) who also found evidence of increased self-esteem in athletes who practiced sport with trained coaches. These findings suggest that coach training can have a positive effect on the sport experience of the athlete.

Conroy and Coatsworth (2006) argue that training should be utilized to teach coaches how to promote positive development in athletes. As an intervention method, Conroy and Coatsworth (2006) developed the Penn State Coach Training Program; a program modeled after the CET program (Smith et al., 1979). The main purpose of the Penn State Training Program is to provide coaches with methods of incorporating positive personal development in their coaching practice to enhance the developmental experiences of the athlete. In an application of Penn State Training Program with a sample of 7 youth sport coaches, Coatsworth and Conroy (2006) found that trained coaches increased the self-esteem of females athletes compared to participants of

untrained coaches. This finding supports previous research (Smith et al., 1979; Smith et al., 1993; Smith & Smoll, 1990) and identifies various coach training interventions as an appropriate method of increasing the positive development of youth.

Another recent application of the CET program focuses on motivational climate. Duda and Balaguer (2007) describe motivational climate as an athlete's perception of the social environment as created by the coach. Similar to Achievement Goal Theory, motivational climates are categorized as either task or ego. A task climate promotes effort, mastery of skills, and achievement of personal standards while an ego climate is manifested through outperforming others and preferential treatment of higher skilled athletes (Smith, Cumming, & Smoll, 2008). Research on motivational climate suggests that a task climate is linked to positive experiences and outcomes and an ego climate relates to negative outcomes (see Duda & Balaguer, 2007 for a review). Given this proposition, Smith, Smoll, and Cumming (2007) presented 20 coaches with a 75-minute workshop on a Mastery Approach to Coaching (MAC). The purpose of this workshop was to provide coaches with information on how to create a task oriented climate. Their hypothesis was that an athlete-perceived task climate would reduce levels of anxiety compared to an ego climate. Their results show that MAC coach training did in fact lead to decreased anxiety levels in athletes. Alternatively, athletes who played for untrained coaches increased in anxiety as the season progressed. This supports the view that motivational climate coach intervention training can also serve an effective method of modifying athlete experience in sport.

Although programs designed with principles of positive youth development and motivational climate are worthwhile undertakings, issues of sustainability may limit their

potential (Lerner, 2002). Intervention training programs typically require financial

support and/or significant effort in planning the intervention prior to its implementation

in a program. Intervention programs are often developed from grants monies or private

agencies interested in contributing to the developmental experiences of young athletes.

However, once grants subside programs cease to operate which consequently limits the

applicability of these programs over time (Lerner, 2002). To mitigate this effect, Jensen,

Hoagwood, and Trickett (1999) suggest that research efforts and investments (both time

and money) should be directed at programs that are already in place.

Studies suggest that coaches learn through experience and interactions with other

coaches (Carter & Bloom, 2009; Erickson, Bruner, MacDonald, & Côté, 2008; Trudel &

Gilbert, 2006). In a study that interviewed 44 coaches on their sources of knowledge,

Erickson et al., (2008) found that 'by doing' and 'interacting with others coaches' were

the two most important sources of knowledge. Carter and Bloom (2009) interviewed six

university level coaches and found qualitative evidence that coaches rely on experience

and support from others in learning how to coach. These findings reinforce the notion

that coaches learn appropriate skills through experience and interactions with mentors

and suggests that formal coach training (i.e., certification programs) is not the most

salient method of coach learning. In addition, programs may lack the resources needed to

provide coaches with formal training and may choose to offer informal learning

opportunities such as coach meetings within the programs. Informal types of coach

learning that result from coaches interacting with each other are referred to as

communities of practice and are believed to be an effective source of knowledge for

coaches. More specifically, communities of practice reflect learning opportunities that

results from coaches interacting with each other over time. These interactions promote negotiation and knowledge sharing that positively impact coach behaviors (Culver & Trudel, 2008). Although many programs utilize methods of learning based on the principles of community of practice, investigations of the effectiveness of such methods have not been conducted. Given the sustainability issues of intervention programs (Jensen et al., 1999; Lerner, 2002) it is important to better understand how community of practice coach training programs impact the developmental experiences of youth in sport.

Purpose of the study

The purpose of this study was to determine if positive youth development coach training provided through programs resulted in increased reports of personal development in athletes compared to athletes in programs where coaches did not receive training. It was hypothesized that athletes in programs with coach training would score higher on the positive dimensions of personal development and score lower on negative experiences compared to athletes in programs where no training was provided. In addition, it was expected that coaches with training would create a more task-oriented environment than coaches with no training.

Methods

Participants

Two groups of participants were sampled for this study. First, program administrators from 10 different community sport programs were recruited. Program administrators were individuals in charge of overseeing a given program and provided information about the structure of the program.

The second group consisted of 109 male and female athletes (48.6% males; 51.4% females) selected within programs for which structure information was obtained. Athlete participants were between 9 and 17 years of age ($M = 13.0$, $SD = 1.3$) and represented the sports of basketball, dance, hockey, ringette, soccer, softball, and volleyball. On average, athletes had been participating in their sport for 5.7 years ($SD = 2.9$) and enrolled in the present program for 4 years ($SD = 3.0$).

Based on information collected from program administrators, participants were divided into two groups. The first group consisted of programs that offered informal positive youth development training to their coaches. A total of 41 athletes from four programs made up this group. The second group consisted of 68 athletes from six programs. Coaches in the second group did not receive any type of positive youth development training.

Data Collection

Program administrators completed a youth sport program structure survey to provide information about program operations. The survey was originally developed by Wilkes and Côté (2006) and collects information on programs structure and objectives, coaches and referees, athlete behaviors, and parent behaviors. Examples of items collected from the survey are the competition level of the program, the length of season, the number of hours of involvement per week, the required coaching certification, the development of positive values in youth, and opportunities for athletes and parents to act as coaches/referees (see Table 1 for demographics of programs). Of particular interest was the section that investigated life skills and character development training received by coaches and the methods by which coaches learned how to teach skills to athletes.

The first question determined if it was expected that coaches teach any life skills (i.e., leadership) to athletes during participation in the program. The second question asked if coach training about on how to use sport as a tool to enhance character development in athletes was used. The two questions were answered by Yes/No responses. If administrators answered that training was provided to coaches, they were asked to identify which method was use. Administrators answered by Yes/No responses to the following methods: reading published materials, attending life skills workshops, apprenticeship with experienced coach, observing delivery of life skills with athletes, observing other coaches who deliver life skills, in-house training sessions, and group feedback meetings. A follow-up discussion occurred with administrators of programs who stated that training was offered to understand the details of how training was conducted. These discussions determined that coach training occurred by two methods: at coach meetings and by mentorship with more experienced coaches. One program did require coaches to take a three hours course on how to interact with youth; however this course was not designed specifically for teaching life skills to children.

Athletes completed a demographic information survey and two questionnaires. Each athlete first completed a demographics survey which asked their age, gender, sport, program name, number of years in the sport, and number of years in the program. Next, athletes completed the Youth Experience Survey for Sport (YES-S; MacDonald, Deakin, Eys, & Côté, 2009); a 37-item measure that assesses positive and negative development on the five dimensions of personal and social skills, cognitive skills, goal setting, initiative, and negative experiences. Responses to each item are provided on a 4-point Likert scale. Reliability analyses of the dimensions ranged between .69 and .88. Finally,

the Motivational Climate Scale for Youth Sport (MCSYS; Smith et al., 2008) was used to determine if an athletes' perception of their environment was task or ego oriented. The MCSYS is a 12-item measure on which athletes respond to statement regarding their environment on a 5-point Likert scale. Six items relate to a task climate while 6 items exemplify an ego climate. Smith et al. (2008) found strong support for the factor structure of the MCSYS in a group of athletes between ages 9 and 14 years. Cronbach alpha scores for task and ego climates were .78 and .81 respectively.

Procedure

Program administrators were contacted via email or telephone. An explanation of the study's purpose was outlined along with data collection expectations for athletes and administrators. Administrators interested in the study were sent the program structure survey via email along with a letter of information and consent form. The survey was completed by the administrator on their own time and returned to the primary investigator either in person, via postal mail, or email. Completion of the program structure survey took approximately 30 minutes.

Program administrators granted permission to recruit athletes within the program. The primary researcher contacted coaches of the teams to discuss athlete participation in the study. In certain instances, administrators contacted the coaches directly to request their participation in the study. Once contact with coaches established, a meeting time was scheduled with the teams. The meeting occurred after a practice or game and informed athletes about the goals of the study and how they could be involved as participants. Materials for data collection (letter of information, consent form, questionnaires) were placed in an envelope and distributed to the athletes who agreed to

participate. Athletes either completed the questionnaires on location immediately

following their practice/game or completed them at home and returned the completed

documents after a subsequent practice or game. The time required to complete the

questionnaires was between 20 and 30 minutes.

Results

Demographic information of the programs appears in Table 1; programs ranged in

ages, gender, and competitive level. Coaches from trained and untrained programs were

similar in ages of athletes, length of season, and number of hours per week with athletes.

Required coach certification did not vary across programs with most requiring either a

level 1 or no certification.

Independent samples t-tests examined the differences in positive development

between athletes in programs where coaches participated in communities of practice

coach training and athletes in programs where coaches did not receive training. Since

multiple t-tests were conducted, a corrected alpha level of .006 was used for the analyses.

Results of the analyses between both groups are presented in Table 2.

The first analyses examined demographic differences between the two groups and

found that athletes in the trained ($M = 13.1$ years) and untrained groups ($M = 13.0$ years)

did not significantly differ in age. Athletes in programs without training ($M = 6.7$ years,

$SD = 2.6$) reported being involved in their sport for significantly more years than athletes

in programs where training ($M = 3.9$ years, $SD = 2.4$) took place ($t (104) = 5.37, p <$

.000). A similar result was found for total years in the present program with athletes of

untrained coaches ($M = 4.9$ years, $SD = 3.2$) reporting significantly more years of

involvement in the program that athletes of trained ($M = 2.5$ years, $SD = 2.0$) coaches (t (105) = 4.27, $p < .000$).

Further analyses investigated differences between groups on the developmental experiences of athletes measured by the YES-S. Five analyses were conducted using each subscale as the dependent variable. The first analysis investigated the construct of personal and social skill development. Athletes of the group with coach training reported a mean score of 3.1 out of 4 while the group coach without training had a mean score of 2.8 out of 4. The difference between the groups was statistically significant with a t (107) = 3.00, $p = .003$. This result indicates that positive youth development training provided to coaches did have a positive effect on the personal and social development of athletes.

Investigation of the remaining subscales of the YES-S (cognitive skills, goal setting, initiative, and negative experiences) found no significant differences between athletes in programs with or without training. Although no statistical differences were found with the adjusted alpha value, a marginal effect was found on the subscale of cognitive skills. Athletes in the trained group reported a mean score 2.3 while athletes of untrained coaches had a mean score of 1.9 (t (107) = 2.16, $p = .033$). This finding suggests that coach training has the potential to positively affect cognitive skill development however further investigation of such effects are needed to corroborate this claim.

Program	Sport	Age	# Coaches	Participants	Competition Level	Weeks Per Season	Hrs/Week	NCCP Required
Trained 1	Dance	14-16	1	Co-ed	Competitive/Recreational	28	3.5	None
Trained 2	Ringette	12-14	1	Girls	Recreation	26	2	Level 1
Trained 3	Basketball	9-16	1	Co-ed	Recreational	10	1	Level 1
Trained 4	Volleyball	11-14	4	Girls/Boys separate	Competitive	30	5.5	Level 1
Average:		**13.1**				**16.8**	**3.5**	
Untrained 1	Softball	12-14	1	Girls	Competitive	16	2	Level 2
Untrained 2	Softball	13-16	2	Girls	Competitive/Recreational	12	1.5	None
Untrained 3	Soccer	12-13	1	Co-ed	Recreational	14	2	None
Untrained 4	Soccer	14	1	Boys	Competitive	16	5	Level 3
Untrained 5	Soccer	12-14	4	Co-ed	Recreational	20	1	None
Untrained 6	Hockey	13-15	3	Co-ed	Recreational	22	1	None
Average:		**13.0**				**16.6**	**2.1**	

Table 1. Demographic information of program structures

The final set of analyses investigated differences on task and ego climates between both groups. Differences on task climates did not reach significance using the corrected alpha value but may be considered as marginal with a value of t (106) = 2.09, p = .039. No differences between both groups on ego climate were found.

	Trained	Untrained	p
Age	13.05	13.00	.854
Total years in sport	3.87	6.65	.000*
Total years in program	2.48	4.87	.000*
Personal and social skills	3.12	2.78	.003*
Cognitive skills	2.25	1.92	.033
Goal setting	3.08	2.95	.297
Initiative	3.59	3.41	.092
Negative experiences	1.46	1.34	.245
Task climate	4.34	4.06	.039
Ego Climate	1.81	1.79	.894

* Significant using adjusted p-value of .006

Table 2. Mean values between athletes from trained and untrained groups

Discussion

This study investigated the impact of informal coach training on reports of positive and negative youth development experiences and perceptions of motivational climate. Results demonstrate that coach training consistent with principle of the community of practice (Culver & Trudel, 2008) framework (i.e., coach interactions) increased reports of personal and social skill development in athletes compared to

athletes in programs without training. The other three positive dimensions (cognitive skills, goal setting, and initiative) and the negative dimension of personal development did not differ between groups. The first hypothesis of the study was partially supported since one aspect of personal development was higher for athletes of trained coaches. The second hypothesis, predicting that perceptions of task climate to be higher for athletes of trained coaches, was also partially supported as athletes in the group with training reported marginally higher rates of a task climate than the untrained group.

The finding of increased personal and social skills demonstrates that informal coach training is positively associated with the development of youth. The difference between both groups cannot be explained by age, years in the sport, years in the program, or other demographics variables for each program (Table 1). Past experience in the sport and number of years spent in the present program were higher for athletes of untrained coaches suggesting that these variables are not a factor related to increased personal and social skills. Other sources of coach training were similar between groups and cannot be considered as the primary reason why the trained group reported higher levels of personal and social skills. Although little is known about how to impact the development of youth (Conroy & Coatsworth, 2006); the present results suggest that coach training is positively related to youth experiences in sport.

Research on sources of learning shows that coaches do not only learn through structured certification programs but also through informal means (i.e., communities of practice; Culver & Trudel, 2008) such as interacting with others (Carter & Bloom, 2009; Cushion, Armour, & Jones, 2003; Trudel & Gilbert, 2006). Considering that coaches in the present sample learned positive youth development through methods consistent with

communities of practice principles (coach meetings, observation, and interactions with other coaches), our findings support the claim that informal sources of learning can be beneficial. In their review of coach education, Trudel and Gilbert (2006) report that informal sources of learning are typical for most coaches. This implies that addressing issues of positive development in meetings and through discussions with more experienced coaches provides coaches with much needed knowledge that ultimately translates into positive outcomes for youth. Coaches are aware that teaching principles of positive development is important; however many report lacking appropriate information on how to do so (McCallister, Blinde, & Weiss, 2000). Our results suggest that this information can efficiently be transmitted to coaches through coach meetings and by working together within the program.

Present results are also consistent with Petitpas and colleagues (2005) and Fraser-Thomas et al.'s (2005) suggestions who argue that caring adults play an important role in youth sport programs that aim to promote the development of positive psychosocial skills in youth. Although intervention programs that provide coaches with formal training focused on personal development or the creation of a task-oriented climate (i.e., Conroy & Coatsworth, 2006; Smith et al., 2007) have been successful, we propose that informal methods of coach training outlined in this study are an effective method of teaching youth important skills. It is unclear if the results of the present study are similar in magnitude to the intervention studies outlined above, which creates a need for future research to quantify the strength of formal training and informal coach training on youth development.

Findings from this study are also interesting from a resource and sustainability perspective. Programs developed for positive development purposes often rely on university-based interventions of funding agencies to support their operations. Such resources may not be readily available to programs which limit the applicability of such interventions (Lerner, 2002). The programs in this study did not rely on external sources of coach training suggesting that no additional cost were needed to instruct coaches about positive development principles. Although only one dimension of positive development increased in athletes, it is reasonable to believe that the methods of training used in the programs are appropriate. Minor modifications to the in-house coach training programs could create an even greater impact on the personal development of youth. For example, programs should consider incorporating regular discussion about positive development in their coach meetings and discuss specific issues of positive development such as initiative and goal setting with their coaches. In addition, promoting an environment that encourages coaches to work together and exchange ideas may also foster the positive development of athletes. However, the minimal amount of time needed to incorporate topics of positive development is currently unknown.

Although the informal methods of coach training utilized in this study increased athlete reports of personal and social skill development, shortcomings exist. This is exemplified by a lack of differences on other domains of the YES-S and on perceptions of motivational climate. Reports for cognitive skills development and task climate are deemed as marginally significant; however there is not sufficient evidence to demonstrate that the training provided to coaches could increase such experiences. Athletes of trained coaches showed non-significant increases on the other positive dimensions of the YES-S

but also slightly higher reports of negative experiences and ego climates. Therefore, it would be important for programs that wish to incorporate informal sources of coach positive youth development training to reflect on the content and transmission of these programs before proceeding. A further recommendation is that programs engage in constant evaluation and research to determine if the methods in place have the desired effects on children (Petitpas et al., 2005). The YES-S, utilized in this study to measure positive development, is considered a valuable instrument to achieve this goal.

In conclusion, although this study identified that youth experiences can be positively affected by informal coach training, future research needs to investigate methods of refining coach training while minimizing additional costs and resources for programs. Present results suggest that any amount of training is better than no training to develop positive skills in youth, creating opportunities for programs that do not have access to additional resources to positively affect youth in their program. However, considering the cross-sectional nature of this study, it would be of interest to determine if coach training causes increases in personal development. Longitudinal designs evaluating the impact of coach training interventions would strengthen our understanding of how types of coach training impact the positive personal development of youth. Considering the number of children that participate in structured sport, incorporating community of practice networks into a program could have large scale effects on a significant number of youth.

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Chapter 5: General Discussion, Summary, and Conclusions

The framework of developmental systems theory (Ford & Lerner, 1992; Lerner, 2002) guided the development of the studies presented in previous sections. Developmental systems theory states that individual and environmental factors need to be considered to fully understand how individuals develop across structured settings. Since sport has been proposed as an ideal setting to promote positive personal development (Fraser-Thomas, Côté, & Deakin, 2005) and is the most popular structured activity undertaken by youth (Mahoney, Larson, Eccles, & Lord, 2005), its effects on positive development were considered. Prior to investigation of individual (Study 2) and environmental (Study 3) factors related to the development of sport participants, a psychometrically valid measure of positive development in sport was proposed (Study 1). Combined, the three studies presented in this dissertation enhance our understanding of the role of structured sports as an activity that can improve the positive development of youth.

Instrumentation

Although a growing amount of research focuses on the positive development of youth in sport, a psychometrically tested instrument had yet to be developed (Gould & Carson, 2008; Holt & Jones, 2007). Study 1 addressed this gap by investigating the psychometric properties of the Youth Experience Survey 2.0 (YES; Hansen & Larson, 2005) in a sample of sport participants. The YES 2.0 was originally designed to assess developmental experiences of youth aged 15 and over on seven life domains across a range of structured activities (i.e., arts, faith-based groups, sports). Hansen and Larson (2002) state that the generality of the instrument may result in context-specific issues

being lost, suggesting that modifications to the instrument could increase the applicability of the instrument to certain domains. Psychometric investigation of a modified version of the YES 2.0 used in a sample of sport participants failed to produce strong support for the factor structure proposed by Hansen and Larson (2005). Subsequent exploratory analyses resulted in a revised scale named the Youth Experience Survey for Sport (YES-S). The YES-S assesses personal development of sport participants on the five dimensions of personal and social skills, cognitive skills, goal setting, initiative, and negative experiences. The development of the YES-S is an important contribution to the field and to the remainder of this dissertation as it provides an instrument to assess how individual (Study 2) and environmental (Study 3) factors affect personal development.

Individual Factors

The second study investigated the relationship between perceptions of enjoyment, motivational climate, and positive personal development in team sport athletes. Results demonstrated that different sources of enjoyment and motivational climate are linked to personal development outcomes. Positive reports of affiliation with peers, effort expenditure, self-referenced competency, and task climate were the most important predictors of personal development in young athletes. These findings add to our understanding of the role of peers and demonstrate that peers are not only an important source of continued participation (Smith, 2007; Weiss & Williams, 2004) but are also a key contributor to increased personal development in youth. Results also reinforce previous research on motivational climate which has associated task climate with positive outcomes of sport participation (Duda & Balaguer, 2007). Alternatively, negative experiences in youth sport were predicted by an ego oriented motivational climate and

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high reports of other-referenced competency. Combined, results of this study are of interest to youth sport program administrators who wish to incorporate aspects of positive development in their sport setting. By emphasizing positive peer relationships and a task climate, programs should be better equipped to promote the positive development of participants. Considering that the percentage of athletes who reach elite levels of participation lies well below 1% (Danish 2002), it is important to identify individual variables that result in positive experiences and promote the development of skills applicable outside of the sport domain.

Environmental Factors

Researchers have suggested the importance of investigating environmental factors to get a greater understanding of an individual's development within a given context (Ford & Lerner, 1992; Holt & Jones, 2007; Schulenberg, 2006). To address this issue, study 3 compared reports of positive development and motivational climate between athletes who played for coaches who received coach training and athletes of coaches who did not receive training. It was hypothesized that coaches with training would create an environment which would increase the personal development of participants. In addition, it was expected that coaches with training would create a task-oriented environment. Results showed that providing coaches with in-program positive youth development training increases the development of personal and social skills in athletes. However, increases on other positive dimensions, reductions in reports of negative experiences, and differences in motivational climate were not found between both groups. Results of study 3 suggest that coach training is important; however it would be of interest to determine the amount and type of training necessary to provide athletes with higher rates

of personal development. Nonetheless, it appears that any amount of personal development coach training can positively affect the development of athletes.

Implications

There are a number of implications that stem from the findings of this dissertation. The instrument presented in the first study (Youth Experience Survey for Sport; YES-S) changes the way positive youth development through sport is measured. Until this point, measurement relied on instruments designed for a range of structured activities, and the applicability of these instruments with sport participants was unknown. It is believed that the YES-S is a welcomed addition to the growing body of research devoted to increased personal development of sport participants. A further implication of the instrument is its ability to measure positive development in youth aged 10 and above. The Youth Experience Survey 2.0 (Hansen & Larson, 2005) was developed for adolescents aged 15 and above. The expanded age range of the YES-S opens the door to research with younger athletes which may identify how sport participation affects the development of younger athletes. Development models of sport (i.e., Côté, 1999) suggest that youth engage in sports from the age of 6 years, creating a need for researchers to investigate how sports affect development prior to age 15. Future research may wish to modify the YES-S to measure positive development with even younger children. This would allow for a broader understanding of the effects of sport participation on development.

Findings also support the developmental systems theory (Ford & Lerner, 1992) framework by demonstrating that individual and environmental factors are important to consider for a complete understanding of development through sport. However, studies

of positive development in sport often overlook the impact of the environment on development (Holt & Jones, 2007). Present results suggest that factors of enjoyment, motivational climate, and the environment created by the coach are contributors to positive development. Therefore, future investigation of the development of youth through sport should consider both individual and environmental factors.

Studies 2 and 3 support the contention that structured sports are a setting capable of promoting positive development in youth (Fraser-Thomas, Côté, & Deakin, 2005). These results have implications for youth sport program administrators. Programs designed to foster positive youth development should provide an appropriate context, surround youth with caring adults, teach skills relevant to situations outside sport, and grow from on-going evaluation (Petitpas, Cornelius, Van Raalte, & Jones, 2005). This dissertation reinforces these four conditions and outline methods of doing so. The appropriate context identified in the second study suggests that creating a highly enjoyable and task oriented climate is ideal for positive development. Surrounding youth with caring adults and teaching youth skills relevant to positive development is exemplified by teaching coaches principle of positive development and promoting the inclusion of these principles into their coaching practice. Finally, the instrument developed in study 1 provides programs with a method of evaluating positive development in their sport setting by measuring the experiences that youth face through participation. This allows programs to maintain on-going research within their sporting environment. The application of these findings can prove useful in creating an environment which positively affects the development of youth.

Limitations and Future Directions

Although the findings identified individual and environmental factors as important to the development of youth, a limitation of the present studies is that the methods used to analyze the effects of each level did not allow for simultaneous investigation of factors. Youth sport represents a context in which athletes are nested within programs, meaning that there may be something unique about the environment which contributes to a child's experience. Hierarchical linear modeling (HLM; Raudenbush & Byrk, 2002) techniques allow for investigation of how different levels of data (in this case individual and program levels) influence development. Although it is appropriate to use HLM in the sport domain, the sample of the present study was not sufficient to justify its use. Paterson and Goldstein (1991) suggest that 25 individuals nested within 25 contexts are necessary to conduct an HLM analysis with sufficient power. Future research may wish to consider these guidelines and attempt to sample an adequate number of individuals and programs to complete such analyses as this would provide relevant information about how individual and environmental factors interact to affect development.

Concurrent to the analytical processes used in this dissertation, it is important to acknowledge the limitations of the design used. Studies two and three used cross-sectional designs and therefore causation between the variables of enjoyment, motivational climate, coach training, and positive personal development cannot be implied. Future research should seek to determine if these predictors *lead* to positive personal development. This could be achieved by longitudinally following athletes and collecting multiple data points over the course of sport participation to determine if causal

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relationships exist between the variables. In addition, it would be of interest to explore

alternative relationships between these variables. Since it was shown that coach training

is related to positive development, it would be worthwhile to examine if varying amounts

of coach training moderate the relationship between enjoyment and positive development

and between motivational climate and personal development. Alternatively, task and ego

motivational climates could be used to explore mediation models between enjoyment and

positive personal development.

Another important future direction from these studies is to investigate the factor

structure of the YES-S. The proposed factor structure contains five dimensions, however

further validation of the instrument is necessary. Given the liberal inclusion criteria used

in the exploratory analyses, it is possible that the YES-S could be shortened to fewer than

37-items. Considering that children as young as age 9 participated in the present studies,

combined with its use with other questionnaires, a shorter instrument that measures

positive youth development in sport would be welcomed. It would also be of interest to

determine if the YES-S, similar to the YES 2.0, is applicable to other structured activities

such as arts and faith-based groups.

Finally, future research should also consider how other variables impact the

positive development of youth. The present studies investigated enjoyment, motivational

climate, and coach training however a range of other variables can potentially impact

development. Other variables outlined by Weiss and Williams (2004) that have been

shown to affect participation could be investigated. Examples of such variables are social

recognition, approval from parents/coach, and social status. Investigation of these

variables would complement the present findings and strengthen our understanding of the factors that result in positive and negative development through sport.

Conclusion

There are two major contributions that can be taken from the results of this dissertation. First, it is now possible to measure positive youth development with an instrument designed specifically with the sport domain in mind. The development of this instrument is important as it is the first questionnaire to do so. Second, results of the second and third study demonstrate that it is possible for youth sport participants to learn positive development skills and that both individuals and environmental factors should be considered when developing a youth sport program. Although future research should continue to build on the findings of this dissertation and explore other factors that can increase the positive personal development of sport participants, it is clear that enjoyment, motivational climate, and coach training are important factors related to positive experiences in youth sport.

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Appendix A

Letter of Information – Athletes

School of Kinesiology and Health Studies
QUEEN'S UNIVERSITY
Physical Education Centre
Kingston, Ontario, Canada
K7L 3N6

Letter of Information - Athlete Participants

The purpose of the present study is to gather information about children's experiences in sports. The goal is to understand different experiences that children face in youth sport programs and understand how children develop through sport.

The researcher for this study is Dany MacDonald from the School of Kinesiology and Health Studies at Queen's University. This project is part of research study for his Doctoral Thesis. Participation in this study requires you to fill out questionnaires, which take approximately 30 minutes to complete. Some of the questions will ask you about negative peer influences (e.g., bullying, drinking, drugs), family finances, and/or other forms of discrimination that you may or may not have experienced in sport. You have the right to not answer any questions that you are uncomfortable with and are invited to contact Telehealth Ontario at 1-866-797-0000 if any of these questions trigger emotional upset. As a reminder your participation in this study is completely voluntary and you can decide to stop participating at any point without explanation or consequences. Should the child decide to stop answering questions, information collected to that point will be immediately destroyed. Although there is no financial compensation it is anticipated that your information will help us to better understand how children develop, optimally, through sport.

All the information collected will remain confidential to Dany MacDonald and his co-researchers throughout the entire study and information will be kept in a locked filing cabinet. At no point will participant's information be shared with others. Once the information has been completely collected, results will be addressed as a group, ensuring confidentiality to all participants in the project.

There are no known physical, psychological, economic or social risks associated with participation in this study.

If you or your child would like further information about the study, or have additional questions or concerns, please feel free to contact individuals listed below. You may also contact Dr. Joan Stevenson, chairperson of the Queen's University General Research Ethics Board by phone at 613-533-6288 or by e-mail at: stevensj@queensu.ca.

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Appendix B

Consent Form - Athletes

School of Kinesiology and Health Studies
QUEEN'S UNIVERSITY
Physical Education Centre
Kingston, Ontario, Canada
K7L 3N6

PARTICIPANT INFORMED CONSENT FORM – ATHLETE PARTICIPANT
Understanding Experiences of Youth Sport Participants

I have read the letter of information and understand the purpose of the present research study.

I acknowledge that all questions I have about this project have been answered to my satisfaction. I am also aware that participation in the present study is completely voluntary and I may decide to stop participating at any point without further questioning. I understand that there is potential for some emotional upset and that any information I provide to the researchers will be confidential. Data will be grouped to ensure anonymity. I am aware that I may contact any of the primary researchers or the General Ethics Board at Queen's University if I have any questions, comments, concerns or complaints about participation in this study.

I consent to participate in this research project.

_____

| **Participant Name** | **Signature** | **Date** |

_____

| **Parent/Guardian** | **Signature** | **Date** |

If you have any comments, questions or complaints with regards to this study, please contact the researchers or the General Research Ethics Board at the address below.

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Thank you for participating in this study!

Appendix C

The Youth Experience Survey 2.0 – Revised

The Youth Experiences Survey (YES) 2.0

Instructions: Based on your _**current**_ or _**recent**_ involvement please rate whether you have had the following experiences in [name of activity]

Your Experiences In…

Sport: _____

		Not at all	A little	Quite a Bit	Yes Definitely
1.	Tried doing new things.	1	2	3	4
2.	Tried a new way of acting around people	1	2	3	4
3.	I do things here I don't get to do anywhere else	1	2	3	4
4.	Started thinking more about my future because of this activity	1	2	3	4
5.	This activity got me thinking about who I am as a person	1	2	3	4
6.	This activity has been a positive experience in my life	1	2	3	4
7.	I set goals for myself in this activity	1	2	3	4
8.	Learned to find ways to reach my goals	1	2	3	4
9.	Learned to consider challenges when making future plans	1	2	3	4
10.	I put all my energy into this activity	1	2	3	4
11.	Learned to push myself	1	2	3	4
12.	Learned to focus my attention	1	2	3	4
13.	Observed how others solved problems and learned from them	1	2	3	4
14.	Learned about developing plans for solving a problem	1	2	3	4
15.	Used my imagination to solve a problem	1	2	3	4
16.	Learned about organizing time and not putting things off	1	2	3	4
17.	Learned about setting priorities	1	2	3	4
18.	Practiced self discipline	1	2	3	4
19.	Learned about controlling my temper	1	2	3	4
20.	Became better at dealing with fear and anxiety	1	2	3	4
21.	Became better at handling stress	1	2	3	4
22.	Learned that my emotions affect how I perform	1	2	3	4
23.	Improved academic skills (reading, writing, math, etc.)	1	2	3	4
24.	Improved skills for finding information	1	2	3	4
25.	Improved computer/internet skills	1	2	3	4
26.	Improved creative skills	1	2	3	4
27.	Improved communication skills	1	2	3	4
28.	Improved athletic or physical skills	1	2	3	4
29.	Made friends with someone of the opposite gender	1	2	3	4
30.	Learned I had a lot in common with people from different backgrounds	1	2	3	4
31.	Got to know someone from a different ethnic group	1	2	3	4
32.	Made a new friend	1	2	3	4
33.	Learned about helping others	1	2	3	4
34.	I was able to impact my school or community for the	1	2	3	4

	better				
35.	Learned to stand up for something I believed was morally right	1	2	3	4
36.	We discussed morals and values	1	2	3	4
37.	Learned that working together requires some compromising	1	2	3	4
38.	Became better at sharing responsibility	1	2	3	4
39.	Learned to be patient with other group members	1	2	3	4
40.	Learned how my emotions and attitude affect others in the group	1	2	3	4
41.	Learned that it is not necessary to like people in order to work with them	1	2	3	4
42.	I became better at giving feedback	1	2	3	4
43.	I became better at taking feedback	1	2	3	4
44.	Learned about the challenges of being a leader	1	2	3	4
45.	Others in this activity counted on me	1	2	3	4
46.	Had an opportunity to lead a group of peers	1	2	3	4
47.	This activity improved my relationship with my parents/guardians	1	2	3	4
48.	I had good conversations with my parents/guardians because of this activity	1	2	3	4
49.	Got to know people in the community	1	2	3	4
50.	Came to feel more supported by the community	1	2	3	4
51.	This activity opened up job opportunities for me	1	2	3	4
52.	This activity helped prepare me for college or high school	1	2	3	4
53.	This activity increased my desire to stay in school	1	2	3	4
54.	Demands were so great that I didn't get homework done	1	2	3	4
55.	This activity interfered with doing things with family	1	2	3	4
56.	This activity has stressed me out	1	2	3	4
57.	Felt pressured by peers to do something I didn't want to do	1	2	3	4
58.	I did something in this activity that was morally wrong	1	2	3	4
59.	I was laughed at by peers for something I did in this activity	1	2	3	4
60.	Youth in this activity got me into drinking alcohol or using drugs	1	2	3	4
61.	Felt like I didn't belong in this activity	1	2	3	4
62.	I felt left out	1	2	3	4
63.	There were cliques in this activity	1	2	3	4
64.	I got stuck doing more than my fair share	1	2	3	4
65.	Other youth in this activity made inappropriate sexual comments, jokes, or gestures	1	2	3	4
66.	Was treated differently because of my gender, race, ethnicity, disability, or sexual orientation	1	2	3	4
67.	Adult leaders in this activity were controlling and manipulative	1	2	3	4
68.	Adult leaders scared me	1	2	3	4
69.	Adult leaders made personal comments that made me mad	1	2	3	4
70.	Adult leaders encouraged me to do something I believed morally wrong	1	2	3	4

Appendix D

The Youth Experience Survey for Sport

The Youth Experience Survey for Sport (YES-S)

Your Experience in the Sport of: _____	Not at all	A little	Quite a bit	Yes definitely
1. I became better at giving feedback	1	2	3	4
2. I became better at taking feedback	1	2	3	4
3. Became better at sharing responsibility	1	2	3	4
4. Learned that working together requires some compromising	1	2	3	4
5. Learned to be patient with other group members	1	2	3	4
6. Others in this activity counted on me	1	2	3	4
7. Learned about the challenges of being a leader	1	2	3	4
8. Learned about helping others	1	2	3	4
9. Learned that it is not necessary to like people in order to work with them	1	2	3	4
10. Made a new friend	1	2	3	4
11. Got to know people in the community	1	2	3	4
12. Learned I had a lot in common with people from different backgrounds	1	2	3	4
13. I had good conversations with my parents/guardians because of this activity	1	2	3	4
14. Learned how my emotions and attitude affect others in the group	1	2	3	4
15. Improved skills for finding information	1	2	3	4
16. Improved academic skills (reading, writing, math, etc.)	1	2	3	4
17. Improved computer/internet skills	1	2	3	4
18. Improved creative skills	1	2	3	4
19. This activity increased my desire to stay in school	1	2	3	4
20. Learned to find ways to reach my goals	1	2	3	4
21. I set goals for myself in this activity	1	2	3	4
22. Learned to consider challenges when making future plans	1	2	3	4
23. Observed how others solved problems and learned from them	1	2	3	4
24. Learned to push myself	1	2	3	4
25. Learned to focus my attention	1	2	3	4
26. I put all my energy into this activity	1	2	3	4
27. Improved athletic or physical skills	1	2	3	4
28. Was treated differently because of my gender, race, ethnicity, disability, or sexual orientation	1	2	3	4
29. Adult leaders in this activity were controlling and manipulative	1	2	3	4
30. Adult leaders scared me	1	2	3	4
31. Adult leaders made personal comments that made me mad	1	2	3	4
32. Adult leaders encouraged me to do something I believed morally wrong	1	2	3	4
33. Other youth in this activity made inappropriate sexual comments, jokes, or gestures	1	2	3	4
34. Youth in this activity got me into drinking alcohol or using drugs	1	2	3	4
35. I got stuck doing more than my fair share	1	2	3	4
36. There were cliques in this activity	1	2	3	4
37. This activity has stressed me out	1	2	3	4

Appendix E

Motivational Climate Scale for Youth Sport

Motivational Climate Scale for Youth Sports

Here are some statements about what your current team is like. Please read each one and circle the number that is most correct. If there was more than one coach on your team, the questions are about the coach that you spend most of your time with.

---

1. Winning games is the most important thing for the coach.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

2. The coach made players feel good when they improved a skill.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

3. The coach spent less time with the players that weren't as good.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

4. The coach encouraged us to learn new skills.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

5. The coach told us which players on the team were the best.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

6. The coach told players to help each other get better.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

7. The coach told us that trying our best was the most important thing.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

8. The coach paid most attention to the best players.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

9. Coach said that teammates should help each other improve their skills.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

10. Players were taken out of the game if they made a mistake.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

11. The coach said that all of us were important to the team's success.

1	2	3	4	5
Not at all true		Somewhat True		Very True

---

12. Coach told us to try to be better than our teammates.

1	2	3	4	5
Not at all true		Somewhat True		Very True

Appendix F

Sources of Enjoyment in Youth Sport Questionnaire

Sources of Enjoyment in Youth Sport Questionnaire

Directions: An athlete may enjoy several things about sports. Enjoyment can be thought of as experiences or events that lead to positive feelings of pleasure, liking, and fun. Please think about your entire experience in sport: the competitions, practices, times away from your sport environment, and your experiences with other people involved in your sport participation. Think about not only your present experience, but your experience in sports overall, then answer the following questions. There are no right or wrong answers, so please respond honestly.

Please indicate your answer to the statement by circling the number that follows each item (1= not at all; 2= a little; 3= not sure; 4= yes; 5= very much).

During the times when I most enjoy sport, I usually experience that enjoyment from…

	Not at all	A little	Not sure	Yes	Very Much
1. Playing up to my potential.	1	2	3	4	5
2. Working hard in practice.	1	2	3	4	5
3. Improvement of my performance based on my ability to outperform others.	1	2	3	4	5
4. Being with the friends on my team.	1	2	3	4	5
5. Doing skills other kids my age cannot do.	1	2	3	4	5
6. The feeling of team spirit and togetherness I feel from being on a team.	1	2	3	4	5
7. Getting support and encouragement from my teammates.	1	2	3	4	5
8. Participating in a close game, meet, or competition.	1	2	3	4	5
9. Participating in and finishing a difficult practice.	1	2	3	4	5
10. Making new friends in my sport.	1	2	3	4	5
11. Doing things with my teammates away from practice or competition.	1	2	3	4	5
12. Being known by others for being an athlete.	1	2	3	4	5
13. Playing hard during competition.	1	2	3	4	5
14. Improvement of performance based on how I've done in the past.	1	2	3	4	5
15. Hearing the crowd cheer during a close game, match, race, or competition.	1	2	3	4	5
16. Showing that I am better than others who play my sport.	1	2	3	4	5
17. Getting encouragement from my parent(s).	1	2	3	4	5
18. Being better in my sport than other athletes my age or in my league.	1	2	3	4	5
19. Being recognized by others because I participate in sport.	1	2	3	4	5
20. Feeling exhausted after a practice or competition.	1	2	3	4	5
21. Playing well compared to how I've played in the past.	1	2	3	4	5
22. The thrill of competition.	1	2	3	4	5
23. Getting support from my parents for playing my sport.	1	2	3	4	5
24. The excitement of competition.	1	2	3	4	5
25. Having my parent(s) watch me compete.	1	2	3	4	5
26. Giving a lot of effort in practice or competition.	1	2	3	4	5
27. Achieving personal goals I set for myself based on my own performances.	1	2	3	4	5
28. Having my parents pleased with my performance no matter what.	1	2	3	4	5

Appendix G

Letter of Information – Programs

Letter of Information – Program Administrators

The purpose of the present study is to gather information about children's experiences in sports. The goal is to understand different experiences that children face in youth sport programs and understand how children develop through sport.

The researcher for this study is Dany MacDonald from the School of Kinesiology and Health Studies at Queen's University. This project is part of a research study for his Doctoral Thesis. Participation in this study requires you to fill out one survey questionnaire, which takes approximately 30 minutes to complete. Your participation in this study is completely voluntary and you can decide to stop participating at any point without explanation or consequences. Should the child decide to stop answering questions, information collected to that point will be immediately destroyed. Although there is no financial compensation it is anticipated that your information will help us to better understand how children develop, optimally, through sport.

All the information collected will remain confidential to Dany MacDonald and his co-researchers throughout the entire study and information will be kept in a locked filing cabinet. At no point will participant's information be shared with others. Once the information has been completely collected, results will be addressed as a group, ensuring confidentiality to all participants in the project.

There are no known physical, psychological, economic or social risks associated with participation in this study.

If you or would like further information about the study, or have additional questions or concerns, please feel free to contact individuals listed below. You may also contact Dr. Joan Stevenson, chairperson of the Queen's University General Research Ethics Board by phone at 613-533-6288 or by e-mail at: stevensj@queensu.ca.

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Appendix H

Consent Form – Programs

School of Kinesiology and Health Studies
QUEEN'S UNIVERSITY
Physical Education Centre
Kingston, Ontario, Canada
K7L 3N6

PARTICIPANT INFORMED CONSENT FORM – PROGRAM ADMINISTRATORS
Understanding Experiences of Youth Sport Participants

I have read the letter of information and understand the purpose of the present research study.

I acknowledge that all questions I have about this project have been answered to my satisfaction. I am also aware that participation in the present study is completely voluntary and I may decide to stop participating at any point without further questioning. I have been told that there are no physical, psychological, economic, or social risks associated with participation, and that any information I provide to the researchers will be confidential. Data will be grouped to ensure anonymity. I am aware that I may contact any of the primary researchers or the General Ethics Board at Queen's University if I have any questions, comments, concerns or complaints about participation in this study.

I consent to participate in this research project.

Participant Name	**Signature**	**Date**

If you have any comments, questions or complaints with regards to this study, please contact the researchers or the General Research Ethics Board at the address below.

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Thank you for participating in this study!

Appendix I

Athlete Demographic Survey

Participant information sheet

Name: _____

Date of birth: _____
  (MM / DD / YYYY)

Gender (circle one): M F

Sport: _____

Name of current coach: _____

Number of years in present sport: _____ year(s)

Name of sport program: _____

Number of years in present sport program: _____ year(s)

Appendix J

Youth Sport Program Structure Survey

Youth Sport Program Structure

Introduction

The purpose of this survey is to collect information on the delivery of a youth sport program as well as its structure. The survey should take about 30 minutes to complete and will address questions about i) structures and objectives, ii) coaches and referees, iii) athletes, and iv) parents. Please remember that there are no right or wrong answers to any of the questions, the goal is simply to understand how your program functions. All answers provided will remain confidential and will not be disclosed to third party individuals.

As a program director/coordinator, it is possible that multiple sub-programs (i.e. multiple sports, multiple ages) are under your responsibility. For the purpose of this questionnaire, we would like you to focus on one program for one age group. Multiple programs require multiple questionnaires to be completed.

Name of the program: _____

Sport and level: _____

Age group: _____

Participants: program   [_] Boys only   [_] Girls only   [_] Co-ed

Type of program: [_] Recreational   [_] Competitive

Resource person: _____

Contact info: Telephone: _____

                 E-mail: _____

I. Structure and Objectives

1- Approximately how many participants take part in your program? _____ participants

2- For team sports, how many teams are there in the program?   _____ teams

3- What is the maximum number of participants that can take part in the program? _____

4- What are the registration fees for one youth to play one season? $_____ per season

5- Does the program have any funding (other than registration fees) to help maintain operation cost? If so, where does it come from and what value is it?

      Yes   [_]   No   [_]

      If Yes: Source: _____ $_____ value

6- Does your organization offer any rebates for families that enroll more than one child?

      Yes [_]   No [_]

7- Are subsidies provided for youth who cannot afford to pay the registration fees?

      Yes [_]   No [_]

8- What is the start date of your program?   _____

9- What is the end date of your program?   _____

10- On average how many hours per week are devoted to practice?   _____ hrs/wk

11- On average, how many games/competitions (league and exhibition) per season do a team play?
       _____ games/competitions

12- On average, how many league organized tournaments do athletes compete in per year?
       _____ tournaments

13- Are there playoffs at the end of each season?   Yes [_]   No [_]

14- Is there a season ending tournament to end each season?   Yes [_]   No [_]

15- Does your organization keep official standings of teams/players in the league?
       Yes [_] No [_]

16- If playoffs occur, which statement best represents your program?

All team in the program play in playoffs   [_]

About 75% of teams make playoffs   [_]

About 50% of teams make playoffs   [_]

About 25% of teams make the playoffs   [_]

Less than 25% of teams make playoffs   [_]

Not applicable   [_]

17- Over the course of the program, what percentage of the times are…

	75-100%	50-74%	<50%	Don't know
Practices held at same venue	[_]	[_]	[_]	[_]
Practices held on same day	[_]	[_]	[_]	[_]
Games held at same venue	[_]	[_]	[_]	[_]
Games held on same day	[_]	[_]	[_]	[_]

18- Do all athletes registered in the program have equal opportunities to participate (check one that applies to your program)?

Equal opportunities enforced by program   [_]

Guaranteed minimum playing time (i.e., 25%)   [_]

No playing guidelines are specified   [_]

19- Can players/athletes who wish to play in your program be excluded from participating for any of the following reasons (check all that apply)?

	Yes	No
Lives outside of geographical boundaries	[_]	[_]
Behaviour/Attitude	[_]	[_]
Skill Level	[_]	[_]
Playing on another team (i.e., club team)	[_]	[_]

20- Does your organization have any of the following policies to ensure that competition between athletes or teams is equal?

	Yes	No	N/A
Random selection of teams	[_]	[_]	[_]
Adjusted/Modified rules (i.e., lower basketball rims)	[_]	[_]	[_]
Mercy Rules (i.e. 7 runs per inning in baseball)	[_]	[_]	[_]
Modified Rules to assist teams that are losing	[_]	[_]	[_]
Shuffling teams midseason to ensure fair competition	[_]	[_]	[_]
League Draft	[_]	[_]	[_]
Change teams weekly/monthly basis	[_]	[_]	[_]

21- From the list of objectives that an organization may have, please rate how important each of the following are within your program (*VI = Very Important; SI = Somewhat Important; NI = Not important*). If an objective is not applicable to your program, check *N/A*.

	VI	*SI*	*NI*
N/A			
Developing [sport] skills	[__] [__]	[__]	[__]
Enhancing physical fitness	[__] [__]	[__]	[__]
Developing national and provincial level athletes	[__] [__]	[__]	[__]
Assist the character development of athletes	[__] [__]	[__]	[__]
Increase self confidence	[__] [__]	[__]	[__]
Promote good sportsmanship	[__] [__]	[__]	[__]
Winning	[__] [__]	[__]	[__]
Develop leadership skills	[__] [__]	[__]	[__]
Provide opportunities for peer interaction	[__] [__]	[__]	[__]
Other, specify: _____	[__] [__]	[__]	[__]
_____	[__] [__]	[__]	[__]

Mission Statement:

22- Does your organization have a documented mission statement?

Yes [_]   No [_]

23- If available, could you please write down or **attach** a copy of your mission statement?

_____
_____
_____
_____

II. Coaches and Referees

1- Do coaches typically have a background in:

	Yes	No	Don't know
Playing sport at a high level (i.e., University)	[_]	[_]	[_]
Teaching children	[_]	[_]	[_]

2- Is National Coaching Certification Program (NCCP) certification required to coach athletes of the program?

Yes [_]   No [_]

3- If NCCP certification is required, what is the minimum level required? _____   N/A [_]

4- If no NCCP is required, what proportion of teams has a certified coach? _____ %

5- Are potential coaches required to go through the following screening procedures?

	Yes	No
Criminal Reference Check	[_]	[_]
References Check	[_]	[_]
Interview	[_]	[_]
First Aid	[_]	[_]
Apprenticeship (assistant coach before becoming a head coach)	[_]	[_]

6- Do you evaluate coaches in the program with any of the following?

	Yes	No
Athletes' informal Evaluations	[_]	[_]
Parents' informal Evaluations	[_]	[_]
Organizational Evaluations/Observations	[_]	[_]
Athletes' formal Evaluations	[_]	[_]
Parents' formal Evaluations	[_]	[_]
Win-Loss Record	[_]	[_]
Formal Coach Interviews	[_]	[_]
Informal Coach Interviews	[_]	[_]
No evaluations take place	[_]	[_]

7- Does your organization have written policies or code of conducts to deal with negative behaviours that a coach or referee may engage in during practice, games or away from the competition venue? These policies could range from sexual abuse/harassment policies to policies regarding yelling during games?

Written [_]   Agreed on/not written [_]

	Yes	No
Practice:	[_]	[_]
Games:	[_]	[_]
Away from program:	[_]	[_]

If written codes of conduct for coaches are available, **attach if possible**.

8- Does your organization offer specific training opportunities (other than NCCP) to coaches concerning how to coach children?

Yes [_]   No [_]   If yes, Name of training: _____

9- Must all coaches take part in the program?   N/A [ ] Yes [ ]   No [ ]

10- After completing the program are coaches required to take formal refresher or recertification courses?

N/A [ ] Yes [ ] No [ ]   If **yes**, how often? _____

11- If training is available, are the following topics addressed in the coaching training program (check all that apply)?

	Yes	No
How to teach sport specific skills appropriately [i.e. Passing]	[_]	[_]
How to develop practice outlines	[_]	[_]
Sport specific strategy	[_]	[_]
How to appropriately deal with parents	[_]	[_]
How to provide appropriate feedback to athletes	[_]	[_]
How to conduct oneself while coaching	[_]	[_]
How to communicate appropriately with athletes	[_]	[_]
Other, specify: _____	[_]	[_]
_____	[_]	[_]

12- Do coaches participate in regular meetings (formal or informal) to discuss coaching practices?
Yes [_]   No [_]

13- Are the referees from your program or obtained from a third party (i.e., provincial referee association)?

In House [_]   External [_]   If external, what organization: _____

14- Are potential referees required to go through the following screening procedures?

	Yes	No
Criminal Reference Check	[_]	[_]
References Check	[_]	[_]
Interview	[_]	[_]
Test	[_]	[_]

15- Is it expected that coaches teach athletes life skills (i.e., leadership) and use sport as an environment to enhance character development as well as athletic skills?

N/A [_] Yes [_]   No [_]

16- Is training provided or offered to coaches regarding how to teach children to transfer the skills they learn in sport to daily life?

N/A [_] Yes [_]   No [_]

17- Is training provided or offered to coaches regarding how to teach children how to use sport as a tool to enhance character development in children?

N/A [_] Yes [_]   No [_]

18- If training is offered, are the following methods of instruction used to teach coaches how to integrate life skills into sport:

	Yes	No	N/A
Reading published materials	[_]	[_]	[_]
Attending workshop/seminars on how to teach life skills	[_]	[_]	[_]
Apprenticing with an experienced coach	[_]	[_]	[_]
Observing the delivery of life skills programs with athletes	[_]	[_]	[_]
Observing coaching of athletes using life skills philosophy	[_]	[_]	[_]
In house training sessions	[_]	[_]	[_]
Group feedback meetings	[_]	[_]	[_]
Other, specify: _____	[_]	[_]	[_]

III. Athletes

1- Does your organization have written codes of conduct or policies about how to deal with negative behaviours that an athlete may engage in during practice and games or away from the practice or competition venue? These policies could range from violence/aggression towards others to policies regarding yelling during games?

Written [_]   Agreed on/not written [_]

	Yes	No
Practice:	[_]	[_]
Games:	[_]	[_]
Away from sport:	[_]	[_]
Other, specify: _____	[_]	[_]

If written codes of conduct for athletes are available, **attach if possible**.

2- Through participation, does your association facilitate opportunities for athletes to take part in any of the following nationally or provincially recognized training or certification courses?

	Yes	No
Coaching Training	[_]	[_]
Referee/Official Training	[_]	[_]
Sport Specific Accreditation/Achievement levels	[_]	[_]
First Aid/CPR Training	[_]	[_]
Other, specify: _____		

3- Through participation in your organization do athletes have the opportunity to engage in any of the following activities?

	Yes	No
Peer Coaching	[_]	[_]
Peer Refereeing	[_]	[_]
Mentoring younger athletes	[_]	[_]
Athletic Council (athletes input to program)	[_]	[_]
Others, specify: _____		

4- Does your organization:

	Yes	No
Keep individual statistics	[_]	[_]
Have a most valuable player award	[_]	[_]
Have a sportspersonship award	[_]	[_]
Have a most improved player award	[_]	[_]
Effort of the day award	[_]	[_]
Other, specify: _____	[_]	[_]

IV. Parents

1- Does your organization have written codes of conduct or policies about how to deal with negative behaviours that an athlete's parent may engage in during practice and games or away from the practice or competition venue? These policies could range from interference with coaching duties to policies regarding yelling during games?

Written [_]   Agreed on/not written [_]

	Yes	No
Practice:	[_]	[_]
Games:	[_]	[_]
Away from sport:	[_]	[_]
Other, specify: _____	[_]	[_]

If written codes of conduct for parents are available, **attach if possible**.

2- Approximately what percentages of parents regularly attend competitions?   _____%

3- Approximately what percentage of coaches in your program are parents of kids in the program? _____%

4- Through participation in your organization do parents have the opportunity to engage in any of the following activities?

	Yes	No
Coaching	[_]	[_]
Refereeing	[_]	[_]
Mentoring younger athletes	[_]	[_]
Learning sport specific knowledge (i.e., rules)	[_]	[_]
Others, specify: _____		

Do you have any additional comments about your program that you would like to share?

_____

_____

_____

This is the end of the survey. Thank you very much for participating, your help is much appreciated.

Questions? Comments? Please contact:

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Appendix K

Summary of Items Removed at Each Step of Exploratory Factor Analysis

Iteration #1 Items removed:
  Item 2: Tried a new way of acting around people
  Item 14: Learned about developing plans for solving a problem
  Item 20: Became better at dealing with fear and anxiety
  Item 21: Became better at handling stress
  Item 27: Improved communication skills
  Item 29: Made friends with someone of the opposite gender
  Item 31: Got to know someone from a different ethnic group
  Item 34: I was able to impact my school or community for the better
  Item 35: Learned to stand up for something I believed was morally right
  Item 36: We discussed morals and values
  Item 46: Had an opportunity to lead a group of peers
  Item 47: This activity improved my relationship with my parents/guardians
  Item 50: Came to feel more supported by the community
  Item 54: Demands were so great that I didn't get homework done
  Item 55: This activity interfered with doing things with family

Iteration #2 Items removed:
  Item 5: This activity got me thinking about who I am as a person
  Item 19: Learned about controlling my temper
  Item 22: Learned that my emotions affect how I perform
  Item 51: This activity opened up job opportunities for me

Iteration #3 Items removed:
  Item 4: Starting thinking more about my future because of this activity
  Item 15: Used my imagination to solve a problem
  Item 17: Learned about setting priorities
  Item 18: Practiced self discipline
  Item 52: This activity helped prepare me for college or high school

Iteration #4 Items removed:
  Item 16: Learned about organizing time and not putting things off
  Item 61: Felt I didn't belong in this activity
  Item 62: I felt left out

Iteration #5 Items removed:
  Item 57: Felt pressure by peers to do something I didn't want to do
  Item 58: I did something in this activity that was morally wrong
  Item 59: I was laughed at by peers for something I did in this activity

Iteration #6 Items removed:
  Item 1: Tried doing new things
  Item 3: I do things here I don't get to do anywhere else
  Item 6: This activity has been a positive experience in my life

Iteration #7 Final Model with 37 items