



# FINAL RESEARCH REPORT

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## Introduction

The popularity of sport programming and its high social value has led to calls for understanding how sport environments can be structured to influence positive youth development. Researchers have emphasised the importance of structuring sport programs to purposefully facilitate positive development for youth<sup>1,2</sup>. This is achieved through [processes](#)<sup>3</sup> of:

- Integrating positive social values and norms into a program's structure
- Promoting supportive relationships
  - Coach-youth relationships
  - Peer relationships
- Fostering opportunities to deliberately practice life skills
  - Life skills can include decision-making, teamwork, and leadership

Effective integration of the above stated processes can lead to [positive outcomes](#) for youth, such as:

- **Satisfaction of three basic psychological needs**<sup>4</sup>
  - **Competence**: One's perceptions about his/her own ability to effectively engage in tasks/activities
  - **Autonomy**: One's sense of volition to engage in tasks/activities out of his/her own interests
  - **Relatedness**: One's sense of belongingness to others in his/her social environment
- **Positive developmental experiences**
  - **Personal and social values**: Becoming better at regulating one's emotions, demonstrating respect, and learning how to work with others effectively (e.g., communication, teamwork, and leadership)
  - **Goal setting**: Developing one's planning, decision-making, and problem-solving skills
  - **Initiative**: Learning how to demonstrate effort, engage willingly, and persevere
  - **Identity experiences**: Trying new things, thinking about the future, and gaining an understanding of one's self
  - **Adult network**: Improving relationships with adults in and out of sport

Along with these positive outcomes, sport programs with a positive youth development focus are also focused on minimising youth's exposure to or engagement in [negative experiences](#) such as bullying, manipulation, and intimidation.

## Purpose

The purpose of this report was to assess how participation in the Sens Sport and Leadership League (SSLL) influenced youth's satisfaction of basic psychological needs and developmental experiences.

Two research questions were proposed:

1. To what extent did participation in SSLL influence youth's satisfaction of basic psychological needs and developmental experiences?
2. Do differences exist on these two variables for youth participants based on their length of involvement in the program (less than 3 years vs. more than 3 years)?

## Methods

Sixty-five SSSL youth participated in this study:

- Aged 11-18 years old
- Average age: 14.02 years old
- Genders: 60 males, 5 females
- SSSL novices (less than 3 years in SSSL):
  - Total # of youth: 32
  - Average years of involvement: 3.69
- SSSL veterans (3 years or more in SSSL):
  - Total # of youth: 26
  - Average years of involvement: 1.31

Data were collected during 2016 and 2018 seasons from these youth anonymously through the completion of surveys. All youth were ensured that their individual responses would be held in confidentiality and no identifying information would be tied to their data; for this reason, youth were encouraged to be honest and thoughtful in their responses.

### Measure 1: Basic Psychological Needs Satisfaction

The Basic Needs Satisfaction in Sport Scale (BNSS-S)<sup>5</sup> was used to measure levels of satisfaction of basic psychological needs as an outcome of sport programming. This survey consists of 20 statements that are rated across a 7-point scale (from 1 “not true at all” to 7 “very true”) and outcomes are divided into three categories: (a) **competence** (5 items), (b) **autonomy** (10 items), and (c) **relatedness** (5 items).

Following the stem “Please rate the extent to which you agree or disagree with these statements as they relate to your participation in SSSL”, examples of statements for each subscale included:

- **Competence**: “I have the ability to perform well in my sport.”
- **Autonomy**: “In my sport, I feel I am pursuing goals that are my own.”
- **Relatedness**: “In my sport, there are people who I can trust.”

### Measure 2: Developmental Experiences

The Youth Experience Survey for Sport (YES-S)<sup>6</sup> was used to measure levels of youth’s development experiences as an outcome of sport programming. This survey consists of 32 statements which are rated across a 4-point scale (from 1 “not at all” to 4 “yes, definitely”). Six categories or outcomes were measures within this scale: (a) **personal and social values** (10 items), (b) **goal setting** (4 items), (c) **initiative** (4 items), (d) **identity experiences** (5 items), (e) **adult network** (3 items), and (f) **negative experiences** (6 items).

Following the stem “Please rate the level to which you agree or disagree with the following statements as they relate to your participation in SSSL”, examples of statements include:

- Personal and social values: “I became better at sharing responsibility”
- Goal setting: “I learned to consider possible obstacles when making plans”

- Initiative: “I put all my energy into this activity”
- Identity experiences: “I started thinking more about my future because of this activity”
- Adult network: “This activity improved my relationship with my parents/guardians”
- Negative experiences: “Adult leaders in this activity are controlling and manipulative”

## Data Analysis

After the survey period, data were analyzed using statistical software. The first analysis was done to generate the average scores for each measure across all participants. The second analysis was done to compare SSSL veterans with SSSL novices to see if there were any significant differences in reported outcomes based on time spent in the program. This is regarded as an independent samples t-test with  $p$ -value of 0.05.<sup>a</sup>

## Results

### Basic Psychological Needs Satisfaction

#### BNSS-S: Results for all SSSL youth

<i>Subscale</i>	<i>Average</i>	<i>SD<sup>b</sup></i>
<i>Competence</i>	6.27	0.66
<i>Autonomy</i>	6.10	0.78
<i>Relatedness</i>	6.28	0.77

Across the board, SSSL participants rated their satisfaction of basic psychological needs highly, with a general sense of agreement on all the statements. This suggests that the SSSL environment (which includes the coaches) played a role in positively influencing youth’s feelings of competence to perform well in the activities offered, feelings of autonomy to engage in the activities provided out of their own free will, and feelings of relatedness and being close to others in the program.

#### BNSS-S: SSSL Veterans versus Novices

In a subsequent analysis, SSSL veterans were compared to novices on their average ratings for each subscale. No differences were discovered. Given all SSSL participants rated themselves highly across each subscale, this finding suggests that these positive outcomes are sustained over time.

<i>Subscale</i>		<i>Novices</i>	<i>Veterans</i>
<i>Competence</i>	<i>Average</i>	6.20	6.33
	<i>SD</i>	0.77	0.54
	<i>p-value</i>	0.552	
<i>Autonomy</i>	<i>Average</i>	6.13	6.07
	<i>SD</i>	0.81	0.78
	<i>p-value</i>	0.806	
<i>Relatedness</i>	<i>Average</i>	6.17	6.39
	<i>SD</i>	0.86	0.66
	<i>p-value</i>	0.392	

<sup>a</sup> *SD*: Standard deviation. The average spread of scores on each subscale. A low *SD* would indicate that the ratings on a subscale were narrowly spread, while a high *SD* would indicate the ratings on a subscale were widely spread.

<sup>b</sup> *p*-value: The probability that the result happened by chance; If the *p*-value is below 0.05, there is a less than 5% chance that the results were found by chance.

## Developmental Experiences

### YES-S: Results for all SSSL youth

Overall, participants reported high values (between ‘agree’ and ‘strongly agree’) on the first five subscales, and relatively low values (from ‘disagree’ to ‘strongly disagree’) on the negative experiences subscale. Thus, it is evident that youth perceived SSSL to have a positive influence on their developmental experiences.

<b>Subscale</b>	<b>Average</b>	<b>SD</b>
<i>Personal and social values</i>	3.32	0.49
<i>Goal setting</i>	3.46	0.47
<i>Initiative</i>	3.63	0.41
<i>Identity experiences</i>	3.18	0.68
<i>Adult network</i>	3.24	0.59
<i>Negative experiences</i>	1.81	0.87

Particularly strong outcomes emerged related to perceptions of goal setting, initiative, and negative experiences. High ratings of goal setting suggest that youth felt that they learned to find ways to achieve their goals, learned from others how to problem-solve, and were able to plan. High levels of initiative suggest that youth felt they learned to demonstrate effort and willingness to engage in SSSL. Low ratings of negative experiences suggest that youth felt they were accepted and respected by their coaches and peers and felt a sense of belonging to SSSL and their team.

### YES-S: SSSL Veterans versus Novices

On comparing SSSL veterans to novices on their average ratings for each YES-S subscale, differences were found on subscales of personal and social values, goal setting, initiative, and adult networks – in which SSSL veterans tended to report higher values than novices. These results suggest that more time spent in SSSL helped youth to perceive a strong sense of these outcomes.

<b>Subscale</b>		<b>Novices</b>	<b>Veterans</b>
<i>Personal and social values</i>	Average	3.15	3.55
	SD	0.52	0.38
	p-value	0.001*	
<i>Goal setting</i>	Average	3.56	3.60
	SD	0.49	0.37
	p-value	0.048*	
<i>Initiative</i>	Average	3.50	3.77
	SD	0.43	0.30
	p-value	0.009*	
<i>Negative experiences</i>	Average	1.72	1.69
	SD	0.83	0.74
	p-value	0.919	
<i>Identity experiences</i>	Average	2.99	3.32
	SD	0.76	0.55
	p-value	0.760	
<i>Adult network</i>	Average	3.03	3.47
	SD	0.62	0.49
	p-value	0.006*	

\*Indicates a significant p-value

High ratings on personal and social values suggest that over time, the SSLL veterans felt that their participation in the SSLL helped them learn different life skills such as communication, emotional regulation, teamwork, and cooperation. High ratings on goal setting suggest that SSLL veterans learned to establish better goals over time and consider obstacles when making plans. High ratings on initiative suggest that over time, the SSLL veterans expressed improved independence and self-regulation in their engagement. Finally, high ratings on adult network suggest that over time, the SSLL veterans were able to create meaningful relationships with adults both in sport and in their communities.

## Discussion and Recommendations

There is evidence to suggest that the SSLL is associated with positive outcomes for youth, including feelings of satisfaction of competence, autonomy, and relatedness, and perceptions of positive developmental experiences. As well, the results suggest that prolonged engagement in the program has benefits to specific positive youth developmental outcomes (i.e. personal and social values, goal setting, and initiative, and adult networks). These findings demonstrate the variety of positive influences that the SSLL has on its youth participants and advocate for further growth and sustainment of this program.

There were no differences found between novices and veterans on their ratings of basic psychological needs satisfaction. Research in youth sport has posited that the satisfaction of these needs is predicted by processes of coaches' support (e.g., providing youth opportunities to make their own decisions [autonomy], structuring activities that will challenge youth to build various skills [competence], and nurturing strong and supportive relationships [relatedness]), and peers' support (e.g., giving positive and constructive feedback to teammates [competence], being receptive to a teammate leading an activity [autonomy], and treating teammates with and respect and fostering friendships [relatedness]).<sup>7,8</sup> Because the satisfaction of basic psychological needs is dependent on these processes of coach and peer support, as one's SSLL coaches and teammates can vary season by season and from year to year, these processes are not necessarily sustained over time. However, given the high ratings on average regardless of time spent in the program, it is evident that the climate in which youth engage in SSLL has been appropriately structured to foster basic psychological needs support. These outcomes may improve over time with consistency in staffing which could influence sustained support for youth and prolonged engagement of youth.

There is room for improvement on influencing youth's perceptions based on their ratings of developmental experiences. The program could be further improved to align with what youth value personally and socially, fostering more opportunities for youth to think about who they are as a person, and maintaining stronger and more supportive relationships between coaches and youth. Collectively, some strategies to address these different outcomes can include:

- [Facilitating debriefing sessions](#)<sup>9</sup> (e.g., a group huddle) in which participants are given deliberate opportunities to reflect on their experiences. Here, coaches can provide youth with opportunities to give and receive feedback on their performance as athletes (sport skills), teammates (social skills), and as people (personal skills). Youth can also share their experiences with one another and reflect on their own development. This is also an ideal opportunity for coaches to encourage youth athletes to set individual and team goals.



- **Offering explicit opportunities for youth to practice life skills.**<sup>10</sup> It is important for coaches to be explicit in helping youth learn life skills. For instance, a portion of time could be dedicated to coordinating team-building activities during practice (e.g., offering paired activities to practice a skill and learn cooperation, encouraging teammates to use each other's names to practice effective communication, getting youth to work together to design and demonstrate a drill);<sup>11</sup> these life skills could be integrated directly into the sport activity, or as a separate non-sport related activity to offer a different domain for youth to practice and learn skills in.
- **Fostering leadership through designating team captains.**<sup>12</sup> Leadership has been identified within academic literature as a fruitful opportunity to learn life skills through practicing elevated responsibilities. Coaches could offer youth team captain positions, in which captains are responsible for leadership tasks such as helping the team decide goals for the session, leading a warmup, modelling a skill for peers to learn, or planning and coordinating a scrimmage. Team captain roles could also be rotated each practice or game session to promote equal opportunities for youth to practice leadership. Multiple team captains could also be used for different roles (e.g., one captain responsible for set up and planning while another leads the activity, or dividing the group during practice and having each captain lead their own group) – this also helps leaders to practice power-sharing and cooperation.<sup>13</sup> Leadership positions need not always be formal roles; examples of other ways to promote leadership-related life skills can include emphasising personal responsibility (e.g., one youth in charge of bringing the first-aid kit, another youth in charge of setting up equipment), or providing mentorship opportunities (e.g., older, more experienced youth responsible for mentoring and supporting another youth to help promote caring and social responsibility).<sup>14</sup>
- **Connecting youth with the community.**<sup>15</sup> The Boys and Girls Club has demonstrated great effort in offering youth volunteer positions in the organization (e.g., as junior coaches, referees, timekeepers) and taking youth on community retreats. Offering youth these opportunities helps to provide contexts in which youth can practice the transfer of life skills, and develop empathy, initiative, and strong relationships with adults within the community. The authors suggest that the Boys and Girls Club continues to carry this momentum moving forward, by making these community connection strategies a regular part of SLL.

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