How the Bright and Dark Side of Self-Determination Theory Influence Participants’ Life Skills Development in Youth Sport

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Introduction

- Life skills defined as “those skills that enable individuals to succeed in the different environments in which they live such as school, home and within their neighbourhoods” (Danish et al., 2004, p. 40)

- Sport is a setting where young people develop a range of life skills (Johnston et al., 2013; Holt et al., 2017; Opstoel et al., 2019)

- **However:** few theory-based studies explain the mechanisms by which young people develop their life skills through sport
Introduction

Self-Determination Theory and Life Skills Development

- Self-Determination Theory (Ryan & Deci, 2017) is a theory of human development and wellness.

- Conceptual model of life skills development (Hodge et al., 2016) proposed that Self-Determination Theory could be utilized to investigate life skills development in sport.

- Coach autonomy support is positively related to participants’ development of eight different life skills in youth sport (Cronin & Allen, 2018).
Purpose of the Study

Coaching Climate
- Coach autonomy support
- Controlling coaching

Basic Need Satisfaction and Frustration
- Autonomy
- Competence
- Relatedness

Life Skills
- Teamwork
- Leadership
- Communication
- Social skills
- Goal setting
- Time management
- Problem solving
- Emotional skills

Bartholomew et al. (2011)
Vansteenkiste & Ryan (2013)
Balaguer et al. (2018)
Method

309 participants aged 11-18 years ($M_{\text{age}} = 14.71$ years)

Males ($n = 150$) & females ($n = 159$)

Average of 4.38 hours of main sport per week

Football, field hockey, basketball, & dance
### Measures

**Autonomy Supportive and Controlling Coaching**

- Autonomy-Supportive Coaching Questionnaire (Conroy & Coatsworth, 2007)
- Sport Climate Questionnaire (Deci, 2001)
- Empowering and Disempowering Motivational Climate Questionnaire (Appleton et al., 2016)
- 10 items for each subscale

### Items

<table>
<thead>
<tr>
<th>My coach….</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourages athletes to use their initiative</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Shouts at athletes in front of others to make them do certain things</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Alpha coefficients** = .94 and .92

**Factorial validity** = supported via CFA after removing one poorly loading item
Basic Need Satisfaction

- Basic Needs Satisfaction in Sport Scale (Ng et al., 2011)
- 20-item scale measuring autonomy, competence & relatedness satisfaction

<table>
<thead>
<tr>
<th>Basic Need Satisfaction</th>
<th>Not at all true</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my sport, I get opportunities to make choices</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I feel I am good at my sport</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have close relationships with people in my sport</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Alpha coefficients = .85 to .86
Factorial validity = supported via CFA after removing two poorly loading items
Measures

**Basic Need Frustration**
- Psychological Need Thwarting Scale (Bartholomew et al., 2011)
- 12-item scale measuring autonomy, competence & relatedness frustration

<table>
<thead>
<tr>
<th>In my sport...</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel pushed to behave in certain ways</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Situations occur in which I am made to feel incapable</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>I feel I am rejected by those around me</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

*Alpha coefficients = .88 to .91*

*Factorial validity = supported via CFA*
Life skills development – Life Skills Scale for Sport (Cronin & Allen, 2017)
- 43 items assessing the eight life skills listed earlier

<table>
<thead>
<tr>
<th>This sport has taught me to...</th>
<th>Not at all</th>
<th>A little</th>
<th>Some</th>
<th>A lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work well within a team/group</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Set specific goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Speak clearly to others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Know how to positively influence a group of individuals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Alpha coefficients = .82 to .93
Factorial validity = supported via CFA
Data Analyses

- To assess the normality of the data and possible gender and age group differences
- Descriptive statistics and correlations

- Process Macro for SPSS to assess our mediational models (Hayes, 2017)
### Results

**Participants’ perception of their coach?**

<table>
<thead>
<tr>
<th>Autonomy supportive</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2 ⭐</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4 ⭐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Controlling</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 ⭐</td>
<td>3</td>
</tr>
</tbody>
</table>
### Results

**Participants' perception of the sports environment?**

<table>
<thead>
<tr>
<th></th>
<th>Not at all true</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy satisfaction</strong></td>
<td>1 2 3 4 5 ✭ 6 7</td>
<td></td>
</tr>
<tr>
<td><strong>Competence satisfaction</strong></td>
<td>1 2 3 4 5 ✭ 6 7</td>
<td></td>
</tr>
<tr>
<td><strong>Relatedness satisfaction</strong></td>
<td>1 2 3 4 5 ✭ 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy frustration</strong></td>
<td>1 2 3 ✭ 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td><strong>Competence frustration</strong></td>
<td>1 2 ✭ 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td><strong>Relatedness frustration</strong></td>
<td>1 2 ✭ 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
Participants’ perception of whether sport has taught them the eight different life skills?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little</th>
<th>Some</th>
<th>A lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teamwork</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4★</td>
<td>5</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4☆</td>
<td>5</td>
</tr>
<tr>
<td><strong>Social skills</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4☆</td>
<td>5</td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4☆</td>
<td>5</td>
</tr>
<tr>
<td><strong>Goal setting</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4☆</td>
<td>5</td>
</tr>
<tr>
<td><strong>Time management</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4☆</td>
<td>5</td>
</tr>
<tr>
<td><strong>Problem solving</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4☆</td>
<td>5</td>
</tr>
<tr>
<td><strong>Emotional skills</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4☆</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total life skills</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4★</td>
<td>5</td>
</tr>
</tbody>
</table>
Correlational Results

Coach autonomy support

Autonomy satisfaction

Competence satisfaction

Relatedness satisfaction

Teamwork
Goal setting
Leadership
Social skills
Problem solving
Emotional skills
Time management
Communication

Controlling coaching

Autonomy frustration

Competence frustration

Relatedness frustration

$r$ range for all arrows = .32*** to .65***

$r$ range for all arrows = .57*** to .63***
Mediation Results

Total effects = .30*** to .54***
Direct effects = -.01 to .22***
Significant indirect effects = .10* to .23***

β range = .12*** to .55***
Mediation Results

Total need satisfaction

Coach autonomy Support

β range = .31*** to .59***

Total effects = .29*** to .53***
Direct effects = -.02 to .20**
Significant indirect effects = .22*** to .42***

Teamwork
Goal setting
Social skills
Problem solving
Emotional skills
Leadership
Time management
Communication
Discussion

Key Findings
- Bright side of the pathway is related to participants’ development of the eight life skills in youth sport
- Three needs combined are particularly important for developing participants’ life skills
- Dark side of the pathway is only related to need frustration

Practical Application
- Coaches should provide an autonomy-supportive climate and seek to satisfy participants’ three basic needs

Limitations
- Causality could not be established
- Self-report
For those interested in collaborating on future projects, contact me at: Lorcan.Cronin@edgehill.ac.uk
References


References