Extracurricular school sports participation and the relationship with physical activity and motivation towards sports in 10- to 18-year old students

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1.1. Introduction

Schools as ideal settings for PA & sports promotion

(Biddle, Gorely & Stensel, 2004; Janssen & Leblanc, 2010)

(PA adolescents ↓ & Dropout sport ↑)

(Brett Schneider & Naul, 2007)

Schools as ideal settings for PA & sports promotion

(Cale & Harris, 2006; Fox, Cooper & McKenna, 2004; Pate & O’Neill, 2008; Trost et al., 2008)

Additional sources of PA & sports within the school-community context need to be explored → extracurricular school sports (Trost et al., 2008)
1.1. Introduction

Extra-curricular school-based sports
= all sports in which students can voluntarily participate that are not included in the curriculum but organized by the school (or in cooperation with the school) either during lunch break, during after-school hours or on Wednesday-afternoon.

- **United States**: focus on interscholastic sports (exclusively for the most sports-talented students)
- **Belgium**: focus on intramurals (typically for adolescents who are not yet participating in community sports)

**Research Questions**
Research Questions

1. How many students not engaging in community sports do participate in extracurricular school sports?
2. Are students who participate in extracurricular school sports more physically active than their peers?
3. Are students who participate in extracurricular school sports better motivated towards sports than their peers?

Self-Determination Theory (Deci & Ryan, 2000)

Why do you put effort in sports?

- ‘I don’t see the point of sports’
- ‘because other people expect me to’
- ‘because I have to prove how sporty I am’
- ‘because I value the benefits of sports for my health’
- ‘because I enjoy sports’

<table>
<thead>
<tr>
<th>Lack of intentionality</th>
<th>External pressure</th>
<th>Internal pressure</th>
<th>Personal value</th>
<th>Curiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMOTIVATION</td>
<td>CONTROLLED MOTIVATION</td>
<td>AUTONOMOUS MOTIVATION</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Methods

Participants & procedure

- 1049 children
  - 30 elementary schools
  - 60 classes: 5th & 6th grade
  - 563 boys (53.7%) & 486 girls (46.3%)
  - $M$ age = 11.02 years ($SD$=0.02)

- 1526 adolescents
  - 32 secondary schools
  - 96 classes: 7th-13th grade
  - 732 boys (48.0%) & 794 girls (52.0%)
  - $M$ age = 15.34 years ($SD$=1.83)

Measures

- Flemish Physical Activity Questionnaire (FPAQ, Philippaerts et al., 2006)
  - PA levels (minutes/week)
  - Extracurricular school sports participation (dichotomous variable)
  - Community sports participation (dichotomous variable)

- Behavioral Regulation in Physical Education Questionnaire (BREQ-II, Markland & Tobin, 2004; Aelterman et al., 2012)
  - Motivation towards sports
  - 3 subscales with an average score between 0 and 5
    1. Autonomous motivation (8 items, $\alpha = 0.90$)
    2. Controlled motivation (8 items, $\alpha = 0.75$)
    3. Amotivation (4 items, $\alpha = 0.81$)
2. Methods

Analyses
- Multilevel regression analyses (MLwiN)

3. Results
3.1. Descriptive statistics

School sports participation rates

5th – 6th grade
- 24.0% (n = 252)
- 76.0% (n = 797)

7th – 13th grade
- 71.0% (n = 1088)
- 29.0% (n = 438)

School sports participation according to grade

- 76% in 5th & 6th grade
- 34% in 7th & 8th grade
- 26% in 9th & 10th grade
- 26% in 11th - 13th grade
School sports participation according to gender

5th – 6th grade

- Boys: 17.2% (n=107)
- Girls: 31.9% (n=191)

- Boys: 82.8% (n=465)
- Girls: 68.1% (n=331)

7th – 13th grade

- Boys: 64.2% (n=462)
- Girls: 35.8% (n=266)

- Boys: 77.8% (n=418)
- Girls: 22.2% (n=119)

Frequency of participation

5th – 6th grade

- Boys: 1h20
- Girls: 0h53

7th – 13th grade

- Boys: 2h08
- Girls: 1h29
3.2. How many students not engaging in community sports do participate in extracurricular school sports?

5th – 6th grade

<table>
<thead>
<tr>
<th>Participation in Community Sports</th>
<th>No Participation in Community Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>n = 285</td>
<td>n = 764</td>
</tr>
</tbody>
</table>

7th – 13th grade

<table>
<thead>
<tr>
<th>Participation in Community Sports</th>
<th>No Participation in Community Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>41%</td>
<td>59%</td>
</tr>
<tr>
<td>n = 523</td>
<td>n = 893</td>
</tr>
</tbody>
</table>

Introduction  Methods  Results  Discussion
3.3. Are students who participate in extracurricular school sports more physically active than their peers?

Controlled for age, SES, autonomous motivation, controlled motivation, amotivation, sex and community sports participation; * P < .05, ** P < .01, *** P < .001

5th – 6th grade 7th – 13th grade

3.4. Are students who participate in extracurricular school sports more autonomously motivated towards sports than their peers?

Controlled for age, SES, controlled motivation, autonomous motivation, sex and community sports participation; * P < .05, ** P < .01, *** P < .001

5th – 6th grade 7th – 13th grade
4. Discussion

1. If extracurricular school sports are offered at school:
   ▪ the majority of elementary school children participates
   ▪ only a minority of secondary school adolescents participates

2. Strong decline in extracurricular school-based sports participation that coincides with the transition from elementary school towards secondary school

3. Extracurricular school sports participation contributes to an active lifestyle OR extracurricular school sports mainly attract students who already have a physically active lifestyle.

4. Extracurricular school sports participation contributes to higher levels of autonomous motivation towards sports OR extracurricular school sports mainly attract students with high levels of autonomous motivation towards sports
Thank you for your interest in our work

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