Children's need for physical activity in primary education – a cross-sectional survey of primary school teachers

Juliane Mackenbrock & Jens Kleinert

Introduction & Study aim

Physical activity (PA) is important for children’s development and is associated with many positive effects (e.g. better academic performance) (Timmons et al., 2007; Tremblay et al., 2011). Especially before the onset of adolescence PA has a great impact on children’s health. At this time, children are said to have a high need for PA (Stults-Kolehmainen, 2023). However, it is unclear how this urge is being expressed and on which characteristics can be used to operationalize the need for PA. As experts on this topic, physical education (PE) teachers in primary schools can provide information on how the need for PA is expressed in young children.

As an exploratory approach, this study aims to get an overview of the characteristics that primary school PE teachers use to identify a high or low need for PA in PE and whether they rate it as good or bad, helpful or disturbing in PE.

Measures

Demographic information: (e.g. age, gender, years of teaching experience)

Qualitative: signs for high or low PA-need

Quantitative: rating to what extent high or low PA need is good/helpful or bad/disturbing (seven-point scale: 1–7)

Methods

Sample

n = 70 primary school PE teachers in Germany

Gender: female n = 59 (84 %); male n = 11 (16 %)

Age: M = 45.69 (SD = 7.96)

Years of teaching experience: M = 16.84 (SD = 8.08)

Results

Qualitative

Instruction: During PE, I recognise a high PA-need by the following signs:

<table>
<thead>
<tr>
<th>Psychological/</th>
<th>Physical</th>
<th>Tension level</th>
<th>M = 5.75 (SD = 1.17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Motivation</td>
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<td>Physical activity</td>
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<tr>
<td>Social interaction</td>
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</tbody>
</table>

n = 354 quotes

Instruction: During PE, I recognise a low PA-need by the following signs:

<table>
<thead>
<tr>
<th>Psychological/</th>
<th>Physical</th>
<th>Tension level</th>
<th>M = 5.26 (SD = 1.30)</th>
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<tbody>
<tr>
<td>Psychological</td>
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<td>Motivation</td>
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<td>Social interaction</td>
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</tbody>
</table>

n = 253 quotes

Quantitative

Seven point scale: 1 good – 7 bad

A high need for PA among my students… is for the achievement of the learning goal: M = 2.60 (SD = 1.32)

A high need for PA among my classmates: M = 3.13 (SD = 1.51)

Discussion & Conclusion

Our results show that the expression of a need for PA can be allocated to psychological, physical and social factors. Moreover, the relevance of the PA-need is supported by the fact, that teachers tend to rate a high need for PA positive and a low need for PA negative for the students, the PE lessons and the classmates. Given these results, an assessment of students' PA-need can help to make fit PA adequate to students’ needs. In addition, an orientation towards the PA-need may help to promote psychological variables like motivation or self-efficacy in an individual way. However, it needs to be shown whether teachers attribute low activity of students to their low PA-need or to demotivating content of a lesson. Moreover, research should show whether teachers differ in their subjective evaluation of the children’s need for PA. Finally, further research is needed to theoretically substantiate the PA-need and, building on this, to systematize the measurement with child-friendly methods (e.g. pictorial questionnaires).

References


Stults-Kolehmainen, M. A. (2023). Humans have a basic physical and psychological need to move the body: Physical activity as a primary drive. Frontiers in Psychology, 14, 1134049. 10.3389/fpsyg.2023.1134049
