Increasing Physical Activity through Health-Enabling Technologies: the Project “Being Strong Without Violence”

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Content

Introduction
• “Being Strong Without Violence”
• Aim of study
• Study design

Method
• Design and concept of the measurement campaigns for the study

Results
• MET – Metabolic Equivalent
• Leisure Time Step Count
• MoMo – Activity Questionnaire
“Being Strong Without Violence”
Measurement Campaign

Subjective activity measurement
Objective activity measurement

MoMo – Activity Questionnaire  SenseWear Pro 2 CE

personal assessment
51 questions on sports and activity

METs – Metabolic Equivalent
Leisure Time Steps

[Romahn2007] N. Rohmahn Physical-sportive activity of children and adolescents in Germany: An average survey with children and adolescents aged between 4 and 17 years, PhD thesis, The Faculty of Humanities and Social Sciences of the University of Karlsruhe, 2007
Results – METs (Metabolic Equivalent)

$H_0$: no change in METs over the duration of the study between intervention group and control group


24 datasets → comparison groups $I^+ = 13$ and $I^- = 11$

SPSS: error probability $p = 0.354$ – level of significance $\alpha = 0.05$

$\rightarrow$ no significant change in METs between intervention and control group
Results – Leisure Time Steps

Datasets → $I^+ = 13$ and $I^- = 11$
Results – MoMo Activity Questionnaire

- Self-assessment of children’s activities
- Attitude towards physical activity and sports
- Comparison between M1 and M5
- 24 (I+ = 13 and I- = 11) questionnaires analysed

<table>
<thead>
<tr>
<th>Question group</th>
<th>Intervention group (I+) (M1 → M5)</th>
<th>Control group (I-) (M1 → M5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports working groups</td>
<td>12 → 7</td>
<td>0 → 2</td>
</tr>
</tbody>
</table>

- Great interest in sports – meeting friends, having fun, free time activities
Thank you for your attention