HOW ARE YOU, CYCLIST? - THE CONTRIBUTION OF ACTIVE MOBILITY TO CHILDREN'S WELLBEING

Prescribing a Healthy Dose of Cycling

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Trends

2015 every fifth child in Austria was overweight

Less than one fifth of Austrian children meet the current physical activity recommendations of one active hour per day (WHO).

“During the course of yesterday (between waking up in the morning and going to bed in the evening), what percentage of time did you spend on … “

Austria, N=1763 (14-29)
“Did you have one of the following physical complaints yesterday?“

- Physical exhaustion/fatigue: 29.4%
- Headache: 20.5%
- Tensions: 20.2%
- Back pains: 16.9%
- Cold: 13.5%
- Stomach ache: 9.2%
- Dizziness: 7.2%
- Nausea: 6.8%
- Limb pain: 6.8%
- Wound/injury: 4.2%
- Increased temperature: 2.7%
- Inflammation: 1.9%
- Others: 5.2%
- No physical complaints yesterday: 35.0%

Male: 43.7%
Female: 26.0%

35% without any complaints

Austria, N=1763 (14-29)
Starting point

PHYSICAL ACTIVITY - WELLBEING

- walking and cycling …
- wellbeing & social and emotional development of children (e.g. self-esteem, cognitive functioning; concentration, calmness and even academic achievement)

GOV.UK

Press release
Study finds physically active children are happier and more confident

First published: 2 July 2015

The aim of the campaign is to encourage children to do 60 minutes of moderate to vigorous activity a day, every day, in order to meet the recommended 60 minutes of physical activity children need.

This year's campaign launches to coincide with the publication of an evidence review by British Heart Foundation (BHF), researchers from the University of Oxford and Loughborough University, which identifies the direct benefits that physical activity has on children in terms of their physical, social and emotional development.

This new research points to strong evidence that physical activity and sport has a positive impact on children's social skills and self-esteem. The evidence review also identified further social benefits for children as a result of physical activity, including increased confidence and peer acceptance, alongside a link to friendship.

Review author Professor Martins Linder commented:
Wellbeing: definition and measurement

„Well being can be understood as how people feel and how they function, both on a personal and a social level, and how they evaluate their lives as a whole.” (New Economics Foundation, 2012)

Measurement:

- Self-assessment of patients / persons concerned („internal perspective“)
- Subjective perceptions
- ILK (Inventory for assessment of quality of life in children and adolescents):
  - Patient (child) ‡ subjective quality of life
  - Parents (father and/or mother) ‡ subjective quality of life
  - Doctors or other experts ‡ objective quality of life
### Approach: surveys with 3 target groups

<table>
<thead>
<tr>
<th>Children (8 to 10)</th>
<th>Parents</th>
<th>Teachers</th>
</tr>
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<tbody>
<tr>
<td>N=152</td>
<td>N=31</td>
<td>N=10</td>
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</table>

- **Children (8 to 10)**
  - Age, gender
  - Travel behavior
  - Mobility preferences
  - Attitudes
    - travel modes
    - PA
  - Subjective wellbeing

- **Parents**
  - Travel behavior parents
  - Travel behavior child
  - PA level

- **Teachers**
  - School success evaluations
  - Effects of travel modes and PA on:
    - Mental balance
    - Concentration
    - Calmness
    - Social development
Results: Attitudes

N = 152 children
Results: Mobility preferences

- Reporting date: 25% Car-passenger, 17% Public transport, 33% Bicycle, 20% Walking
- Preference: 7% Car-passenger, 11% Public transport, 60% Bicycle, 13% Walking

N = 152 children
Results: Wellbeing of children dependent on the mode used on the trip to school

Wellbeing also lasts longer for active modes (first/last lesson)

N = 124-150 children
Results: Wellbeing of children dependent on the mode used on a given day …

... when the child uses bicycle, scooter, or walks a lot?

- pleased, balanced,
- quite,
- happy, physically fit,
- mentally fit,
- „positively tired“, allows for a better night's sleep,
- no behavioural problems

- more receptive,
- exhausted,
- partly physical complaints

... when the child is traveling as car-passenger a lot?

- restless, annoyed,
- irritable,
- bored,
- dissatisfied, unbalanced,
- bad-tempered, fidgety,
- less receptive

- Satisfied because of comfort,
- quiet,
- urge to move,
- slightly aggressive, nausea

N = 31 parents
Results: Wellbeing of children dependent on the mode used on a given day ...

- healthy
- strong and powerful
- self-confident
- feels well in his/her body
- fit
- happy
- unhappy
- annoyed
- stressed
- tired
- has physical complaints

If my child uses mainly the [##] on a given day, it feels ...

N = 31 parents
Results: School performances

- Children with PA ≥ 7 hours per week have significant better school performances
- This relation is not found for the use of active travel modes
- Children who stated that they want to be more active show significantly lower school performances
Summary

- Children assess active travel modes better
- Active mobility has a positive impact on children’s wellbeing
  - According to self-reports of children and according to reports of parents
- Children with higher PA levels have better school performances
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