

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



University of Natural Resources and
Life Sciences Vienna, Institute for
Transport Studies

Prescribing a Healthy Dose of Cycling

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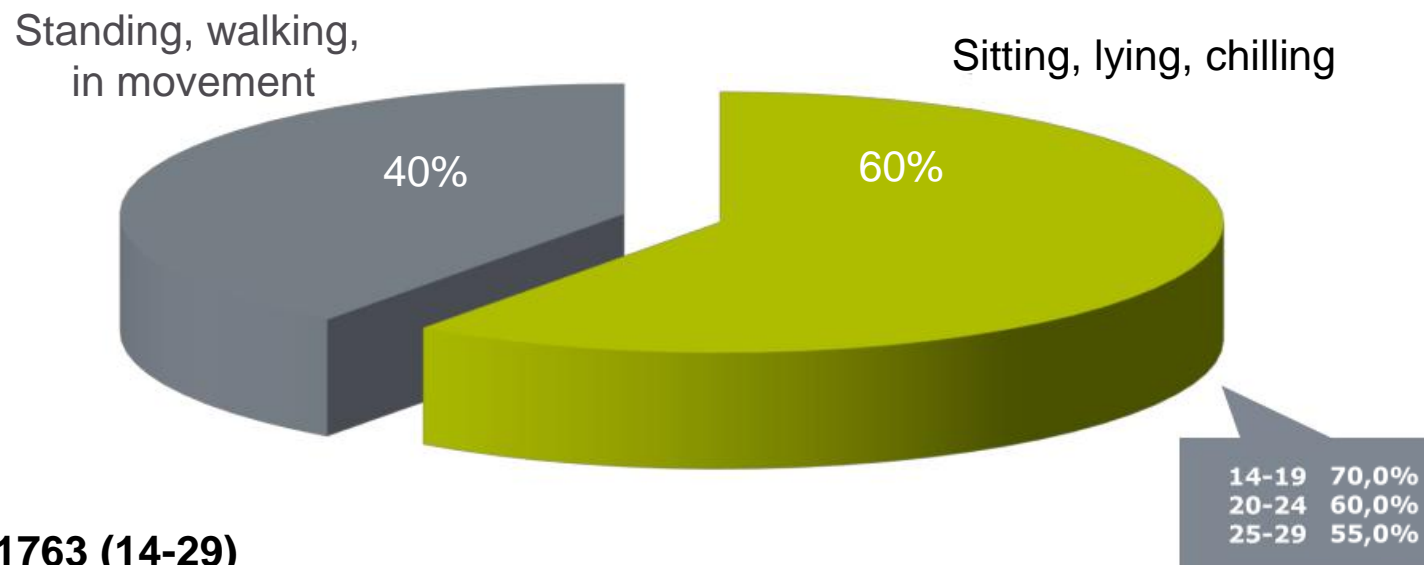
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Trends

- § 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).

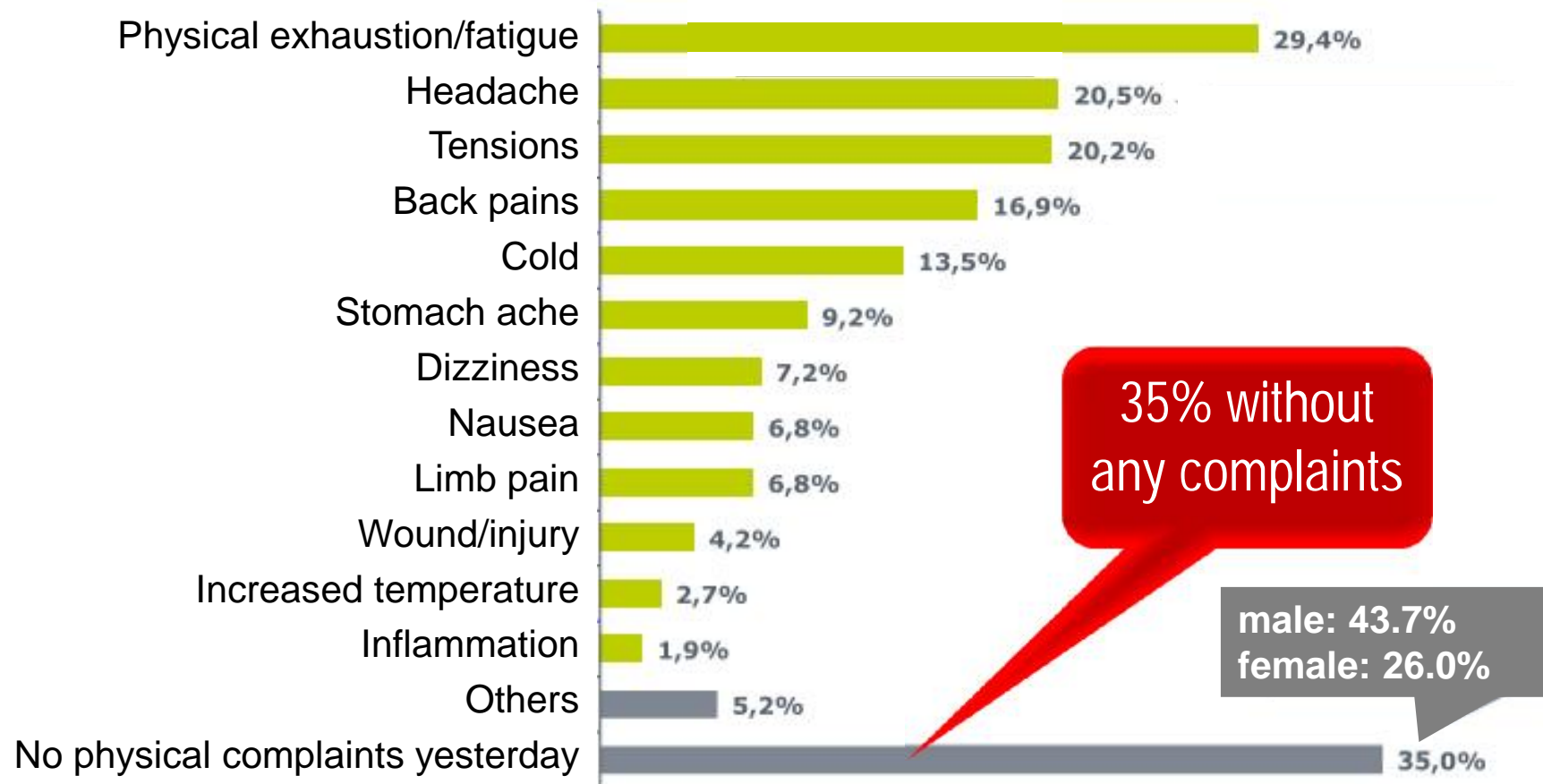
“During the course of yesterday (between waking up in the morning and going to bed in the evening), what percentage of time did you spend on ... “



Austria, N=1763 (14-29)

Trends ... and their impacts

“Did you have one of the following physical complaints yesterday?”



Austria, N=1763 (14-29)

[Knechtsberger, A., & Schwabl, T. (2016). Jugend-Trend-Monitor 2016. Präsentation am 14.04.2016.]

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

From: Public Health England (<https://www.gov.uk/government/organisations/public-health-england>)
First published: 2 July 2016

Change4Life and Disney's 10 minute shake up campaign launches with release of new study on the benefits of physical activity for children.



Today (2 July 2016) marks the launch of this year's 'Change4Life 10 minute shake up' campaign with Disney. The campaign aims to encourage children to do 10 minute bursts of moderate to vigorous activity, inspired by Disney characters, throughout the day, and 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 (<https://www.gov.uk/government/publications/change4life-evidence-review-on-physical-activity-in-children>) 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.

The new review 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 Charles Foster 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

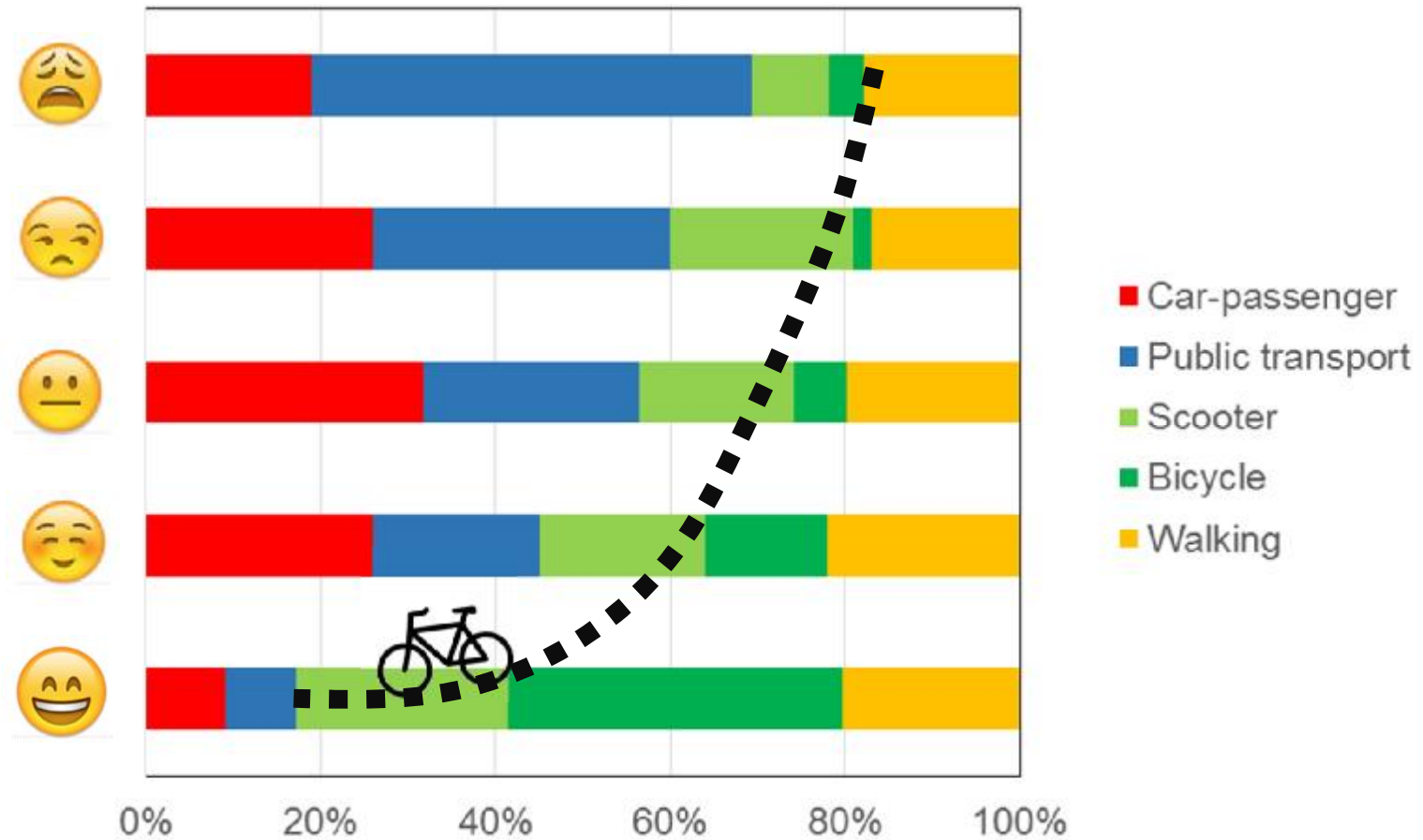
§ **Doctors** or other **experts** → objective quality of life

Approach: surveys with 3 target groups

| Children (8 to 10) N=152 | Parents N=31 | Teachers N=10 |
|---|---|------------------------------|
| § Age, gender | § Travel behavior parents | § School success evaluations |
| § Travel behavior | § Travel behavior child | |
| § Mobility preferences | § PA level | |
| § Attitudes <ul style="list-style-type: none">– travel modes– PA | § Effects of travel modes and PA on: <ul style="list-style-type: none">– Mental balance– Concentration– Calmness– Social development | |
| § Subjective wellbeing | | |

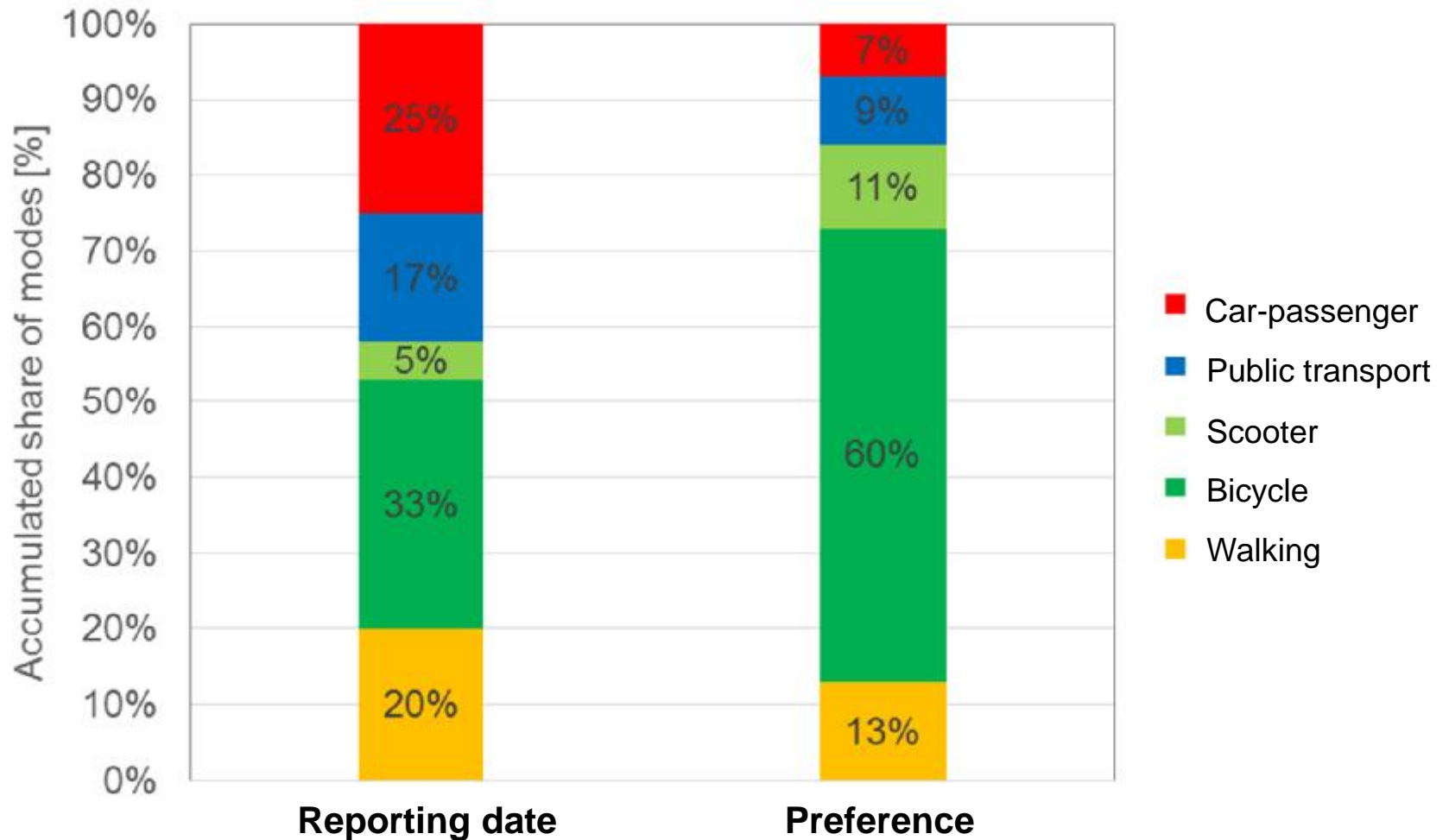


Results: Attitudes



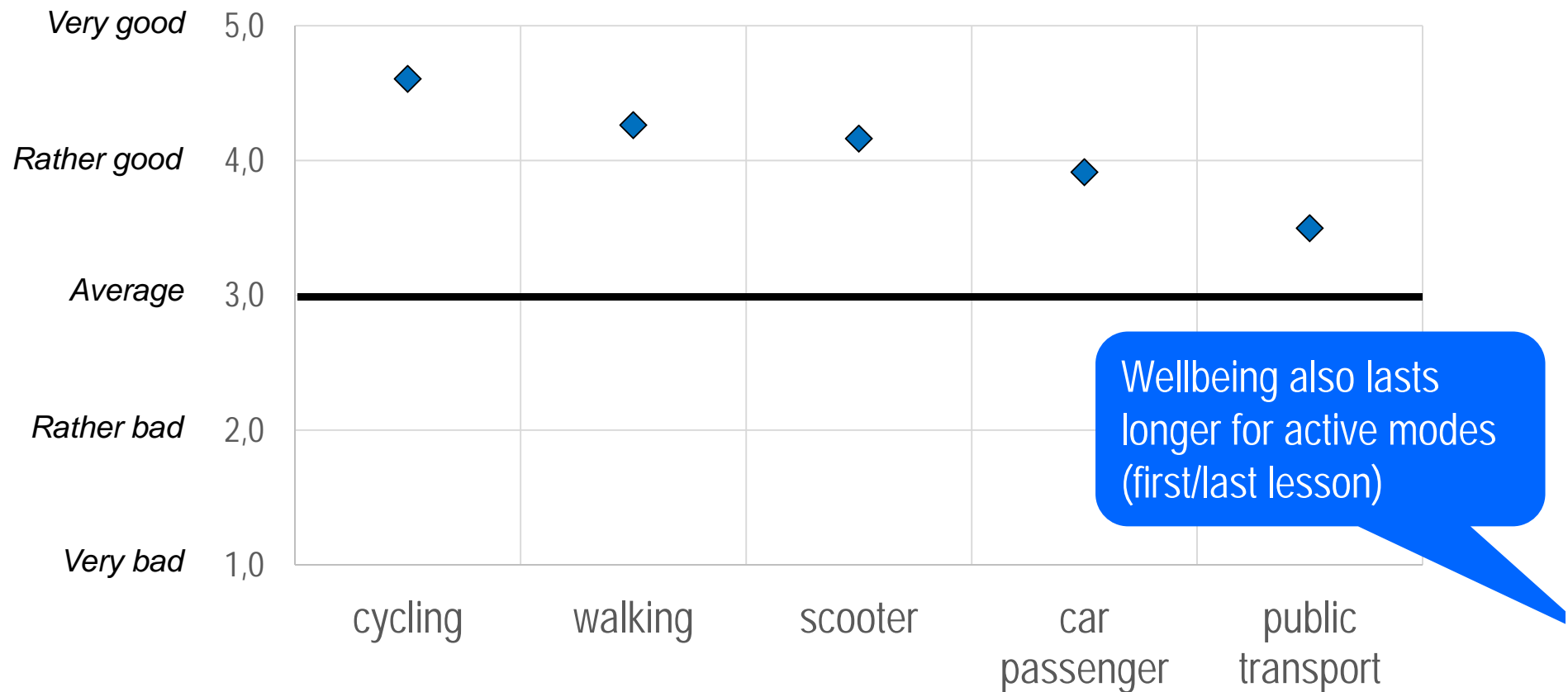
N = 152 children

Results: Mobility preferences



N = 152 children

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



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

frequent answers

occasional

Results: Wellbeing of children dependent on the mode used on a given day ...



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

N = 31 parents

Results: School performances

- § Children with $PA \geq 7$ 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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