Who is in?
An exploration of the participants in the German campaign “Mit dem Rad zur Arbeit” (‘Cycling to work’)

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Agenda

• Introduction
  o Cycling campaign and study design
  o Social demographics of participants

• Selected key aspects
  o Focus on cycling habits of participants during the campaign
  o Changes in the transport mode choice for the way to work
  o Relevance of the social environment

• Impact of participation
  o On future cycling habits
  o On physical and mental wellbeing

• Conclusion
### What does the campaign 'Cycling to work' look like?

<table>
<thead>
<tr>
<th>Campaign organizers:</th>
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<td>Health Insurance Fund AOK and the General German Bicycle Association (ADFC)</td>
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<th>Central objective:</th>
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<td>Improving health and health awareness</td>
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<th>Target audience:</th>
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<td>Working people in general (Participation single or in small teams)</td>
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<th>Online or postal registration</th>
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<td>Documentation of the number of days cycling to work</td>
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| If participants reach more than 20 cycling days, they will take part in a raffle |
| Yearly, since 2001, the campaign started at June 1\(^{st}\) and ended at August 31\(^{st}\) |
Design of the evaluation study

• Evaluation of the 2015 edition of the campaign with nationwide more than 150,000 participants

• Random sample of registered participants in 14 out of 16 German Federal States
  o Gross sample of 8,000 randomly drawn campaign participants
  o 2,296 respondents filled out the questionnaire (29.6%)

• Use of an online questionnaire
  o Invitation via email (email obtained in the registration process)
  o Survey period lasts from mid December 2015 to mid January 2016

• Purpose of the evaluation study:
  o Better understanding of motives and behaviour of participants
  o Potential improvements for increasing the attractiveness of the campaign
Basic information on the participants (I/II)

Gender (n = 2,211)

- Male: 54.6%
- Female: 53.7%

Age (n = 2,224)

- Below 25 yrs.: 1.3%
- 25 to 50 yrs.: 47.3%
- 50 yrs. and above: 51.4%

Average age of participants: 48.4 years

Rate of participants in %

Question: Please state your age and your gender.

Total number of employees who are subject to social insurance contributions = 28,200,899
Basic information on the participants (II/II)

Question: How many employees does your company have in total?

Rate of participants in %

- Up to 9 employees: 9.6%
- 10 to 49 employees: 18.4%
- 50 to 249 employees: 23.9%
- 250 or more employees: 48.2%

Number of participants = 2,240
Key aspect I: Cycling habits of participants during the campaign

• Involvement in the campaign
  o First participation in the campaign: 30.5%
  o Two or more participations: 69.5%
  o Share of persons in teams (with up to four members): 29.9%

• Cycled mileage during the campaign:
  o Distance of single trip: Up to 5 km: 37.3%
    Up to 10 km: 30.9%
    More than 10 km: 31.8%

• Cycling habits off the campaign
  o High share of participants cycling the whole year: 51.0%

⇒ The campaign attracts cycling pros and permanent participants but also newbies and switchers
Key aspect II: Transport mode choice

- Central side-effect of the campaign: Change of the main transportation mode for the way to work
  - 51.0% of the participants in 2015 did not change the transport mode = habitual cyclists
  - 49.0% of the participants did change the transport mode to a bicycle
    - 34.1% switched from a motorised individual transport mode
    - 12.9% switched from public transport
    - 3.2% switched from walking

- In addition: 21.4% of these ‘switchers’ reflect their attitude towards car usage

⇒ The campaign mobilizes a considerable amount of commuters to change the main transportation mode to bicycle
Key aspect III: Relevance of the social environment

• Positive influence on using the bicycle as a commuter mode e.g. through … (cf. Bartle et al. 2013; Heinen et al. 2013)
  – … user-generated information from cycling colleagues
  – … group membership
Key aspect III: Relevance of the social environment

Question: What was your family’s and friends’ / colleagues’ reaction towards the campaign?

- **Campaign was topic of conversation**
  - Family and friends: 48.6% (n = 2,030)
  - Colleagues and company: 65.7% (n = 1,997)

- **Showed support for participation**
  - Family and friends: 49.7% (n = 1,887)
  - Colleagues and company: 46.0% (n = 1,838)

- **My participation made others use their bicycle more frequently**
  - Family and friends: 21.2% (n = 1,878)
  - Colleagues and company: 26.8% (n = 1,859)

- **My participation made others take part in the campaign**
  - Family and friends: 13.8% (n = 1,867)
  - Colleagues and company: 30.6% (n = 1,886)
Key aspect III: Relevance of the social environment

• Positive influence on using the bicycle as a commuter mode e.g. through … (cf. Bartle et al. 2013; Heinen et al. 2013)
  – … user-generated information from cycling colleagues
  – … group membership

• Social contacts become important when …
  – … sharing experiences
  – … deciding about the participation
  – … convincing others to take part in the campaign

• Participation in teams is mainly driven by social motives

⇒ The social environment of the participant is involved and also affected, esp. among colleagues in the company
Impact on cycling habits and well-being

Impact on future cycling habits
- Participants are willing to participate again: 95.9%
- Future participation as a team member: 30.3%
- 63.1% participants of ‘switchers’ intend to keep on using the bike after the campaign

Impact on mental and physical wellbeing
- Participants state a subjective perceived improvement in mental and physical wellbeing (cf. Department of Health 2004; Oja et al. 2011)
- Esp. ‘switchers’ of the main transportation mode document higher effects on mental and physical wellbeing
- Both aspects hold true for the time during and after the campaign
Conclusion

What the study does tell us …

– The campaign is attractive for habitual and occasional cyclists
– A company context facilitates the participation in the campaign
– The study shows a considerable group of commuters that can be attracted to ride a bicycle to work
– The study underpins the relationship between cycling and health improvement (no causality proven)

What the study does not tell us …

– The study findings cannot be transferred to the population of working people – highly selective sample
– The study cannot give information on people who do not want or dare to ride a bicycle to work due to any circumstances like long distances, missing bicycle paths, road safety concerns etc.
Literature


Acknowledgement

This report is based on parts of the research project carried out at the request of the German Health Insurance Fund AOK and the General German Bicycle Association (ADFC).

The authors are solely responsible for the content.
Thank you very much for your attention! Questions?

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BackUp-Slides
Impacts on the participants after changing their MMT (I/II) – *During the campaign*

**Question:** What was the campaign’s impact for yourself personally?

- **Helped me to clear my mind**
  - Rate of participants: 58.2% MMT = bicycle, 71.7% changed MMT

- **Made me feel energetic and healthy**
  - Rate of participants: 54.2% MMT = bicycle, 65.9% changed MMT

- **Made me feel glad to do something for the environment**
  - Rate of participants: 46.8% MMT = bicycle, 51.8% changed MMT

- **A signal for traffic policy**
  - Rate of participants: 30.0% MMT = bicycle, 23.8% changed MMT

- **Made me feel able-bodied**
  - Rate of participants: 28.6% MMT = bicycle, 44.3% changed MMT

- **Made me feel as part of a bigger movement**
  - Rate of participants: 19.5% MMT = bicycle, 22.9% changed MMT

- **Gave me new energy for my job**
  - Rate of participants: 10.3% MMT = bicycle, 13.5% changed MMT

- **None of the above**
  - Rate of participants: 6.9% MMT = bicycle, 23.1% changed MMT

*MMT = Main mode of transportation*

Multiple answers; Number of participants: 1.153 bicycle was MMT before; 1.113 changed MMT
Impacts on the participants after changing their MMT (I/II) – *During the campaign (selection)*

**Question:** What was the campaign’s impact for yourself personally?

- **Helped me to clear my mind**
  - Bicycle was MMT before: 58.2%
  - Changed MMT: 71.7%

- **Made me feel energetic and healthy**
  - Bicycle was MMT before: 54.2%
  - Changed MMT: 65.9%

- **Made me feel able-bodied**
  - Bicycle was MMT before: 28.6%
  - Changed MMT: 44.3%

- **Gave me new energy for my job**
  - Bicycle was MMT before: 10.3%
  - Changed MMT: 13.5%

**MMT = Main mode of transportation**

Multiple answers;
Number of participants: 1.153 bicycle was MMT before; 1.113 changed MMT
Impacts on the participants after changing their MMT (II/II) – After the campaign

Question: Which long-term consequences did the participation in the campaign have for you?

Multiple answers;
Number of participants: 1.154 bicycle was MMT before; 1.108 changed MMT

- I still use my bicycle on the way to work: 73.0%
- I am trying to be more ecological when it comes to transportation: 12.8% (bicycle was MMT before), 20.7% (changed MMT)
- I feel like I am in a better physical shape: 11.8% (bicycle was MMT before), 22.5% (changed MMT)
- Regular exercise is more relevant to me now: 10.2% (bicycle was MMT before), 22.1% (changed MMT)
- I cycle more in general: 10.2% (bicycle was MMT before), 19.1% (changed MMT)
- I am trying to live more healthily in general: 9.3% (bicycle was MMT before), 17.0% (changed MMT)
- None of the above: 21.3% (bicycle was MMT before), 28.0% (changed MMT)

MMT = Main mode of transportation
Impacts on the participants after changing their MMT (II/II) – *After the campaign (selection)*

**Question:** Which long-term consequences did the participation in the campaign have for you?

**MMT = Main mode of transportation**

**Multiple answers;**

Number of participants: 1,154 bicycle was MMT before; 1,108 changed MMT

- **I feel like I am in a better physical shape**
  - Bicycle was MMT: 11.8%
  - Changed MMT: 22.5%

- **Regular exercise is more relevant to me now**
  - Bicycle was MMT: 10.2%
  - Changed MMT: 22.1%

- **I am trying to live more healthily in general**
  - Bicycle was MMT: 9.3%
  - Changed MMT: 17.0%