

Can Social Norms and incentives increase active mobility to the stadium?

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Large-scale sports events produce many tons of CO₂ and up to 80 percent of that can come from (fan) mobility. Additionally, cycling and walking are a great way to meet the physical activity goals by the WHO. Therefore, increasing fans' active mobility can have a lasting effect on sustainability and health.

IMPACT DRIVEN Field Studies.

Our collaboration with OH Leuven and Background

- OH Leuven aims to reduce the CO₂ emissions from their fans' mobility
- Once a season: organize the 'Game for the Future' (GfF), where everyone who comes by bike receives a free drink voucher (incentive)
 - The effectiveness had not previously been assessed
- Aim of our study:
 - Assessing the effectiveness of the GfF incentive and a social norm intervention:

1. Incentive (GfF):

- Incentives can increase intended behavior, even in the long-term (e.g., [Maki et al., 2016](#))
- Mobility in the lab: incentives increase bike choices in a consequential behavioral task ([Kroker & Lange, 2024](#))

2. Social norms:

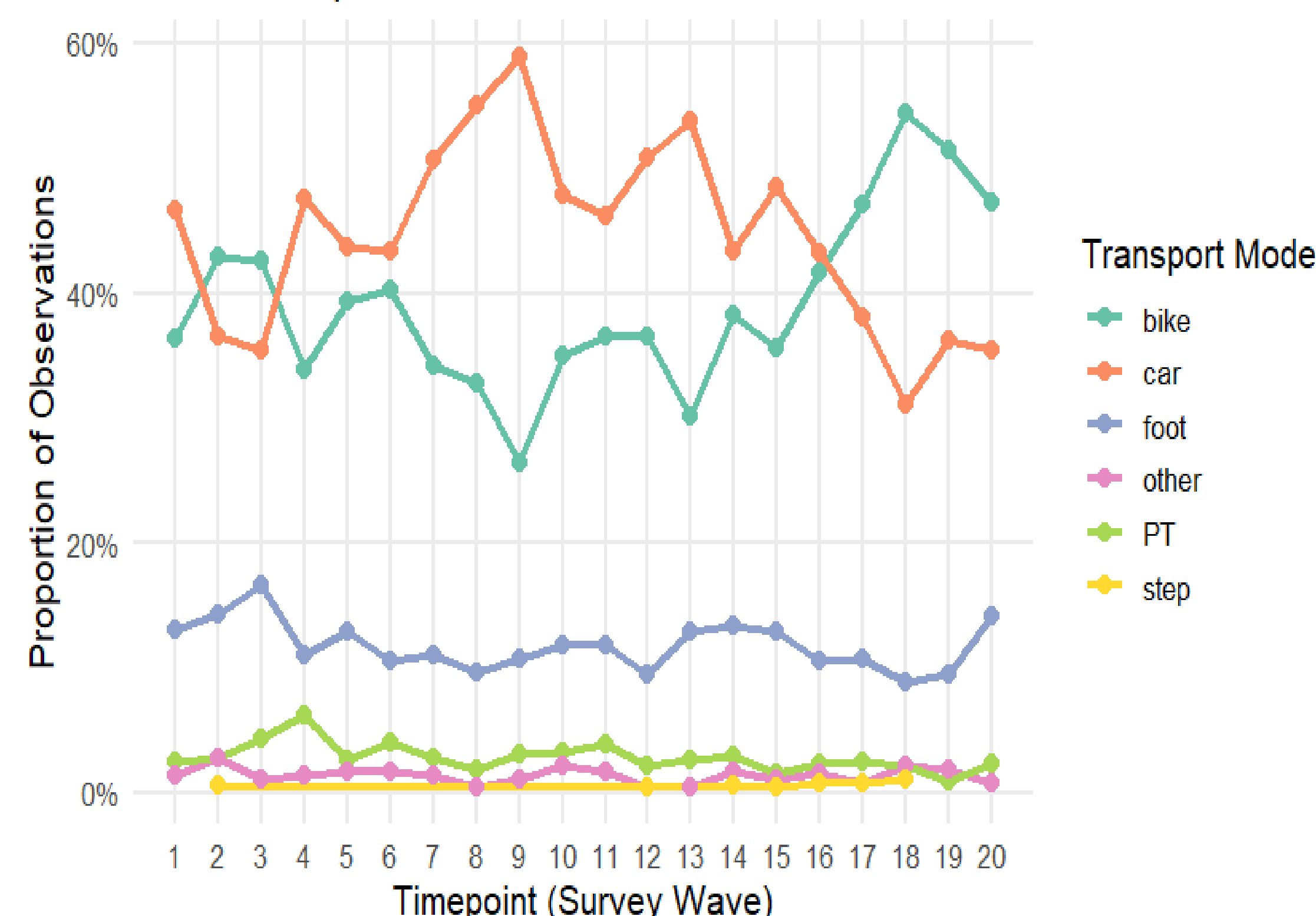
- Prescribe social expectations
- Can decrease car use when commuting ([Kosmos et al., 2015](#))

Results

Seasonal trends:

- Clear seasonal trends
 - If cars increase, bikes decrease (e.g., time point 9: December)
 - Increase in temperature: increase in cycling
 - Start of sunset before kickoff: less cycling

Main Transport Mode Trends Across the Season



Intervention assessment:

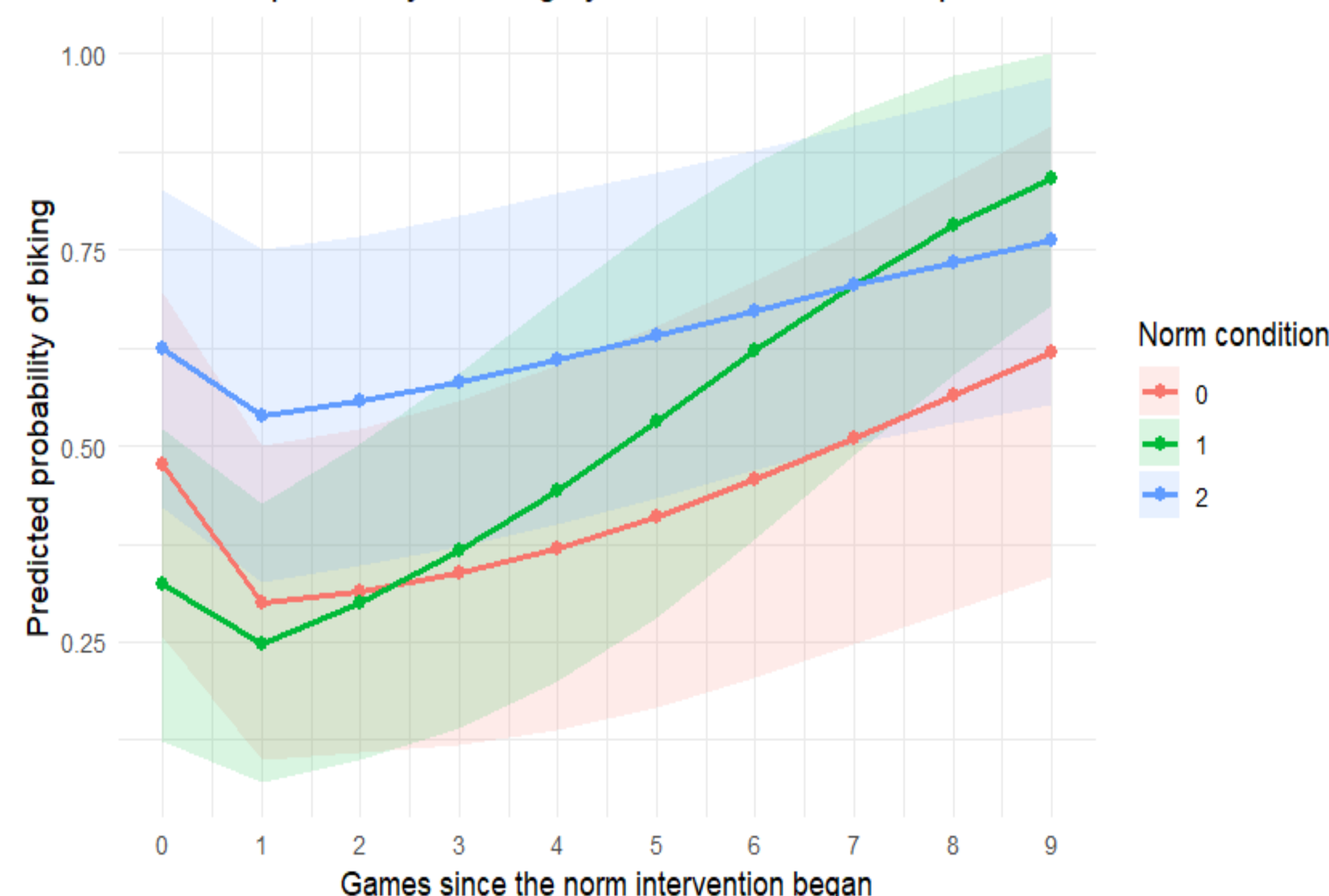
Incentive (GfF):

- No effect of the incentive on cycling behavior (reduction in bikes counted)
- Potential weather effect:
 - GfF: 7 degrees
 - Game after: 25 degrees

Social norm intervention:

- No direct increase in active mobility after the social norm intervention, but:
 - Larger increase in cycling in the long-term (1+n= home games after the intervention was introduced)

Predicted probability of biking by norm condition and exposure



*based on real numbers

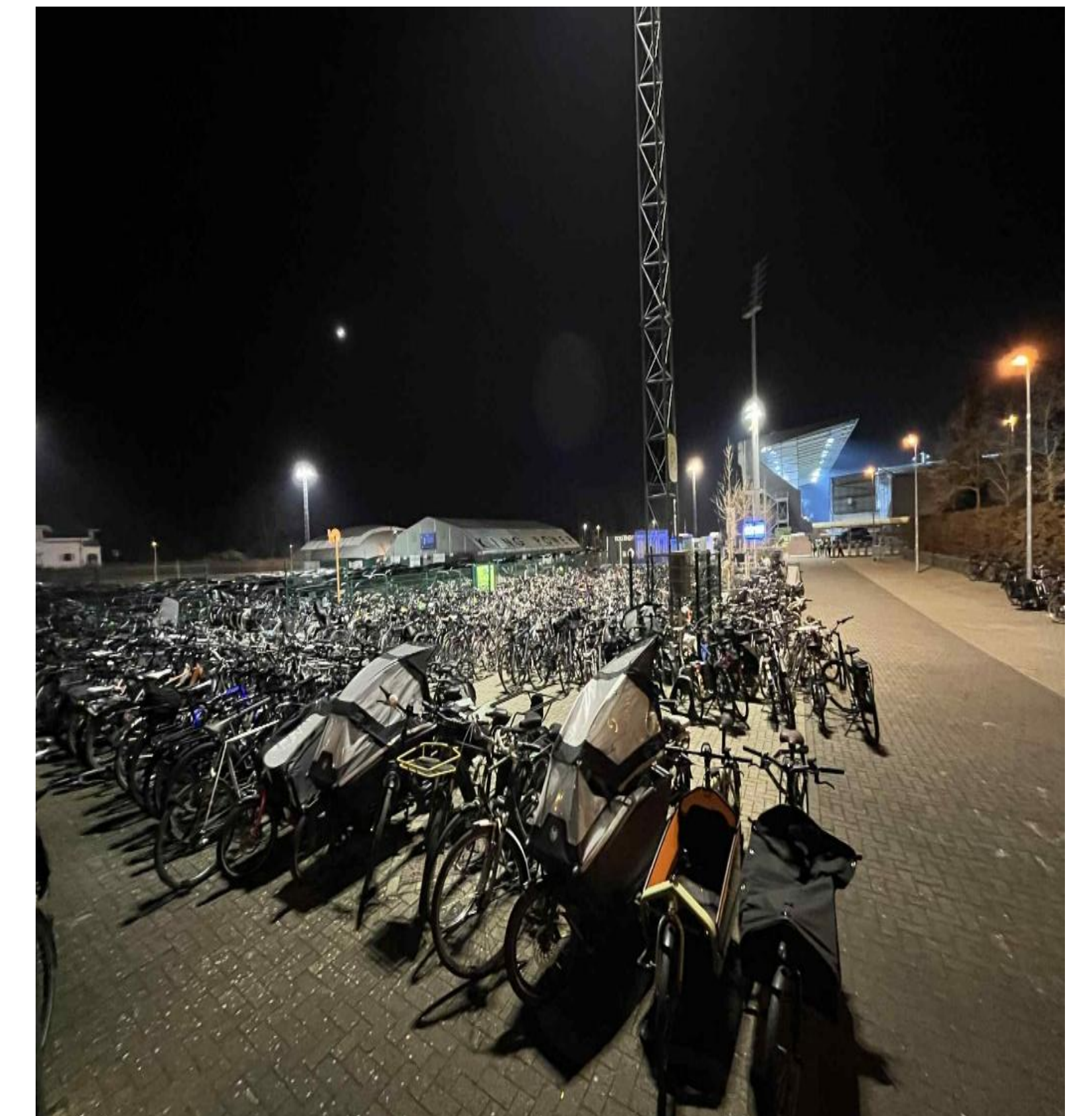


Figure 1. The bike parking at the stadium.

What this shows

- Seasonal trends predict mobility behavior
 - Temperature and sunlight availability correlate with mobility behavior
- Descriptive norms (=Social norm 1) may increase cycling in the long run
- Distance and age: less bike use
- Going with others predicts taking the car: potential of **bike buses**?

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You provide the setting; we design and run the study

You get a clear, evidence-based answer!

Reference

- Kormos, C., Gifford, R., & Brown, E. (2015). The Influence of Descriptive Social Norm Information on Sustainable Transportation Behavior: A Field Experiment. *Environment and Behavior*, 47(5), 479-501. <https://doi.org/10.1177/0013916513520416>
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- Maki, A., Burns, R. J., Ha, L., & Rothman, A. J. (2016). Paying people to protect the environment: A meta-analysis of financial incentive interventions to promote proenvironmental behaviors. *Journal of Environmental Psychology*, 47, 242-255. <https://doi.org/10.1016/j.jenvp.2016.07.006>

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