







## User experience of passengers using the self-driving shuttles at Terhills

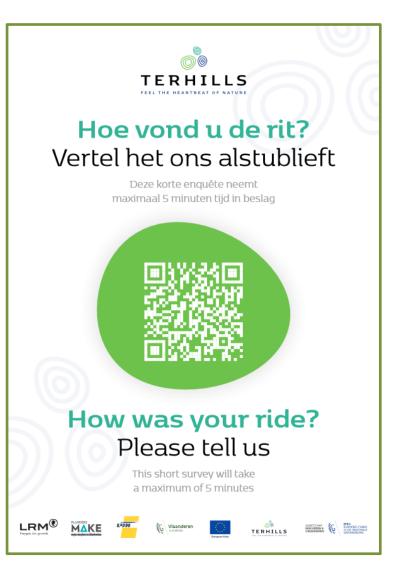
Paving the road for autonomous mobility, 29 March 2023

Mario Cools, Tim De Ceunynck



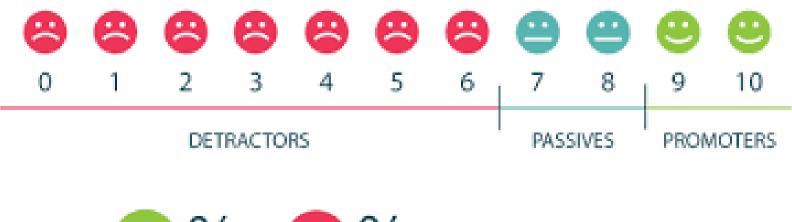
## Data collection

- 2 data collection efforts
  - In-vehicle data / at bus stop (N=389)
    - "Spontaneous" responses using QR-codes on board
    - Invited by interviewer
  - Terhills resort: invited by interviewer (N=166)









3% - 3% =Net promoter score

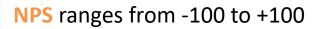
#### Ranges from +100 (extremely positive) to – 100 (extremely negative)



## NPS in daily travel behaviour in Belgium

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NPS group recommendation of NMBS						
NMBS_NPS_CAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Detractor	148	46.84	148	46.84		
Passive	130	41.14	278	87.97		
Promotor	38	12.03	316	100.00		



-34.81 -22

NPS group recommendation of De Lijn						
BUS_NPS_CAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Detractor	209	60.06	209	60.06		
Passive	105	30.17	314	90.23		
Promotor	34	9.77	348	100.00		

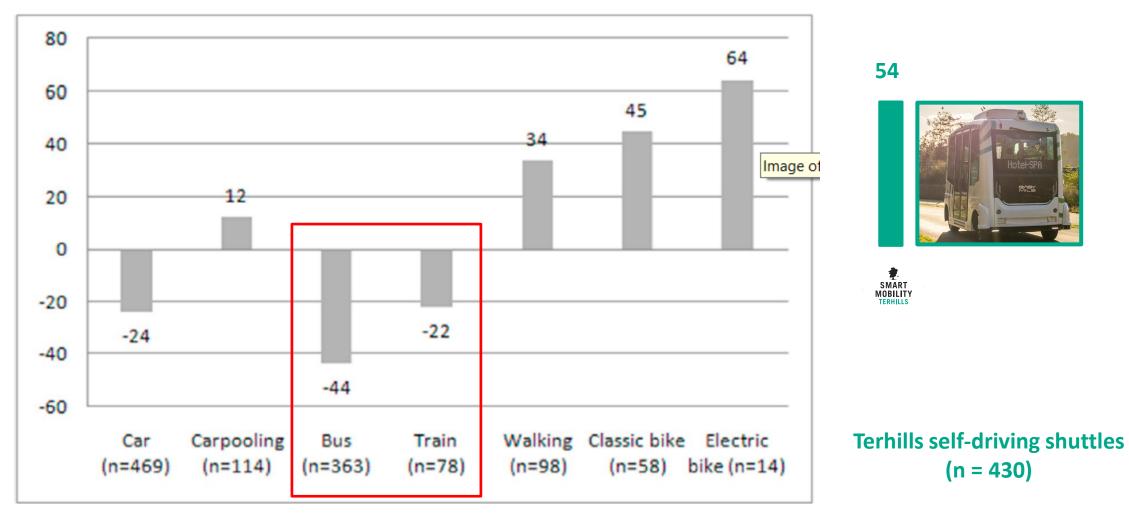
-50.29 -44

Nematchoua et al. (2020) https://doi.org/10.1016/j.rser.2019.109544



## NPS in daily travel behaviour in Belgium

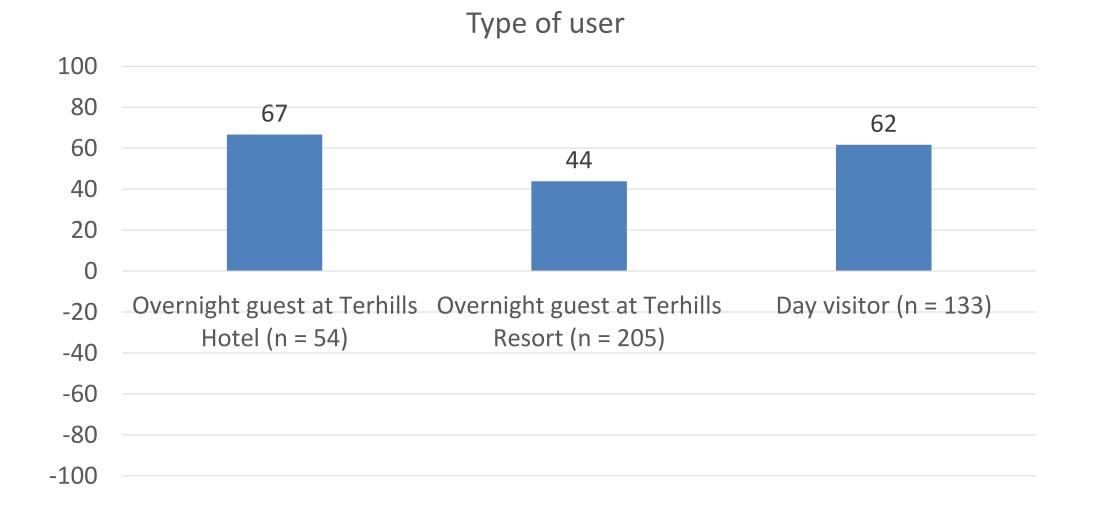
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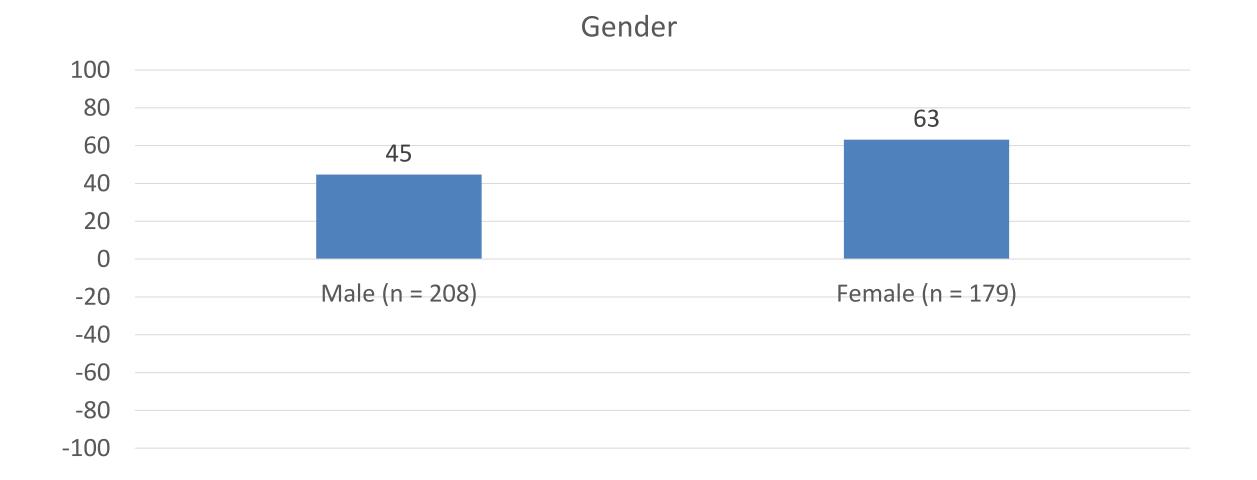
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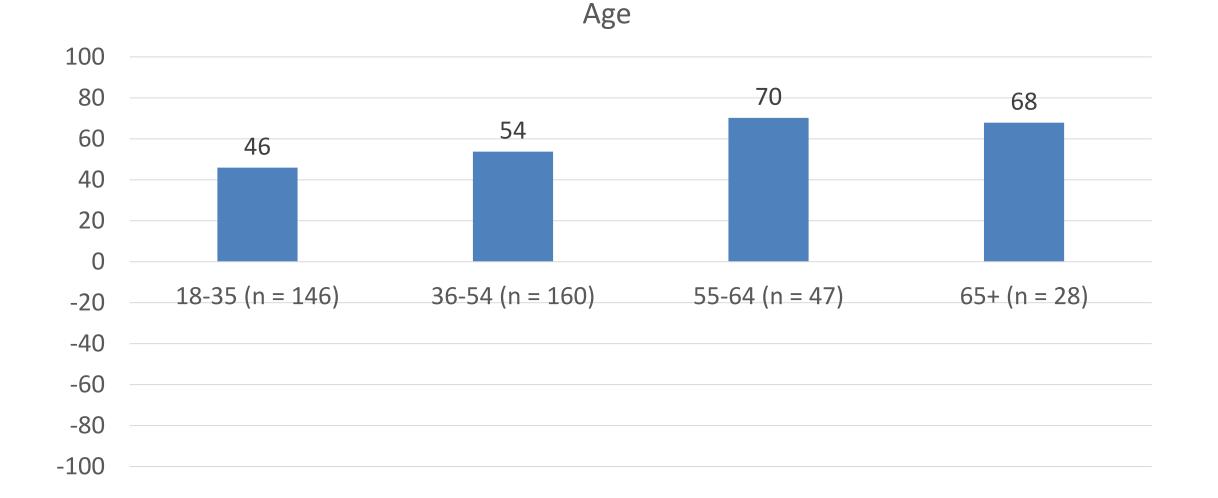
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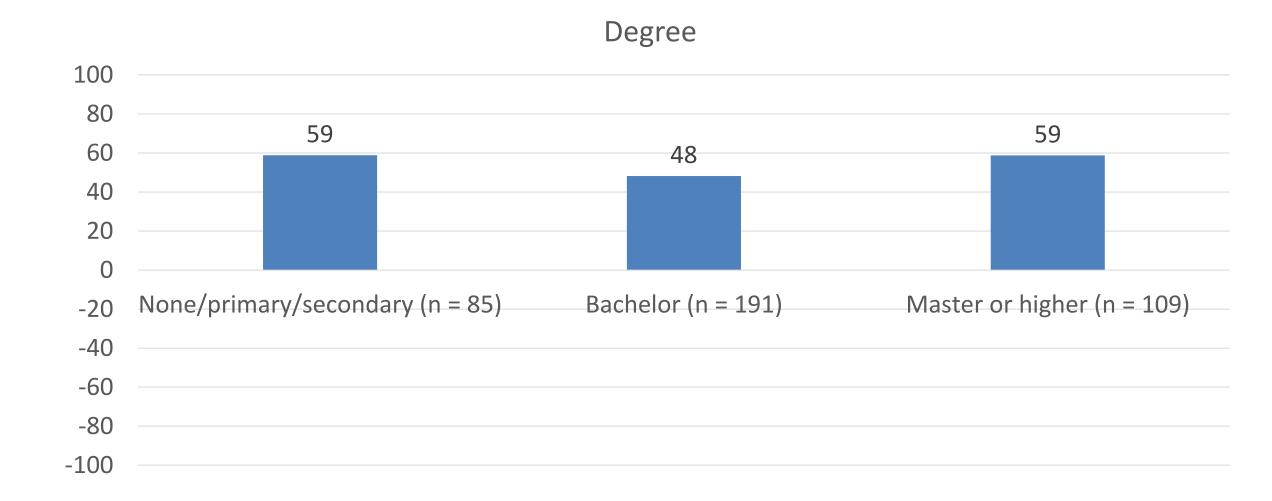
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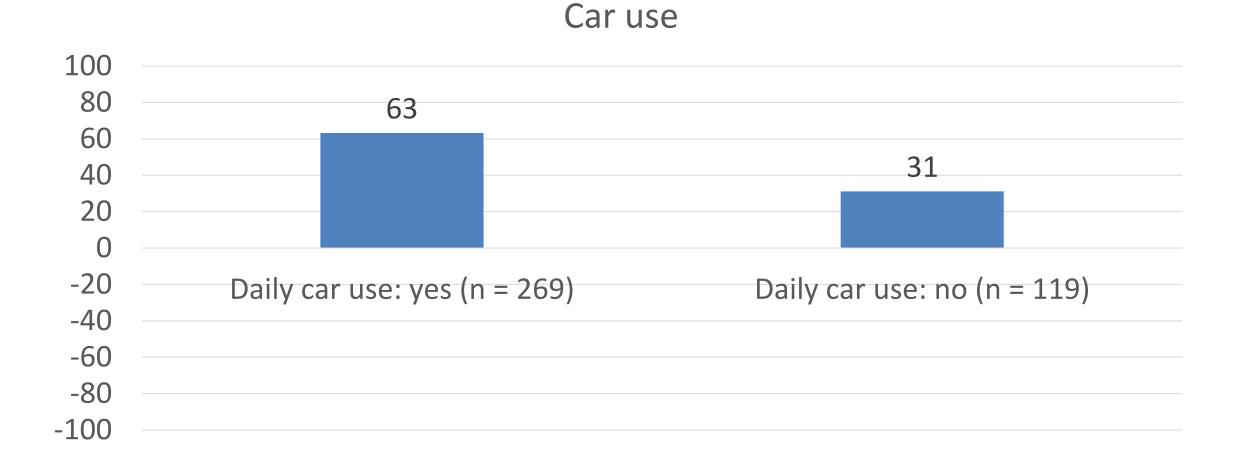
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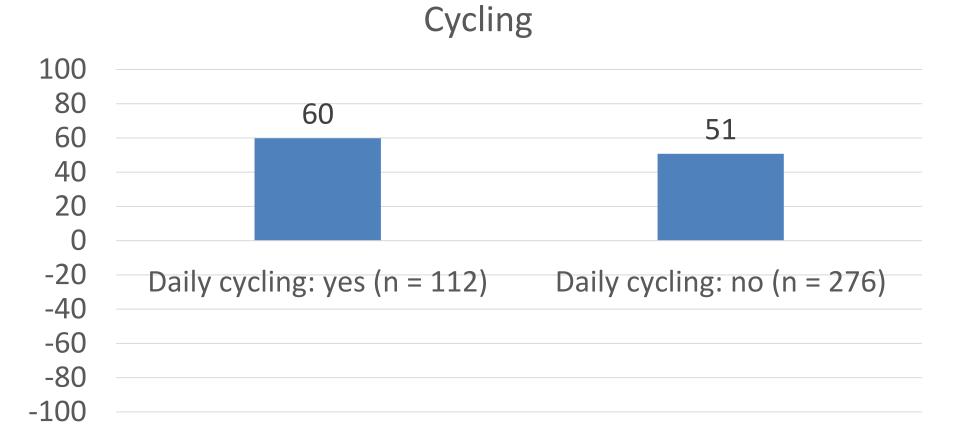
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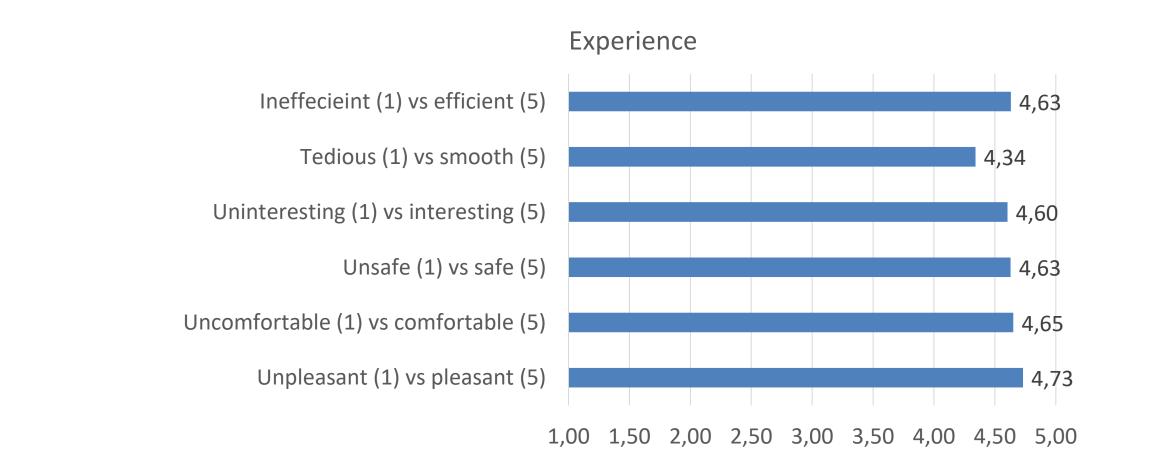






- Current analyses show little to no effect of
  - Country of residence
  - Daily use of other transport modes (e.g. BTM, walking)

## Dimensionality of the experience

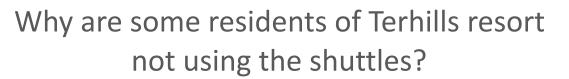


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# Why are some residents of Terhills resort not using the shuttles?



Another reason20%Don't consider the shuttles EFFICIENT1%Don't consider the shuttles SAFE0%Preference for other transport modes57%Only stayed within the resort14%Not aware of the existence19%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

FMA



• Data collection and analysis continues to be able to monitor the transition towards a stewardless system.



#### Takeaway

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• Extremely positive user experience of the system

• People consider the system very safe, pleasant, ...

Some surprising results that deserve further investigation:
 – E.g.; Older and female respondents have a more positive view





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#### PROMOTOR



#### PROJECTPARTNERS





#### **MET STEUN VAN**











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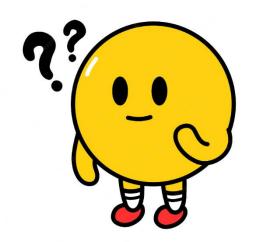




#### Questions and answers?

• Thank you for your attention!

• Questions?



• Let's connect:

