

# eHUBS: the behaviour change perspective

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Marije van Gent

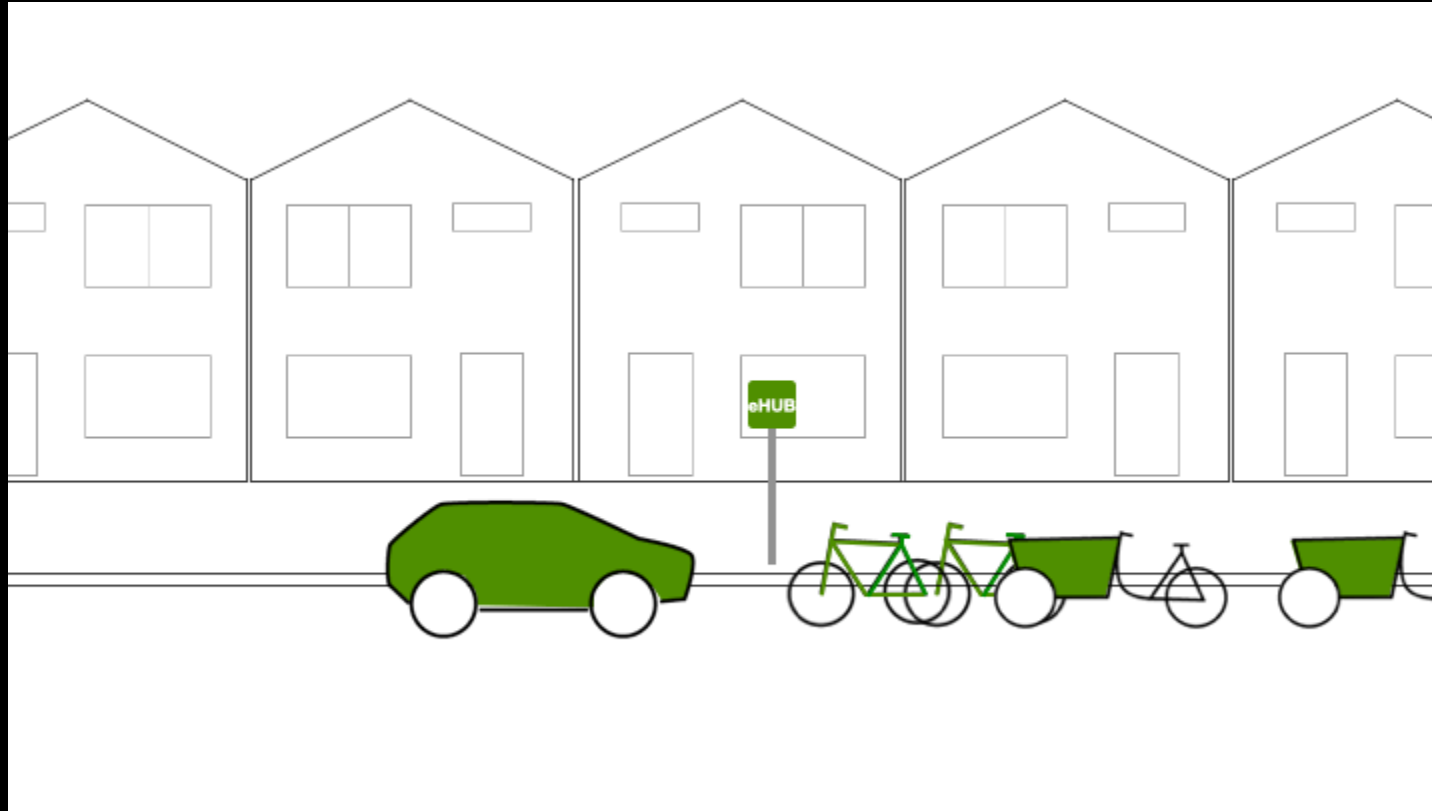
Amsterdam University of Applied Sciences –  
Research Group Psychology for Sustainable  
Cities



AIM

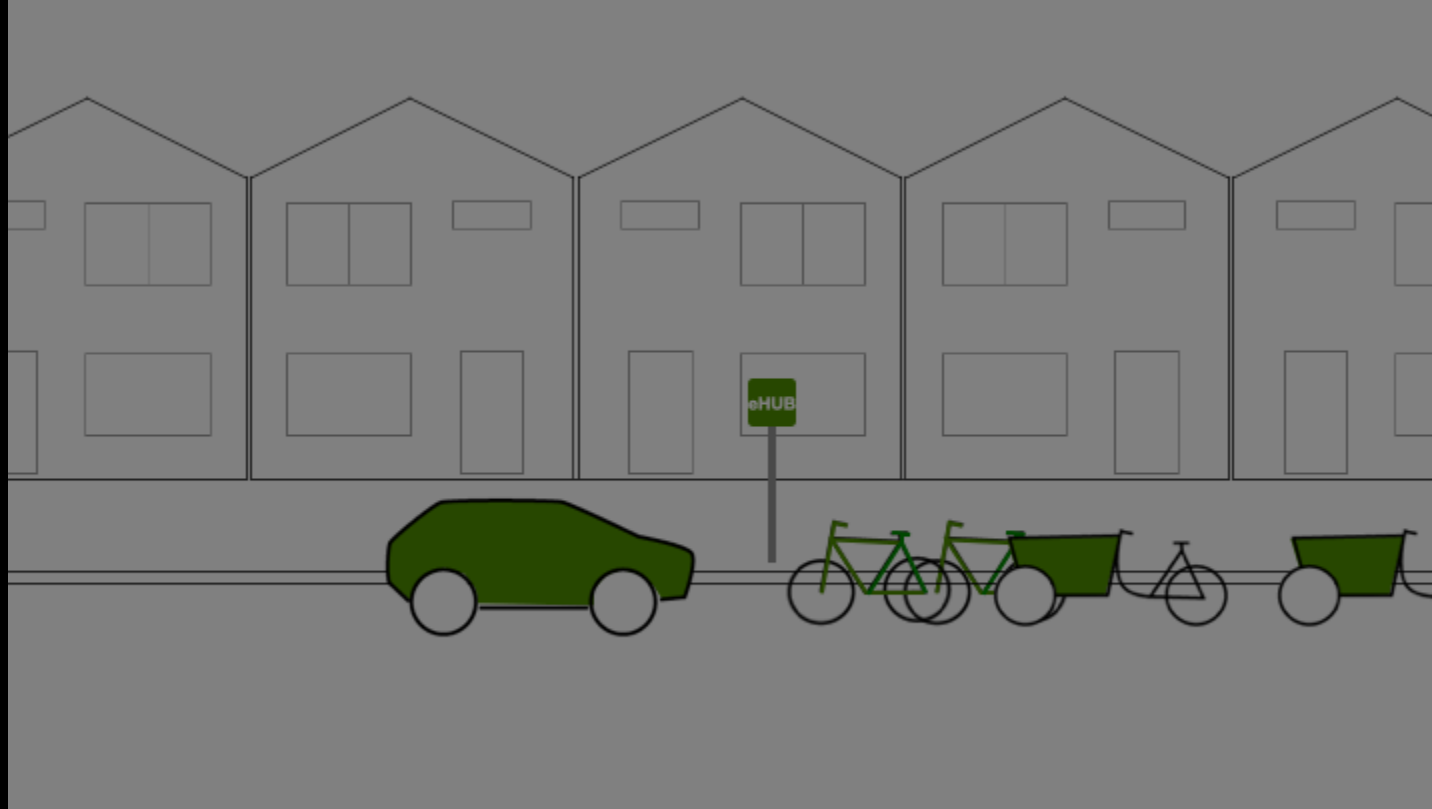


CARBON NEUTRAL CITIES



An eHUB is an intervention to change travel behaviour





Who needs to change?  
What behaviour needs to change?



# What we don't want: dirty trips



car ~~use~~



car own ~~ership~~



# What we do want: active & clean trips



If that is your aim,  
are eHUBs the right solution?

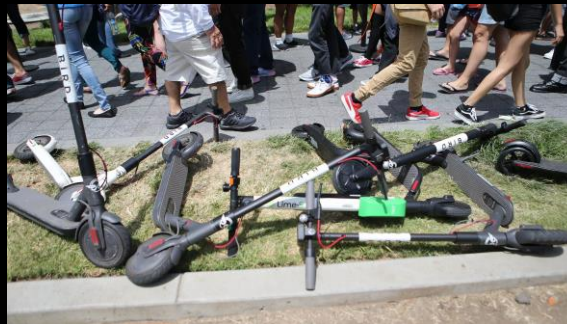


# Shared mobility: what does it replace?

car use ↑

active rides ↓

Public Transport ↓



Early users people without cars?



Target group  
CAR OWNERS



# CAR

- Status quo
- Fits needs and goals
- Habit



# Trying out electric shared modalities from eHUBs by car owners



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Aim of this behavioural research:

- Understanding what motivates car owners to try out eHUBs.
- Gaining insights for the development of behavioral change interventions.

# Trying out electric shared modalities from eHUBs by **car owners**

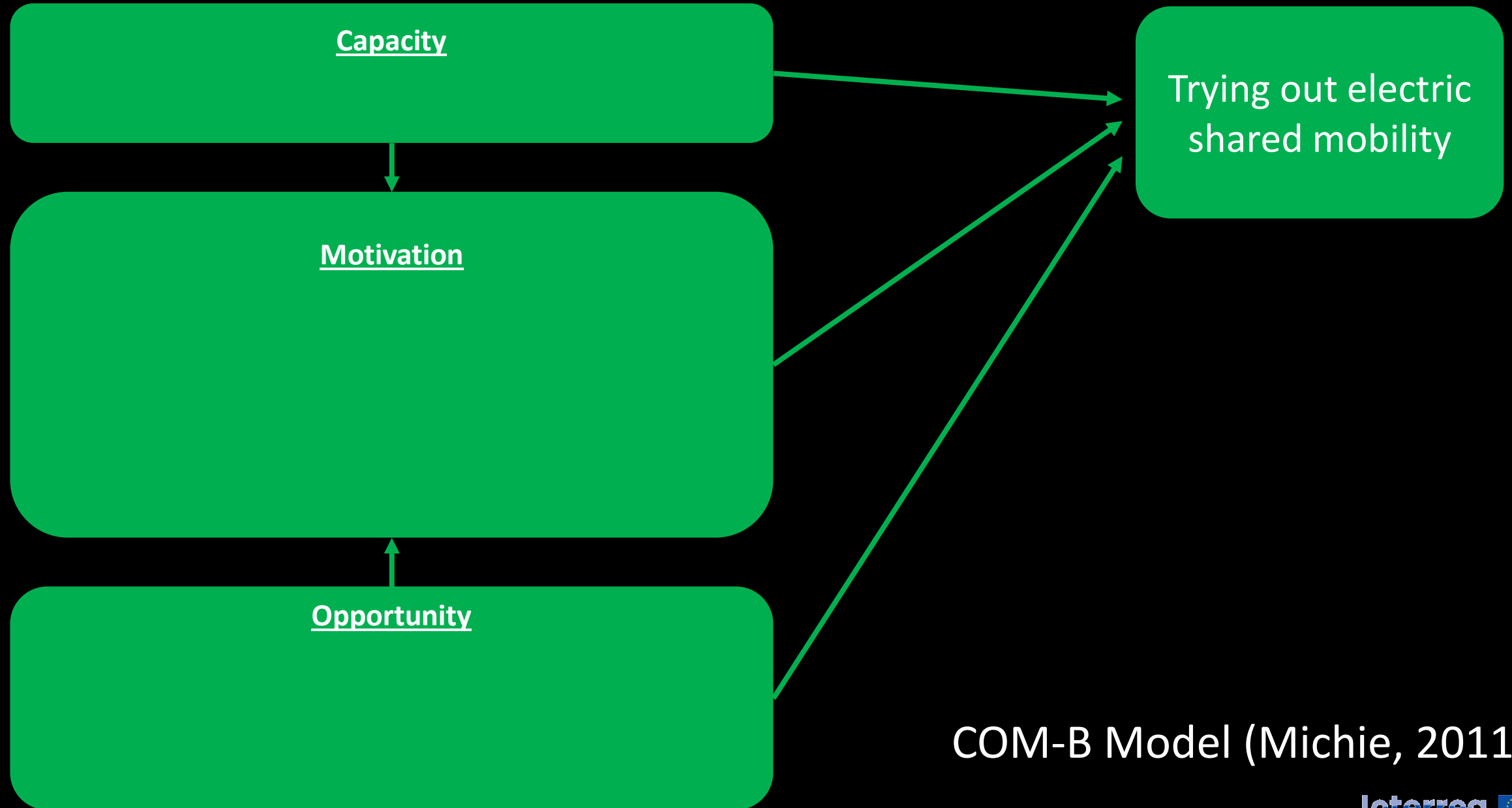


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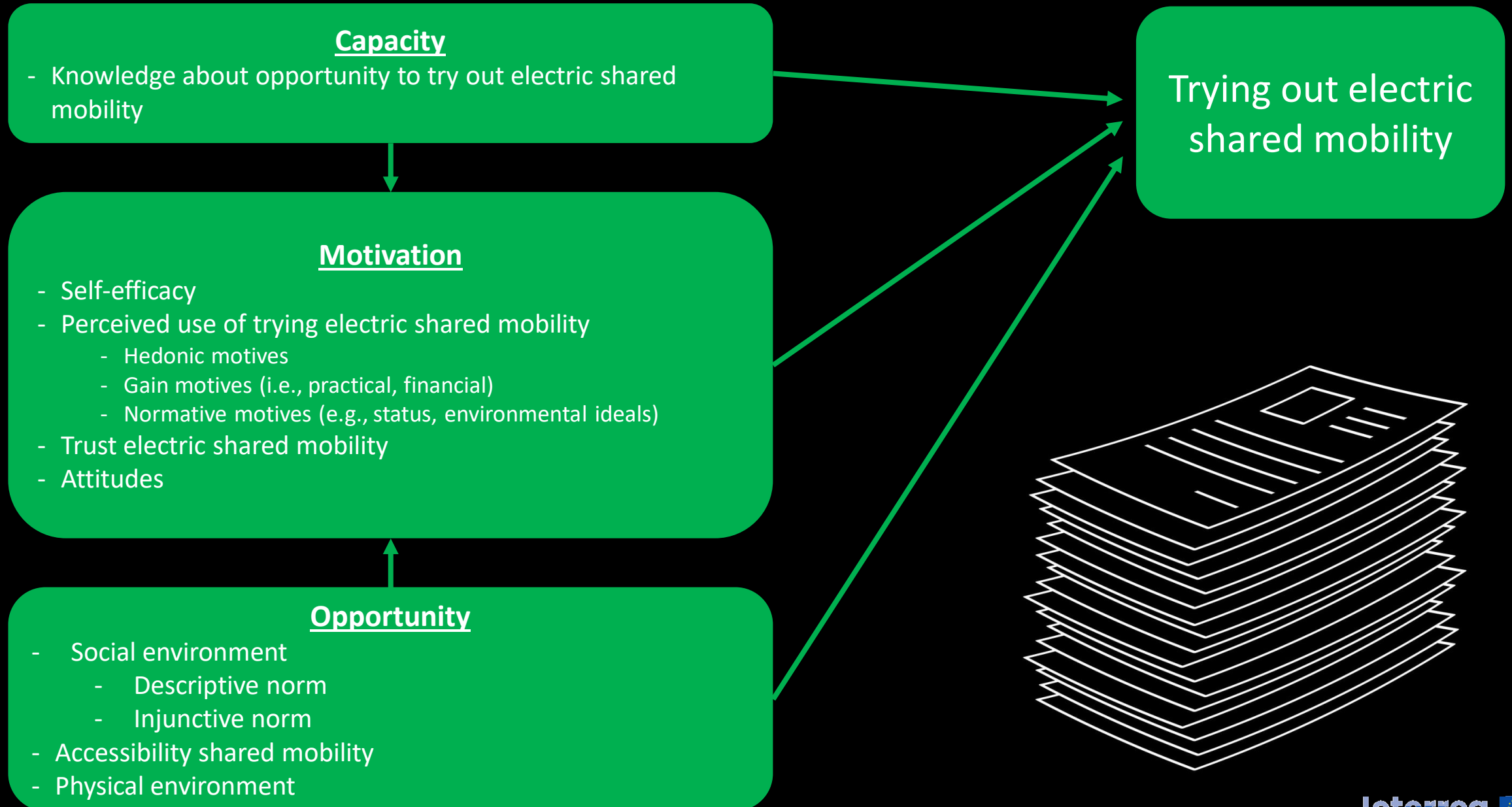
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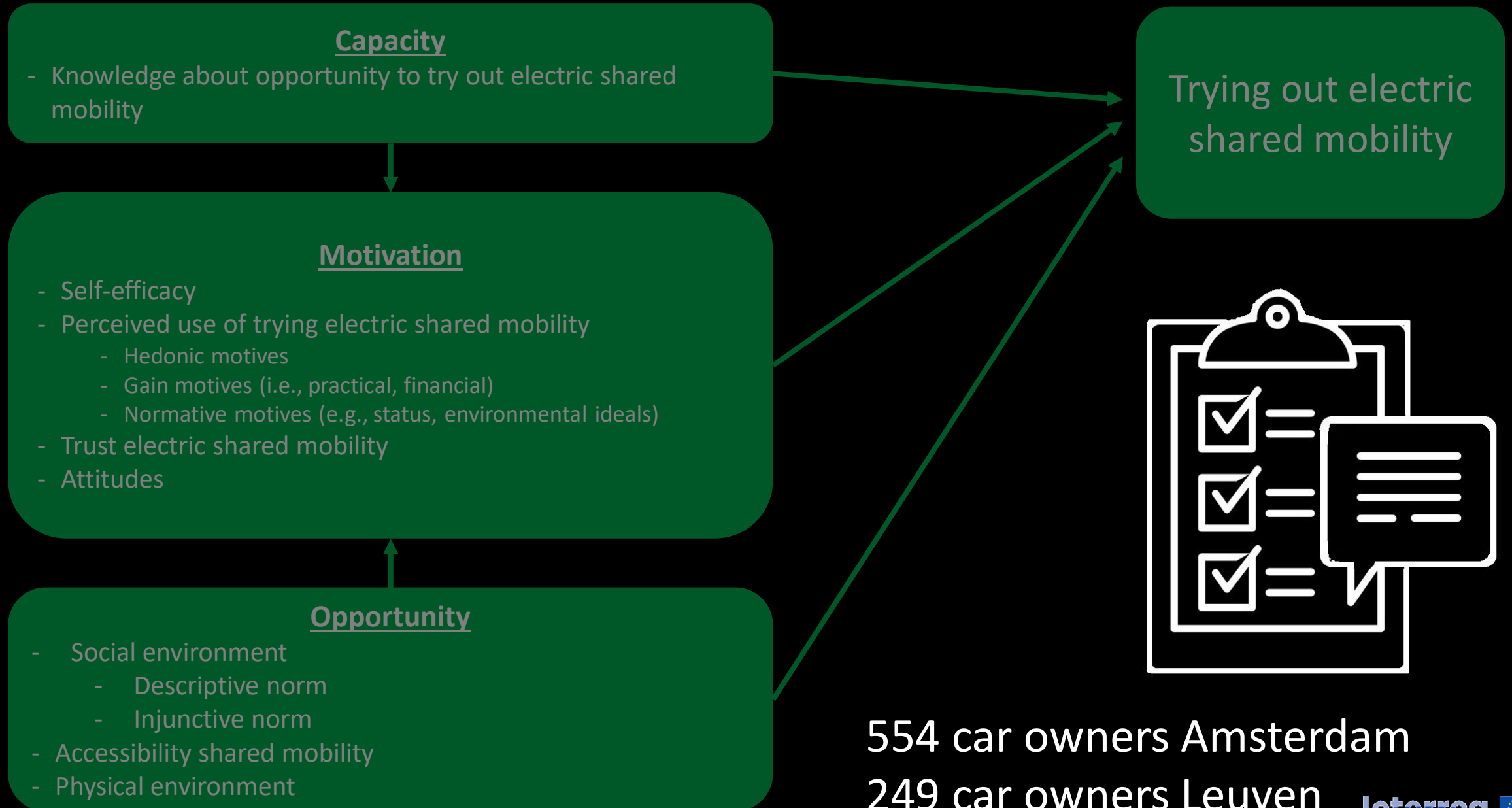
Trying out electric  
shared mobility





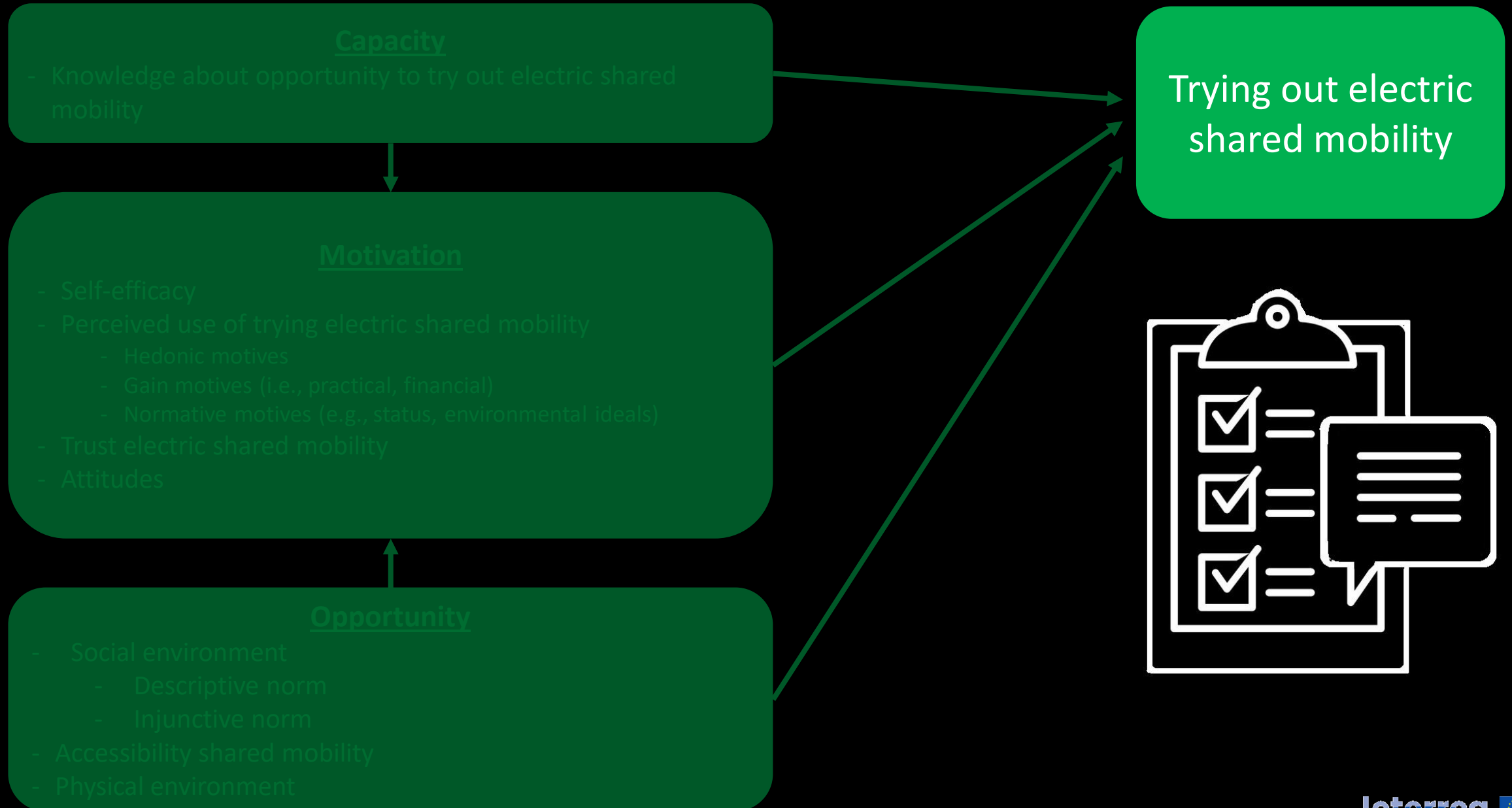
COM-B Model (Michie, 2011)





554 car owners Amsterdam  
249 car owners Leuven



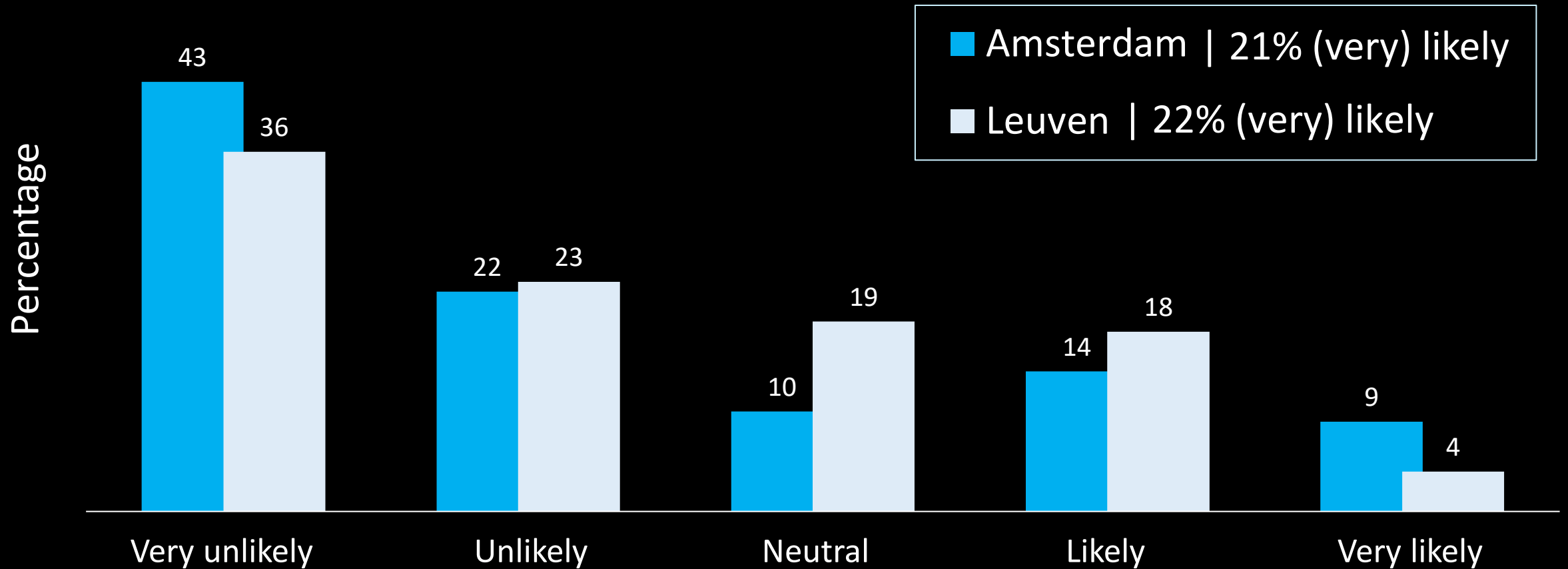


# Would you try out an electric vehicle from an eHUB in the coming month?

Percentage



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# WHY DO OR DON'T CAR OWNERS WANT TO TRY OUT eHUBs?



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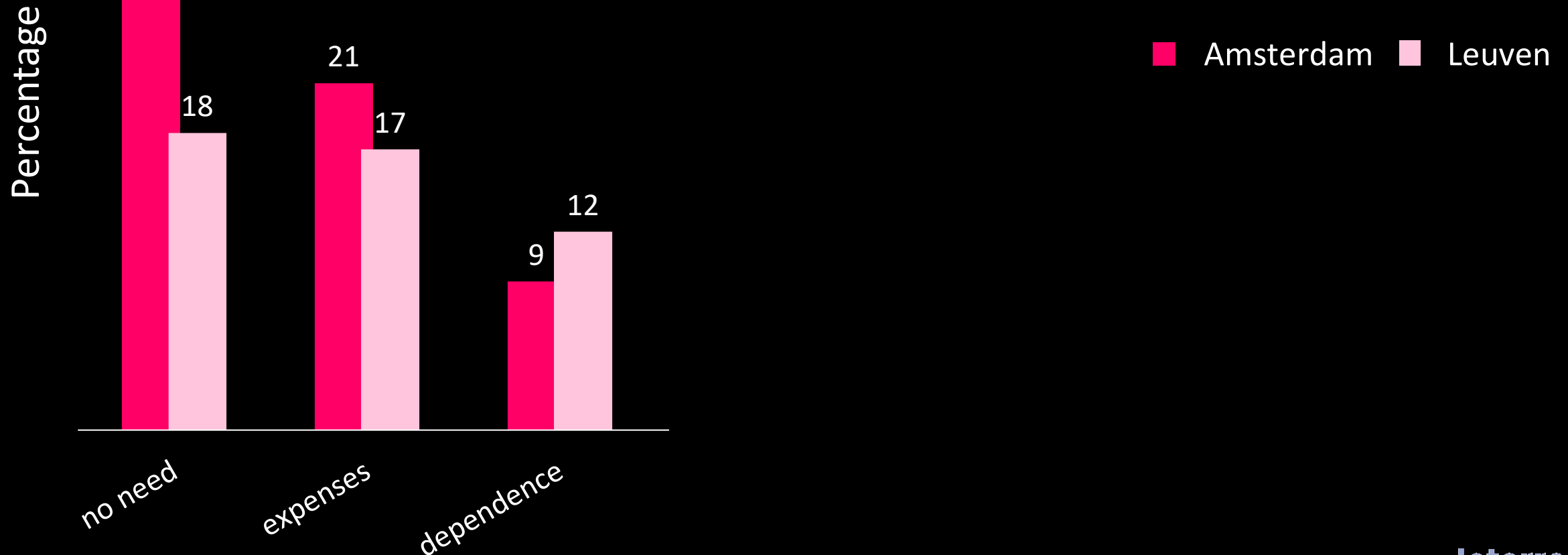
What do they say themselves?



Open-ended question:  
What would be your main reason **not**  
to try out the eHUB?

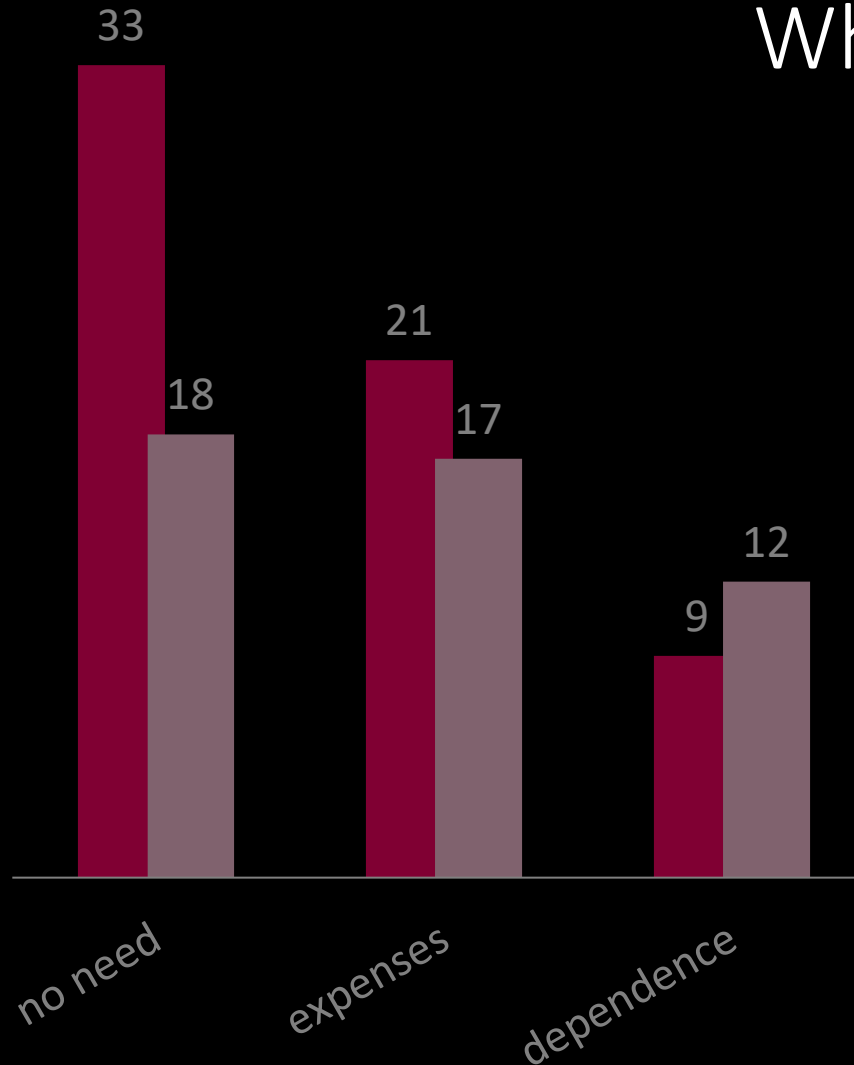


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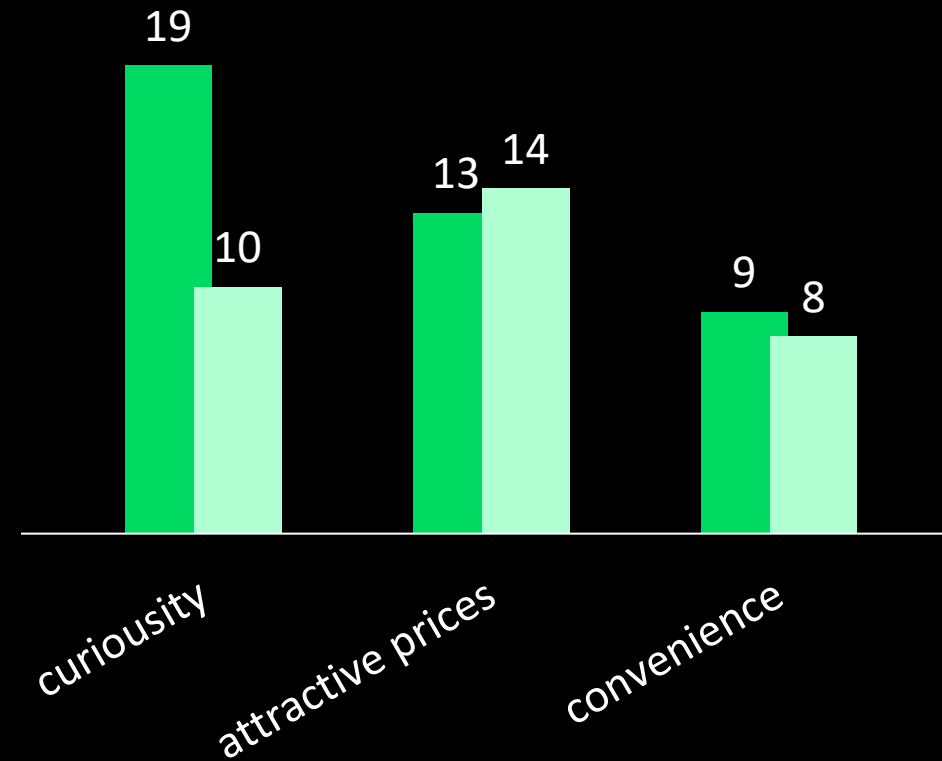


Open-ended question:  
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Percentage



Amsterdam Leuven



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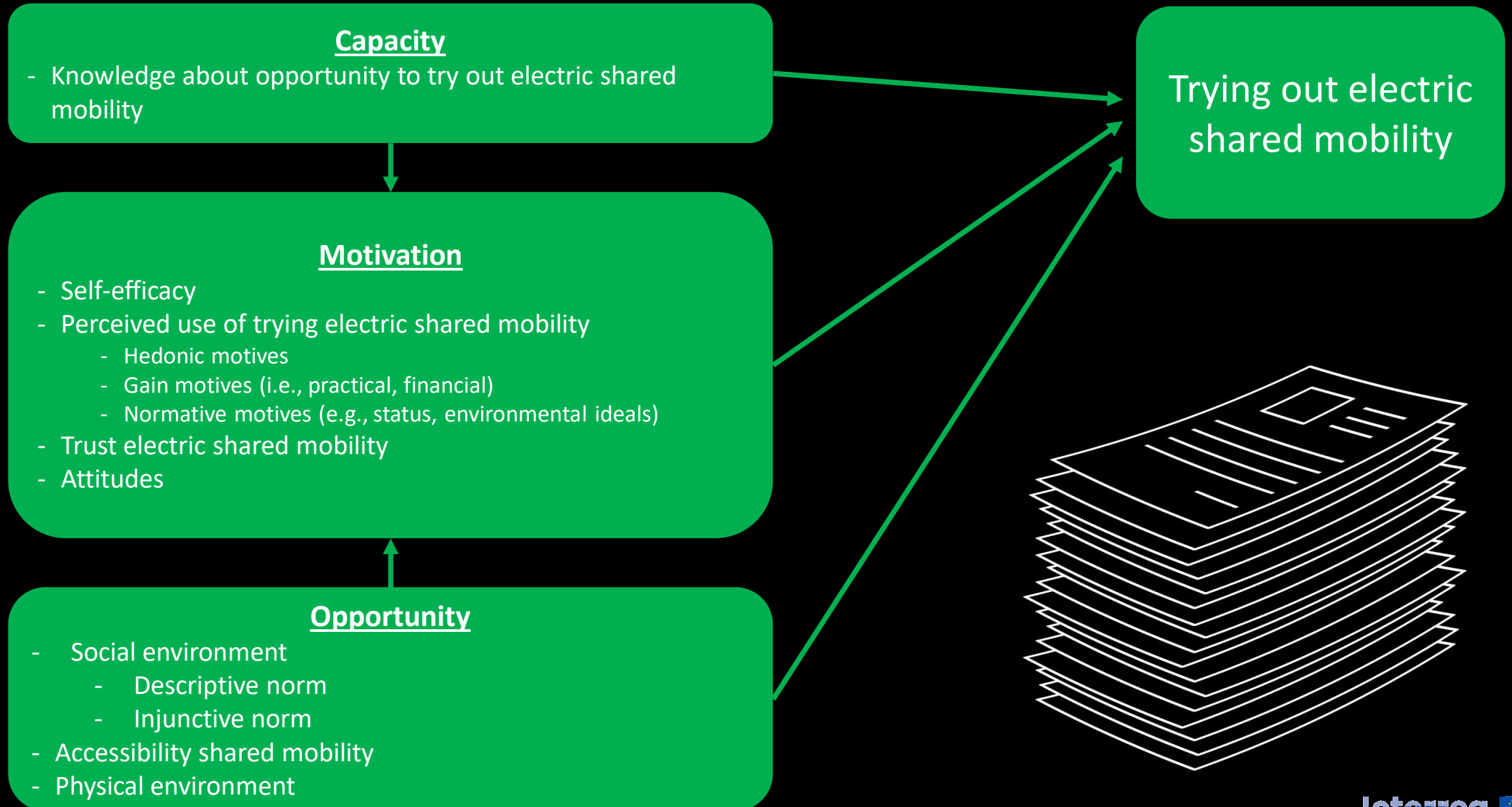
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# WHY DO OR DON'T CAR OWNERS WANT TO TRY OUT eHUBs?

What do they say themselves?  
What does the data say?





# Behavioural determinants Amsterdam

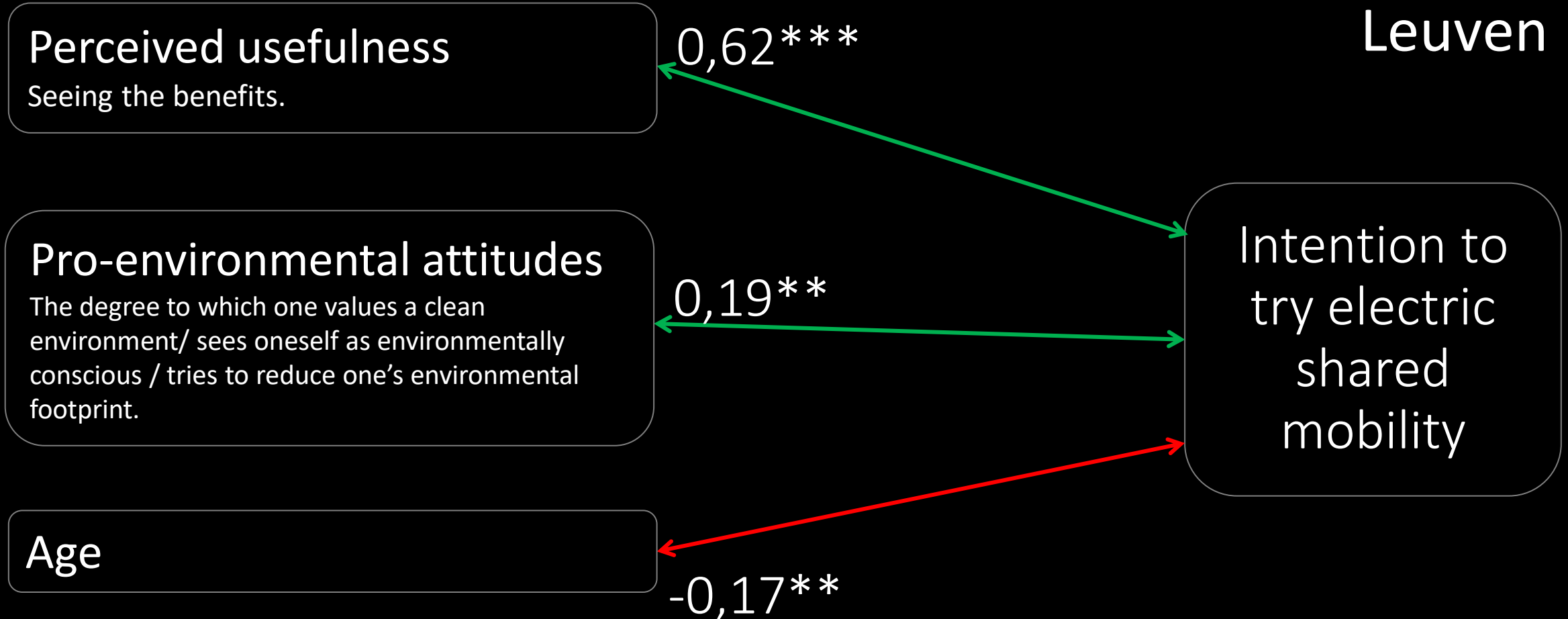


EXPLAINED VARIANCE  $R^2 = .477$



# Behavioural determinants

## Leuven



EXPLAINED VARIANCE  $R^2 = .480$



# Perceived usefulness



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## Gain goal

Is focused on maintaining and increasing personal resources (e.g., money, status).  
e.g., do I get something out of it?

## Hedonic goal

Is aimed at improving how one feels (e.g., pleasure/comfort).  
E.g., does it feel good?

## Normative goal

Is focused on acting in line with (personal) values.  
E.g., Does it benefit the society?



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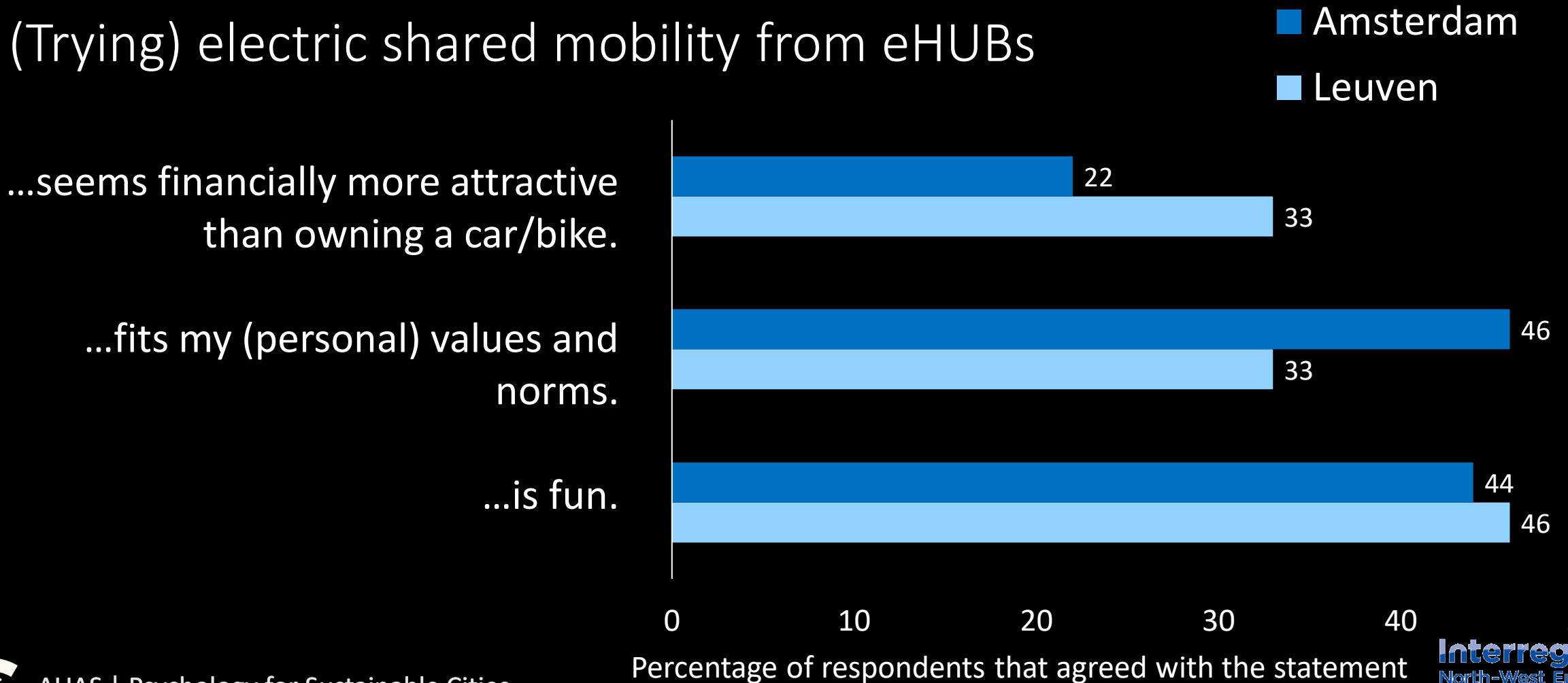
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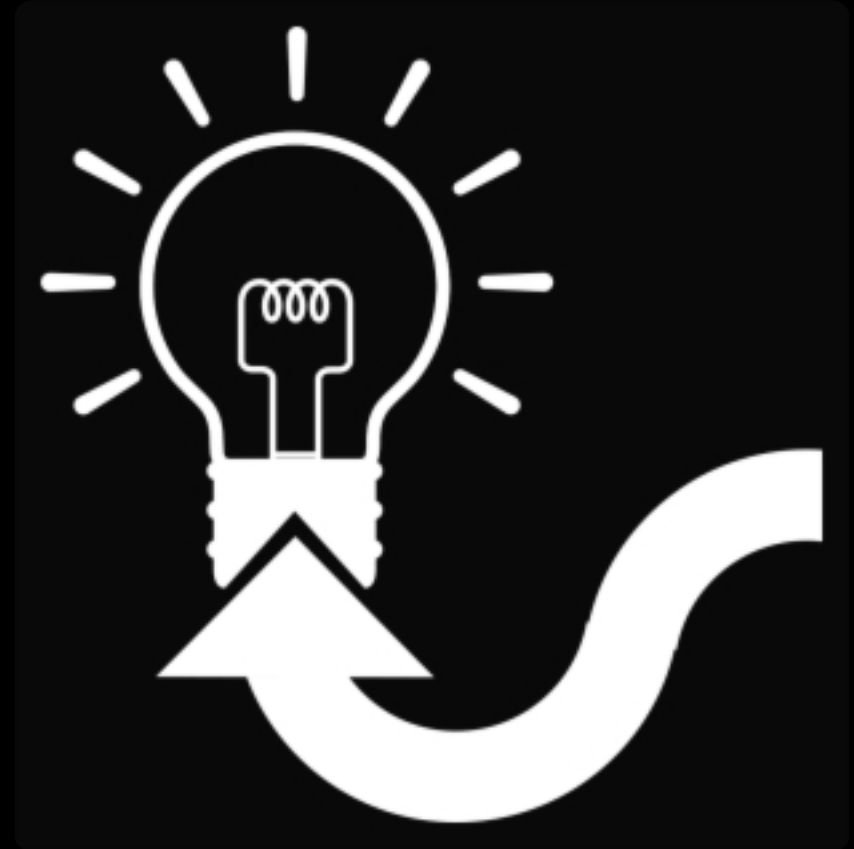
# Perceived usefulness

(Trying) electric shared mobility from eHUBs



# Recommendations

How to encourage car owners to try out  
electric shared mobility



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Car owners are largely satisfied with their own car, so they automatically filter out messages about alternative travel modes (*attentional bias*).



# Recommendation 1: address the *attentional bias*

Most car owners, 70%, don't see the need for trying out shared modes as they already have a vehicle.

Car owners are largely satisfied with their own car, so they automatically filter out messages about alternative travel modes (*attentional bias*).

In communications, address the attentional bias to be able to reach car owners.



# Recommendation 2: emphasize benefits

Finding: perceived usefulness is the most important determinant.

Emphasize in communications the benefits of (trying out) shared mobility.



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The three different goals (gain, hedonic and normative) have a strong positive association with each other. In a campaign, all three goals can be addressed.



# Gain benefits such as:

- Increase the understanding of financial benefits of eHUBs compared to a private car.
- Particularly relevant for groups with limited use of their private car.
- Emphasize practical advantages of long-term use of eHUBs: unburdening of tasks related to car ownership, flexibility, vehicle that fits your needs etc.
- Note: financial motives are diffuse. People sometimes still choose the comfort of a private car even though it is more expensive.



# Hedonic and normative goals

- Ensure that trying out shared mobility is a fun and pleasant experience.
- Emphasizing the green framing of eHUBs creates positive associations.



# Recommendation 3: change the environment

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Systematic review of reviews on low-carbon mode adoption: it is primarily infrastructure that determines mobility mode choice, not individual or social characteristics.



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- If you want to have impact, car owners need to change their behaviour...
- ...who are mostly satisfied with their car use
- It take extra efforts to get this group on board.

