

# Who shares and why?

Assessing the diffusion potential of peer-to-peer mobility innovations

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LAURIE KERR

UNIVERSITY OF EAST ANGLIA

**ENV  
EAST**  
Doctoral Training  
Partnership



**S I L C I**  
Social Influence and *disruptive* Low Carbon Innovations

**Tyndall<sup>°</sup>Centre<sup>®</sup>**  
for Climate Change Research

**UEA**  **erc**  
University of East Anglia

European  
Research  
Council  
Starting grant  
#678799

Personal mobility is undergoing a *technological* and *social* change

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**1998:** “Don’t get into a stranger’s car”

**2008:** “Don’t meet people from the internet alone”

**2018:** “Order yourself a stranger from the internet and get into their car alone”

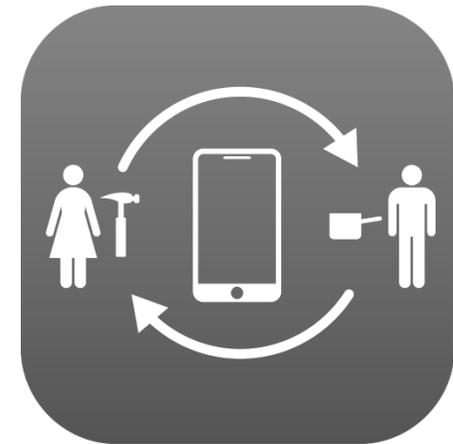
# The sharing economy

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- One of the ‘most significant economic developments’ of the past decade
- Consumer to consumer (C2C), or peer to peer (P2P), interactions
- Allow people to share, barter, lend, rent, trade, gift and swap their personal goods with others

**‘Consumers granting each other temporary access to under-utilised physical assets’**

– Frenken 2015



# Peer-to-peer mobility innovations



## P2P car sharing

An individual granting temporary access of their vehicle to another individual, often for payment



## P2P ride sharing

An individual granting temporary access of a seat in their vehicle, and sharing a journey, with another individual, often for payment

# Research question

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Who are the adopters of peer-to-peer mobility innovations?

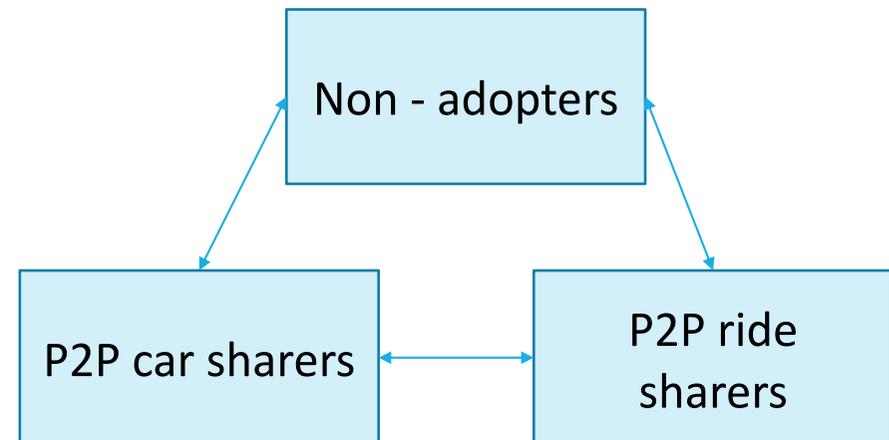


# Methodology

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Three parallel surveys: adopters of P2P car sharing, adopters of P2P ride sharing, non-adopters

- Socio-economic characteristics
- Personality traits
- Communication behaviours
- Travel behaviours
- Perceptions of P2P mobility

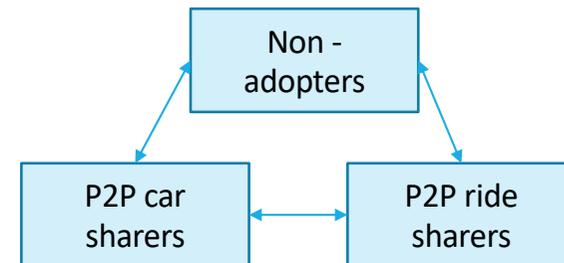


# Methodology

Three parallel surveys: adopters of P2P car sharing, adopters of P2P ride sharing, non-adopters

• **Personality traits**

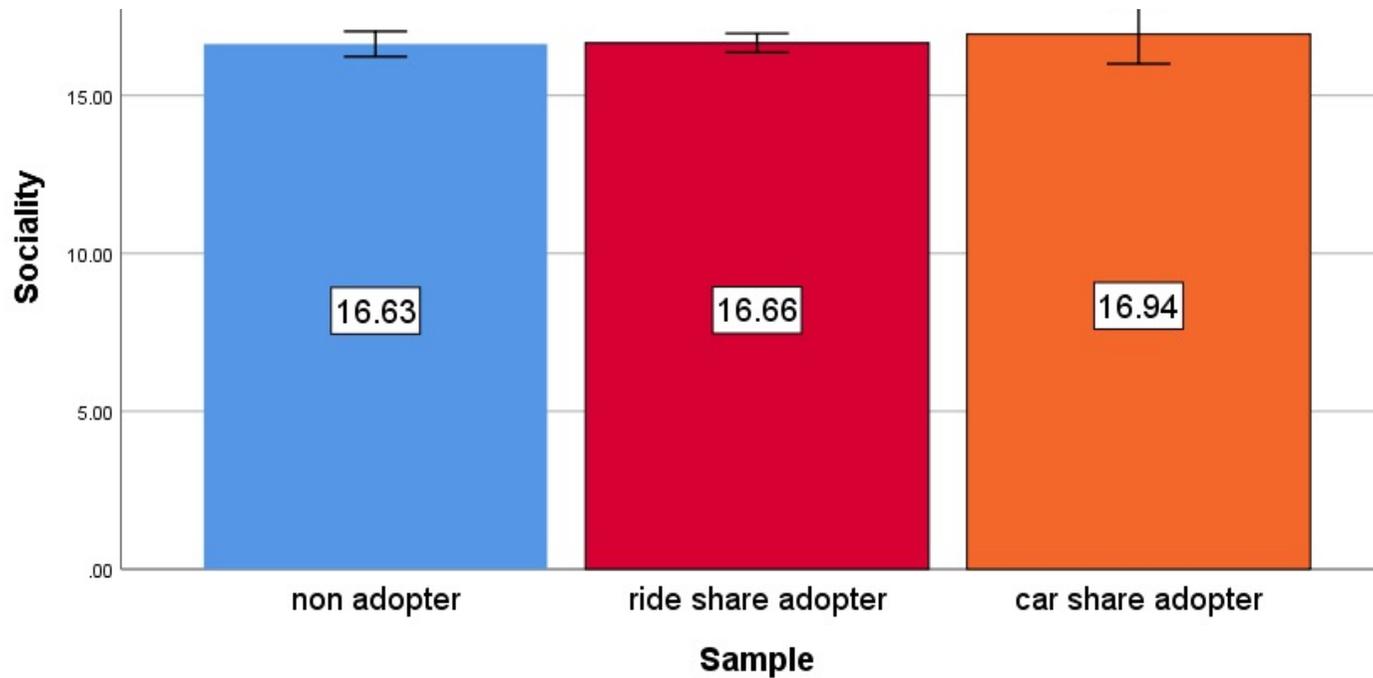
- Trust
- Sociality
- Technophilia



	P2P car sharers	P2P ride sharers	Non adopters
<b>Sociality</b>		↑	
<b>Technophilia</b>	↑	(↑)	
<b>Trust</b>	↑	↑	



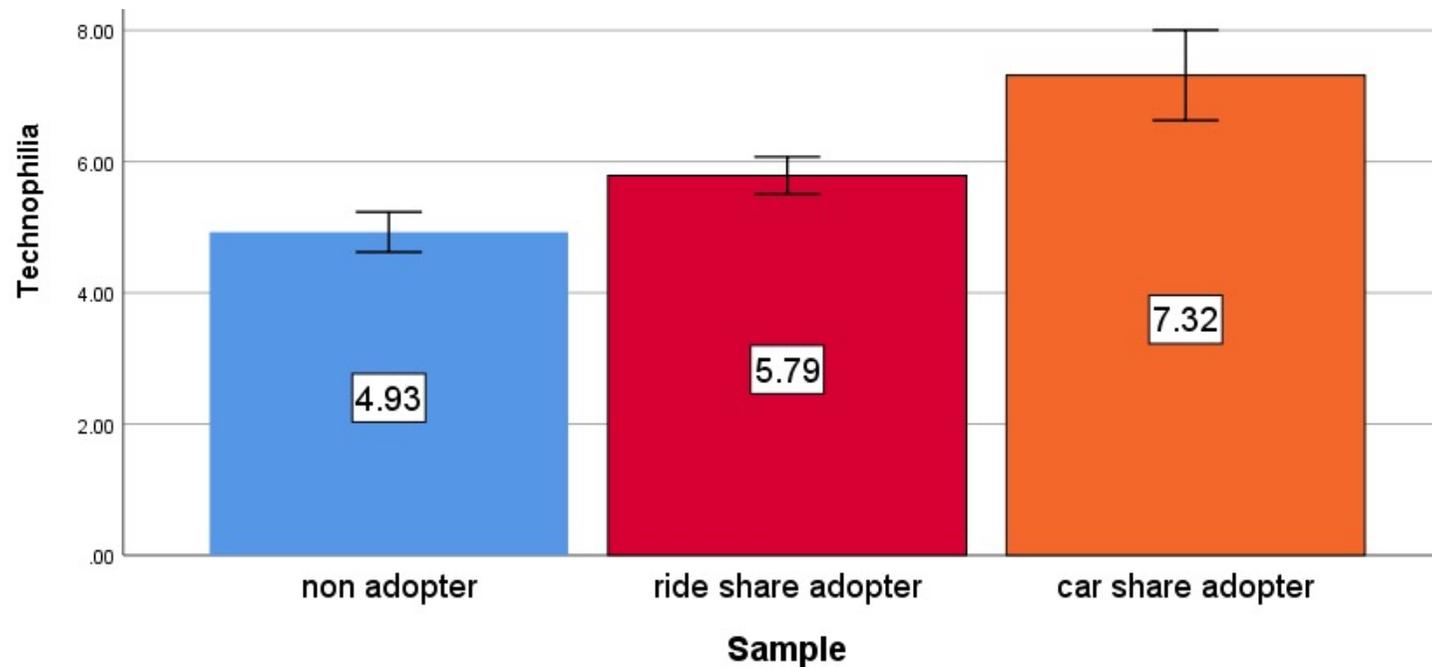
## Key results - Sociality



Error bars: 95% CI

There are **no significant differences** between any of the three samples

# Key results - Technophilia



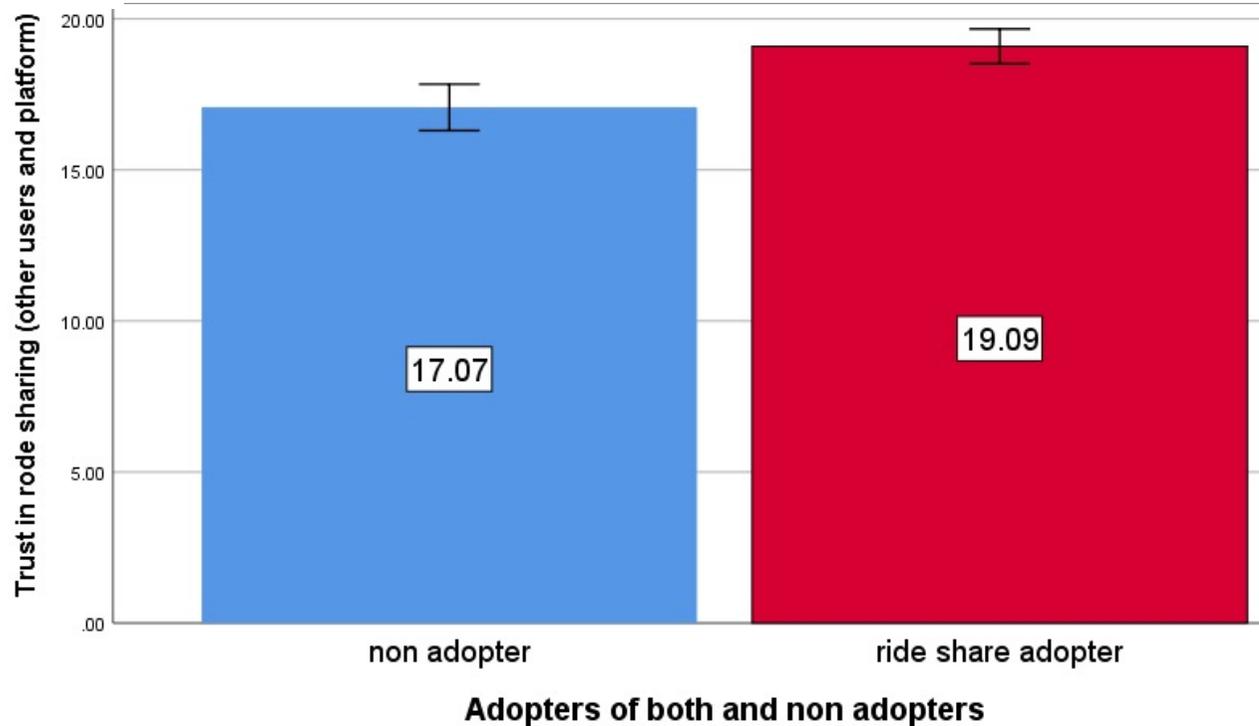
Error bars: 95% CI

P2P car sharers are **significantly\* more “technophilic”** than are P2P ride sharers

P2P ride sharers are **significantly\* more “technophilic”** than are non adopters

\*p<.05

## Key results - trust

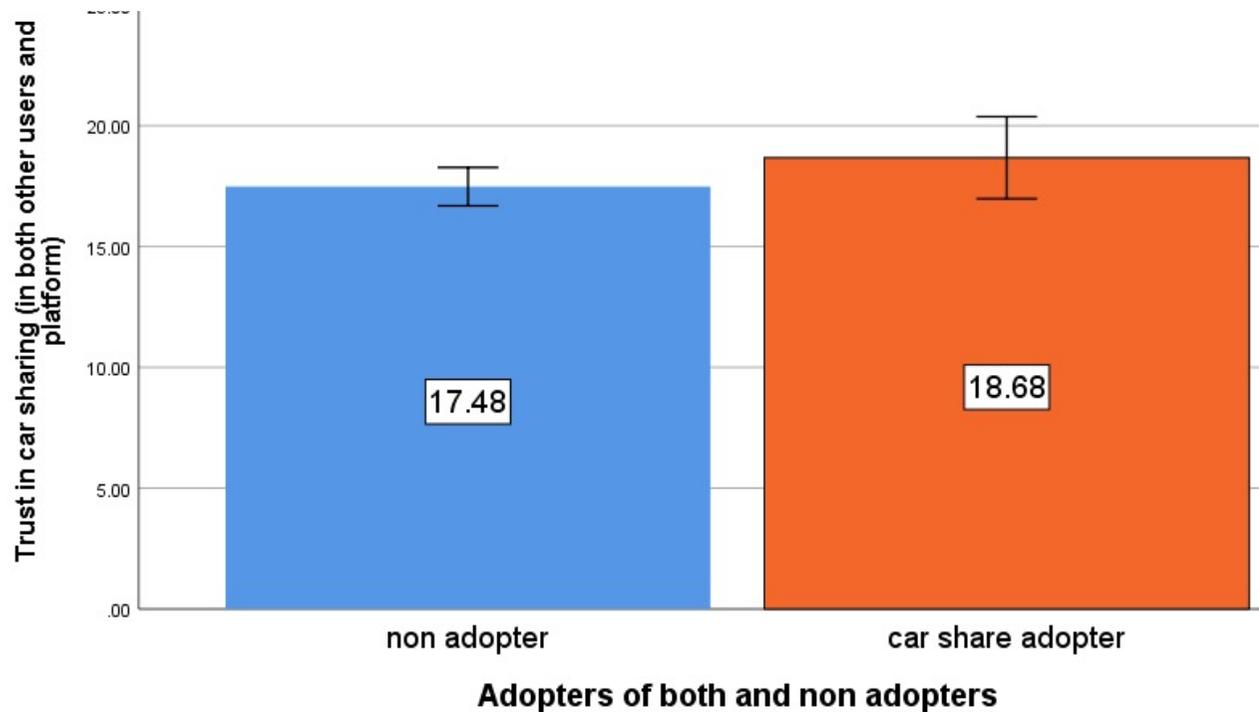


P2P ride sharers are **significantly\* more trusting** (in the platform and other users) than are non-adopters

Error bars: 95% CI

\*p<.05

## Key results - trust



Error bars: 95% CI

There is **no significant difference** between how trusting non adopters and P2P car sharers are

## Identification of adopter profiles



### **Past users**

“Used P2P ride sharing in the past, but not now”



### **Commuters**

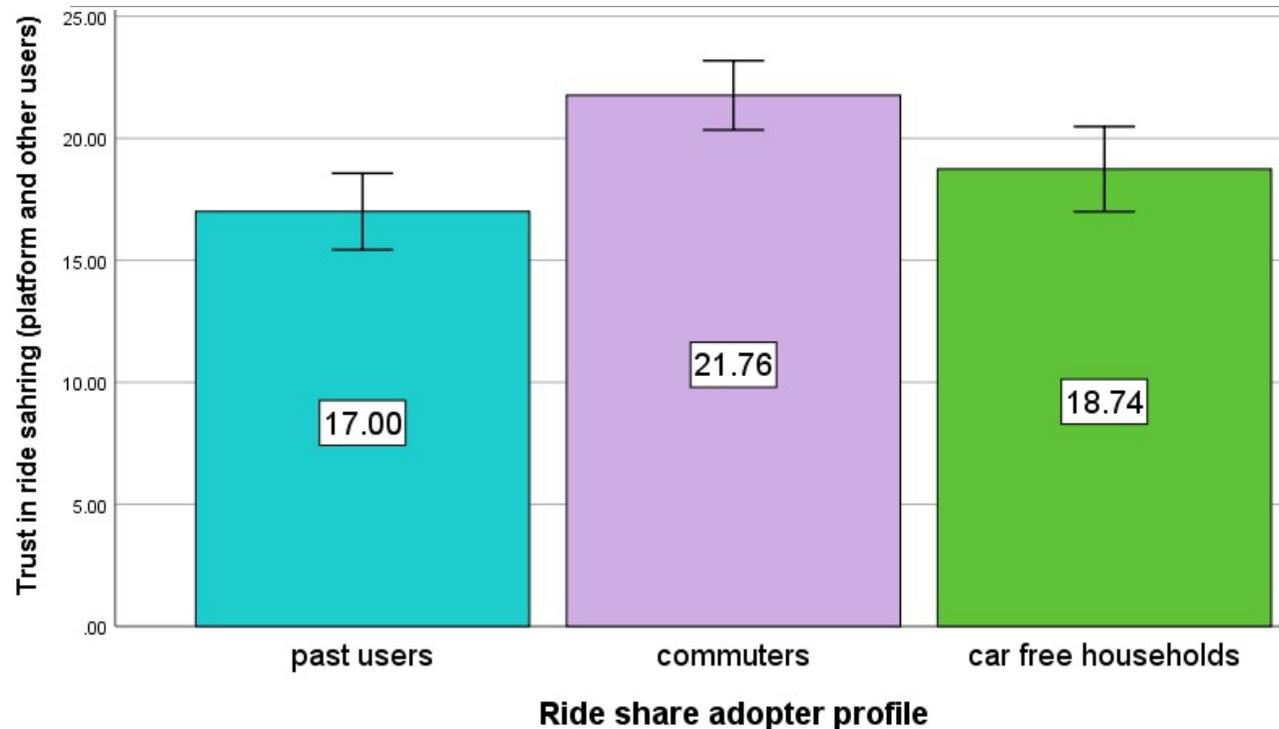
Middle aged (35 – 65)  
Middle income  
Use regularly  
Often with the same people  
Commuting



### **Car-free**

Younger (under 35)  
Lower income  
Car-free households  
Use monthly or less  
One-off journeys

# Comparisons of adopter types



Commuters have **significantly\* higher levels of trust** than do both car-free users, and past users

Error bars: 95% CI

\*p<.05

## Future work

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**Aim:** *To assess the potential for P2P mobility innovations to reduce CO<sub>2</sub> emissions, through an exploration of two case studies: P2P car sharing and P2P ride sharing*

1. *Who are the adopters of peer-to-peer mobility innovations?*
2. Why do adopters use peer-to-peer mobility innovations?
3. What are the impacts of peer-to-peer mobility innovations on CO<sub>2</sub> emissions?

## Future work – next steps

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Why do adopters use P2P mobility innovations?

Focus groups with adopter groups (past-users, commuters, car-free households)

- Role of contextual factors (institutional factors)
- Where is the agency?
- Role of trust
- Role of sociality, relationships

# Thank you for listening

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