

Introduction

The electric bike (e-bike) is experiencing a boom worldwide which has the potential to reduce the number of cars on the road. It also poses a challenge for traffic safety (speed, audibility, weight, handling etc.)

Aims of FEM.EL.BIKE

- to study the use of e-bikes by women for everyday activities
- to explore potential as sustainable means of transport

Why women?

- characterised by emphasis on safety
- more often environmentally conscious
- emotionally less attached to their car than men
- don't drive cars for prestige reasons as much as men
- could function as kind of role model



Method

Several social scientific methods were used:

1. **Literature analysis** concerning the technical standards of e-bikes, accessories & infrastructure
2. **Focus Group interviews:** women from different age groups & different mobility patterns
3. **Two Austrian-wide surveys on e-bikes: lifestyle study** (n=4600, women & men) & **online questionnaire** (n=1000 women)
4. **Field-study:** 10 women were accompanied for two months while using e-bikes on a daily basis
5. **Final workshop:** presentation & discussion of results of the empirical research to retailers (with respect to relevance for work in practice – development, production, marketing etc.)

The results were published in a motivational catalogue providing advice to retailers, municipalities & women

Results

- Almost 60% of men and over 50% of women stated that they would consider using an e-bike.
- E-bikes seem to be primarily used for everyday activities: shopping & errands by both genders

What kind of trips would you use an e-bike for?

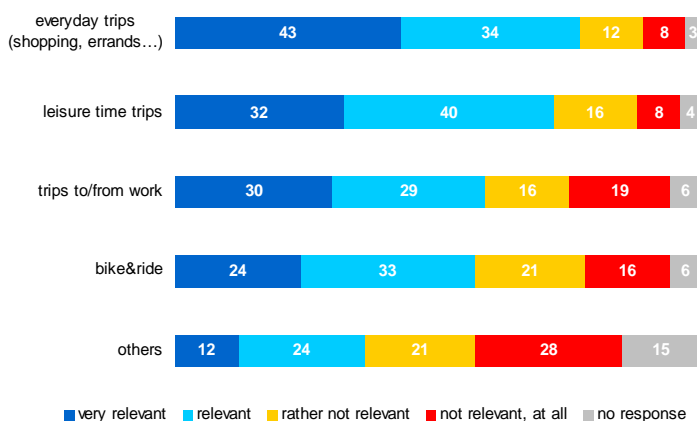


Figure 1: Possible trip purposes (n=4600)

What kind of infrastructure, public preconditions would make you use an e-bike?

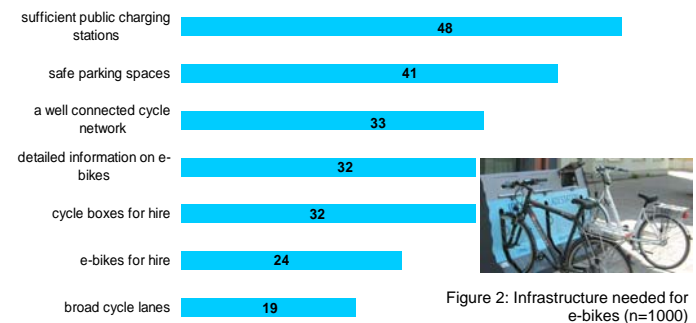


Figure 2: Infrastructure needed for e-bikes (n=1000)

What keeps you from buying an e-bike?

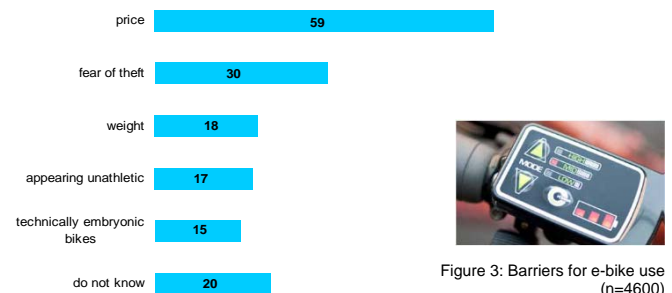


Figure 3: Barriers for e-bike use (n=4600)

- Well connected cycle networks & bicycle boxes may be beneficial in relation to infrastructure, sufficient public charging stations & safe parking spaces
- Greatest barriers to buying e-bikes: price, fear of theft
- Main advantages: 90% predict easier negotiation of steep gradients, 75% think e-bikes have the potential to replace cars on short trips & are environmentally friendlier than cars

What factors can influence you to use an e-bike

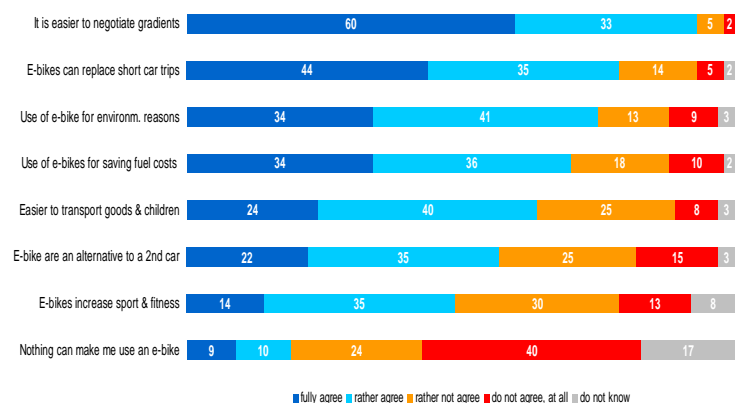


Figure 4: Possible trip purposes (n=4600)

Conclusions

- E-bikes could increase the share of cyclists and reduce the number of car trips & second car holders
- E-bikes may be an ideal mode of transport for women (main expected trip purposes: errands & shopping)
- Women prefer low e-bike weight, simple technical handling & convenient accessories (e.g. rear mirror)
- Relevance of e-bikes is highest in middle sized towns & rural (particularly hilly) areas
- To encourage e-bike use: Improvement of cycling infrastructure (well-connected cycle network, good signing, parking spaces)
- The biggest obstacles for the purchase: price & fear of theft