

# value-based design of mobility innovations for aging well

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## BACKGROUND

Due to physical decline, older people become less mobile, while the need to remain independent is higher than ever. In 2030, 1 in 3 elderly will live solitary in the Netherlands. There is a need for new innovations that support individuals in their mobility, while respecting personal values and tackling barriers.

## AIM

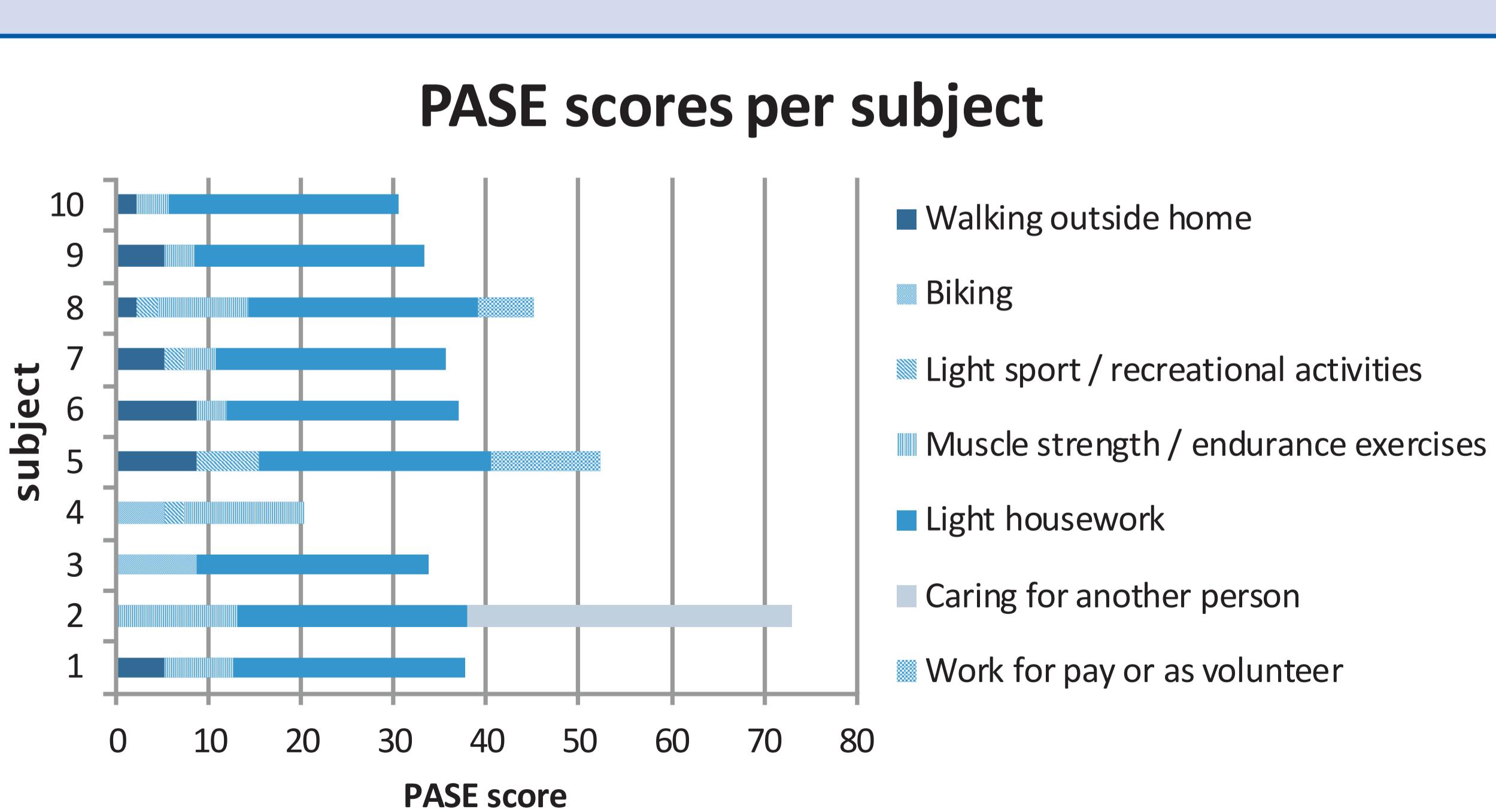
To study personal values of solitary living, community dwelling older adults, and how mobility barriers and facilitators affect their ability to live to their values.

## METHOD

1. 10 in-depth interviews
  - What makes them happy (values)
  - How they spend the day (activity pattern & PASE)
  - Which physical limitations they experience
2. 10 Mind maps of values, barriers and facilitators
3. Brainstorm with designers and care professionals to come to new mobility ideas (figure 2)

## DEMOGRAPHICS

- In cities and villages of The Netherlands
- Age:  $80.5 \pm 8.1$  (9 female; 1 male)
- Very low physical activity score: PASE:  $40 \pm 13$  (general population  $102.9 \pm 64.1$  (median: 90), Washburn et al. (1993))
- Predominant modes of transport: biking & walking



## RESULTS

The following values were shared by multiple interviewees: 1. Social interaction; 2. Independence, 3. Relaxing, 4. Killing time, and 5. Good physical health. E.g. the value Social Interaction was for one person going on holiday. Which was facilitated by a voluntary organisation, taking people out to get a holiday. The mind maps were the inspiration for designers to work on variations of the wheeled walker.

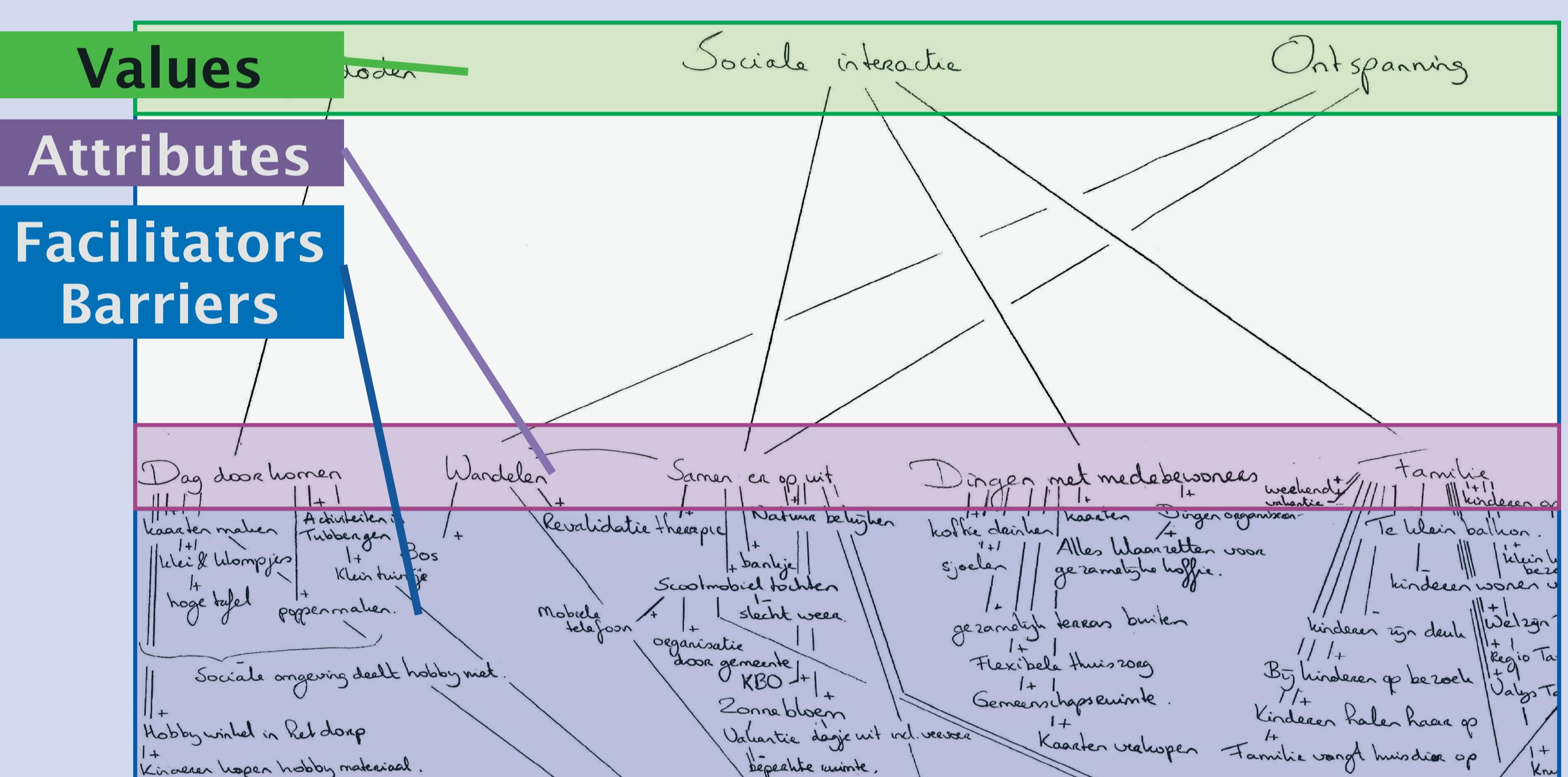


Figure 1. Part of a mind map of one of the subjects with three levels. Attributes are the activities or wishes that the interviewees mentioned.



Figure 2. Concepts resulting from the brainstorm, to be evaluated.

## CONCLUSIONS

The value-based approach offers designers a close look into the lives' of the elderly, thereby opening up a wide range of innovation possibilities.



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