

Transport accessibility and car availability barriers to out-of-home activity participation among the unemployed

A Dutch nationwide latent class cluster analysis

MSc Thesis Project Transport & Planning

Thijs Bon (30 April 2024)



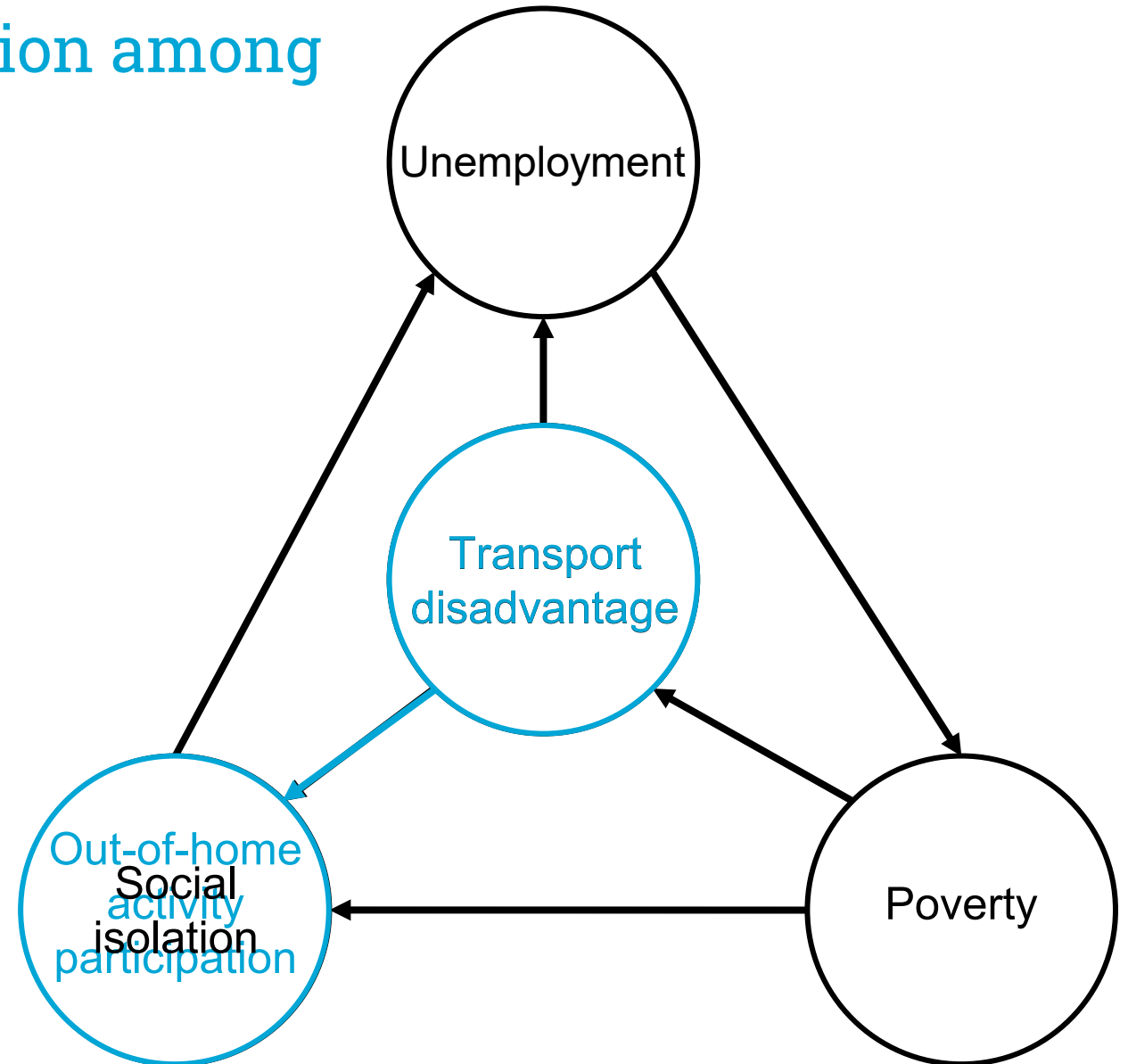
Vicious cycles of marginalization among unemployed

Research gap:

The effect of transport disadvantage on diverse out-of-home activity participation among the unemployed

Societal relevance:

Potential to limit or break the cycle by enhancing accessibility to out-of-home activities through transport and land use policies



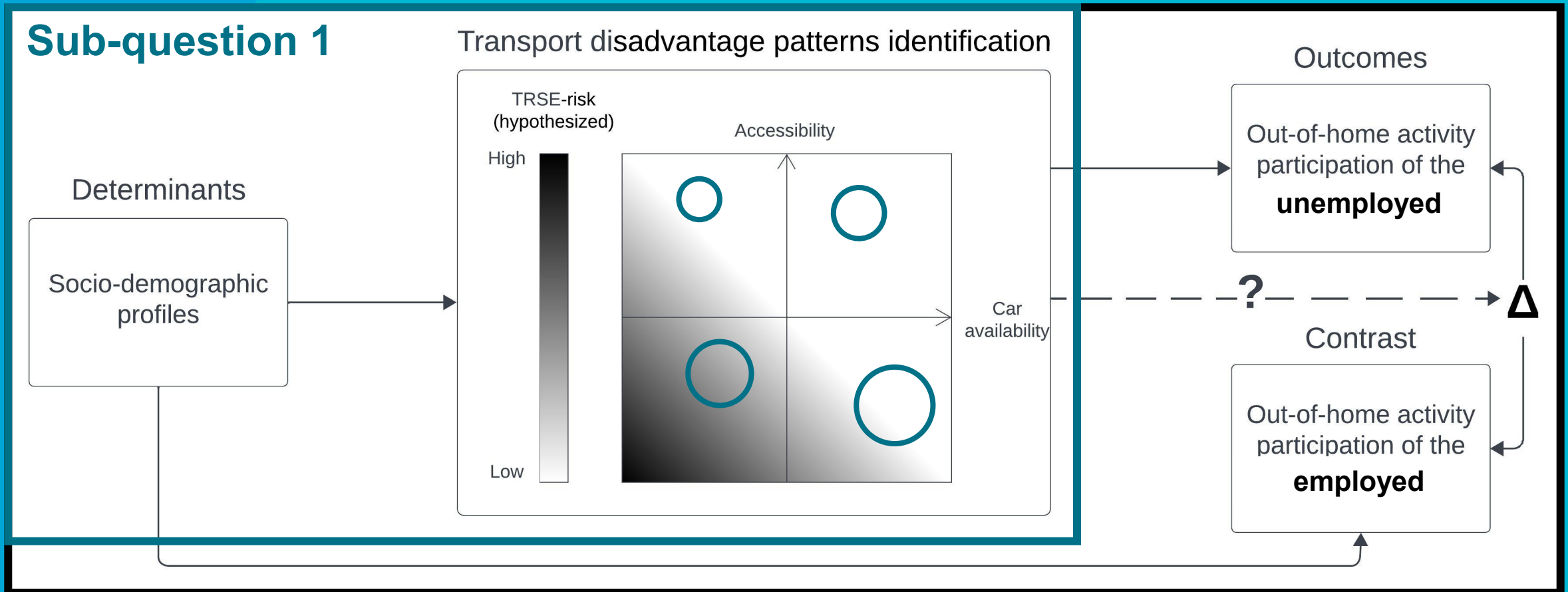
Research questions

- What are the **prevalent patterns of transport accessibility and car availability** among **unemployed** individuals in the Netherlands, and how do these patterns **influence their participation in out-of-home activities**?
- What **socio-demographically determined transport accessibility and car availability patterns**, in which residential locations, exist among unemployed individuals in the Netherlands?
- Which unemployed individuals, in which residential locations, face **transport-related limitations** in their **out-of-home activity participation**?



Conceptual model

Sub-question 2



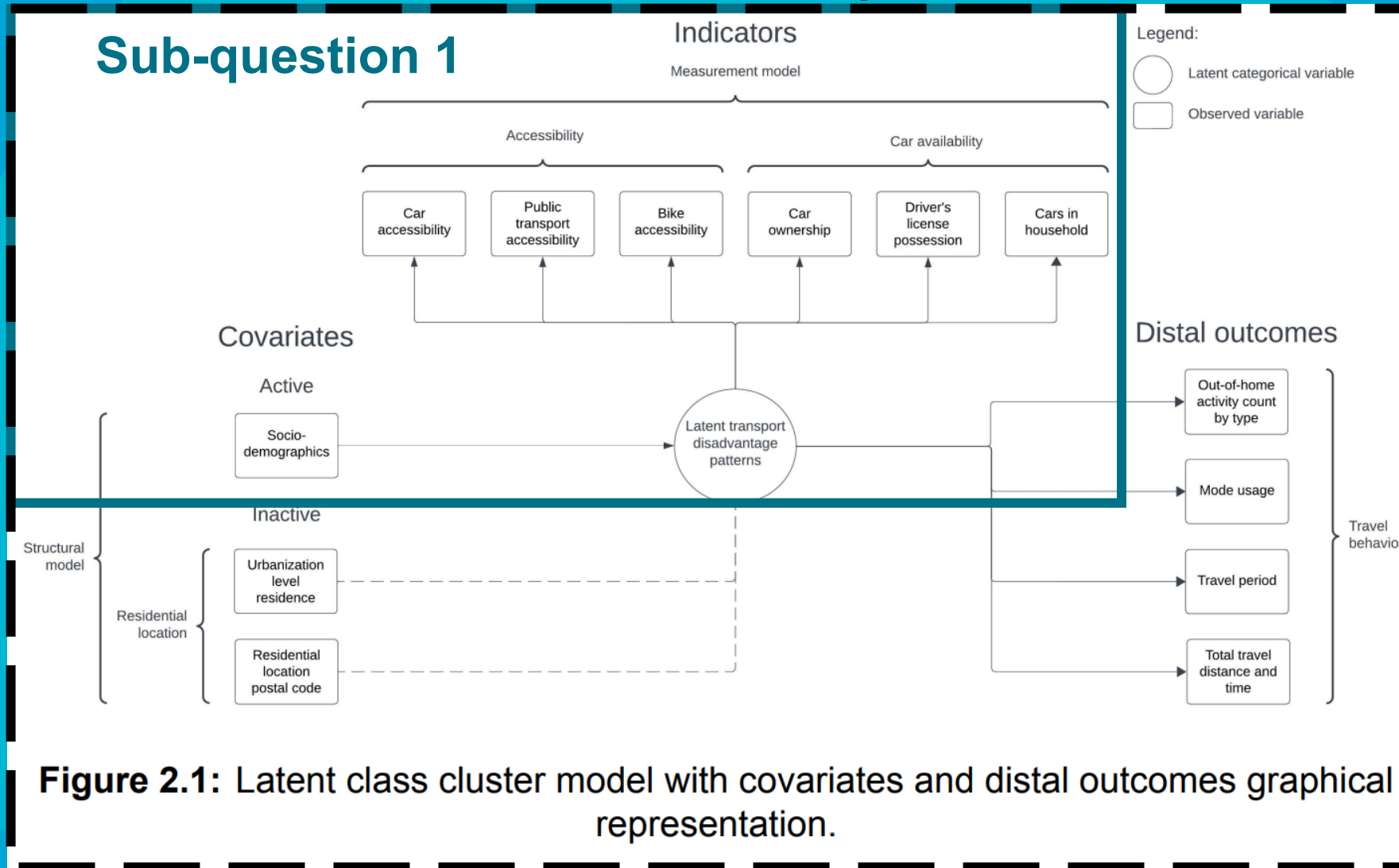
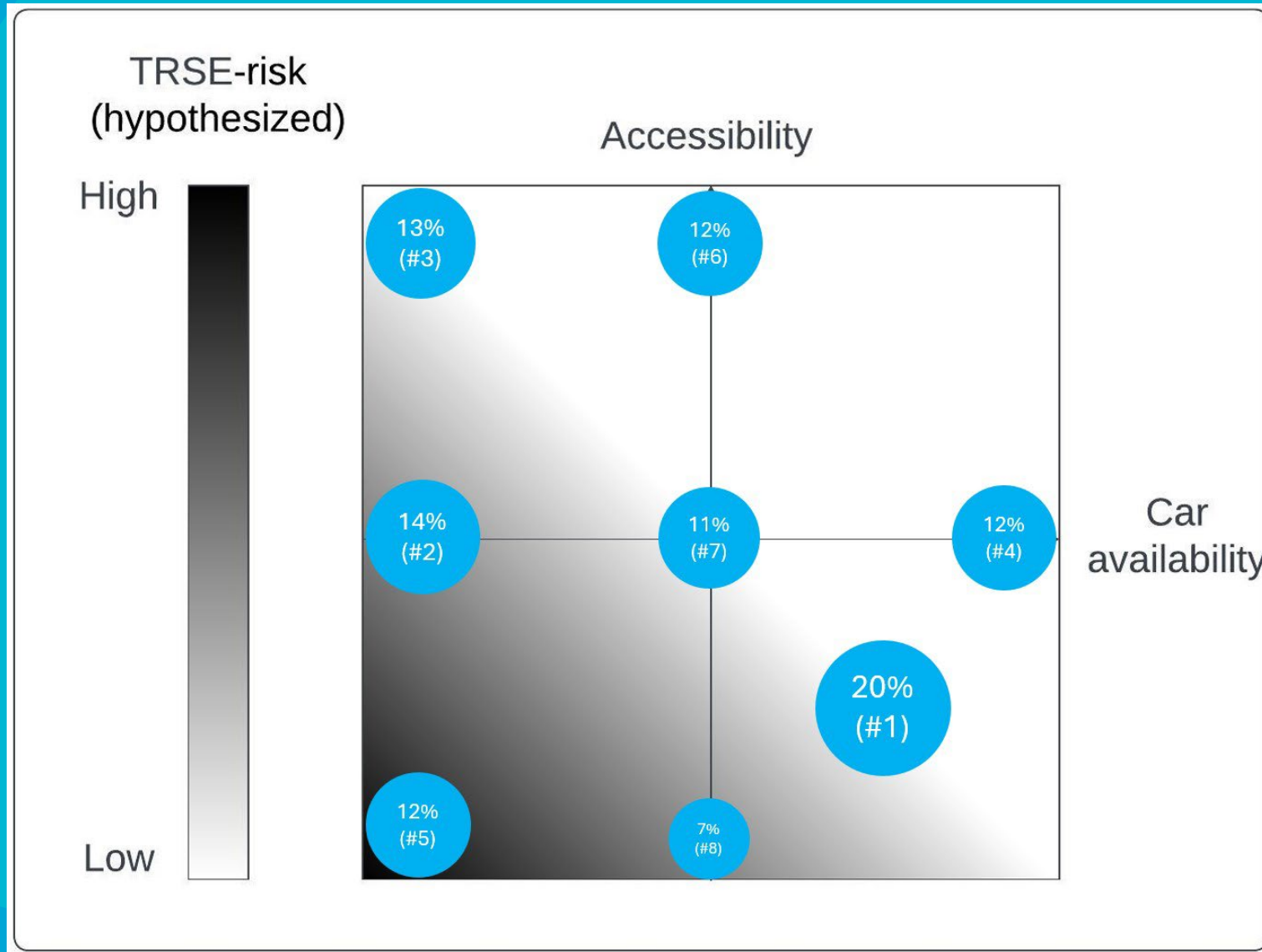


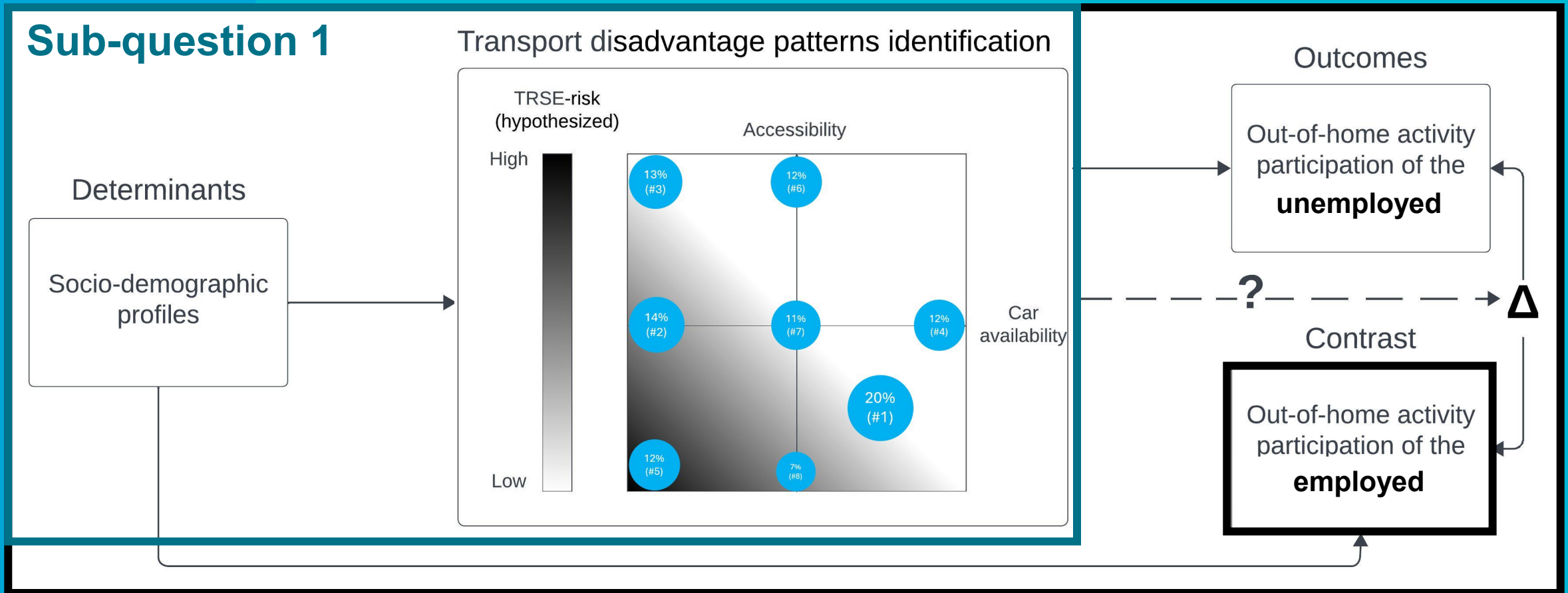
Figure 2.1: Latent class cluster model with covariates and distal outcomes graphical representation.

Eight transport accessibility and car availability groups



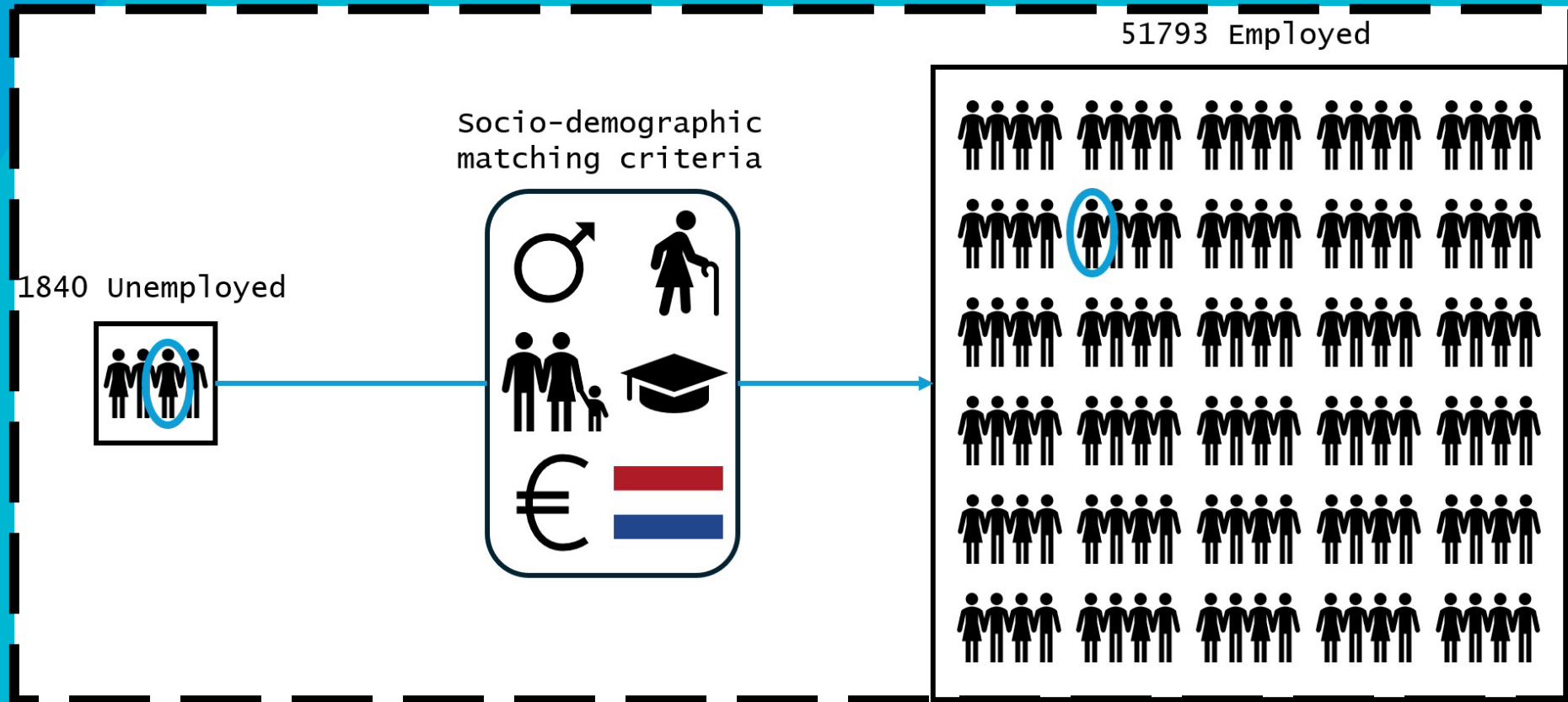
Conceptual model

Sub-question 2

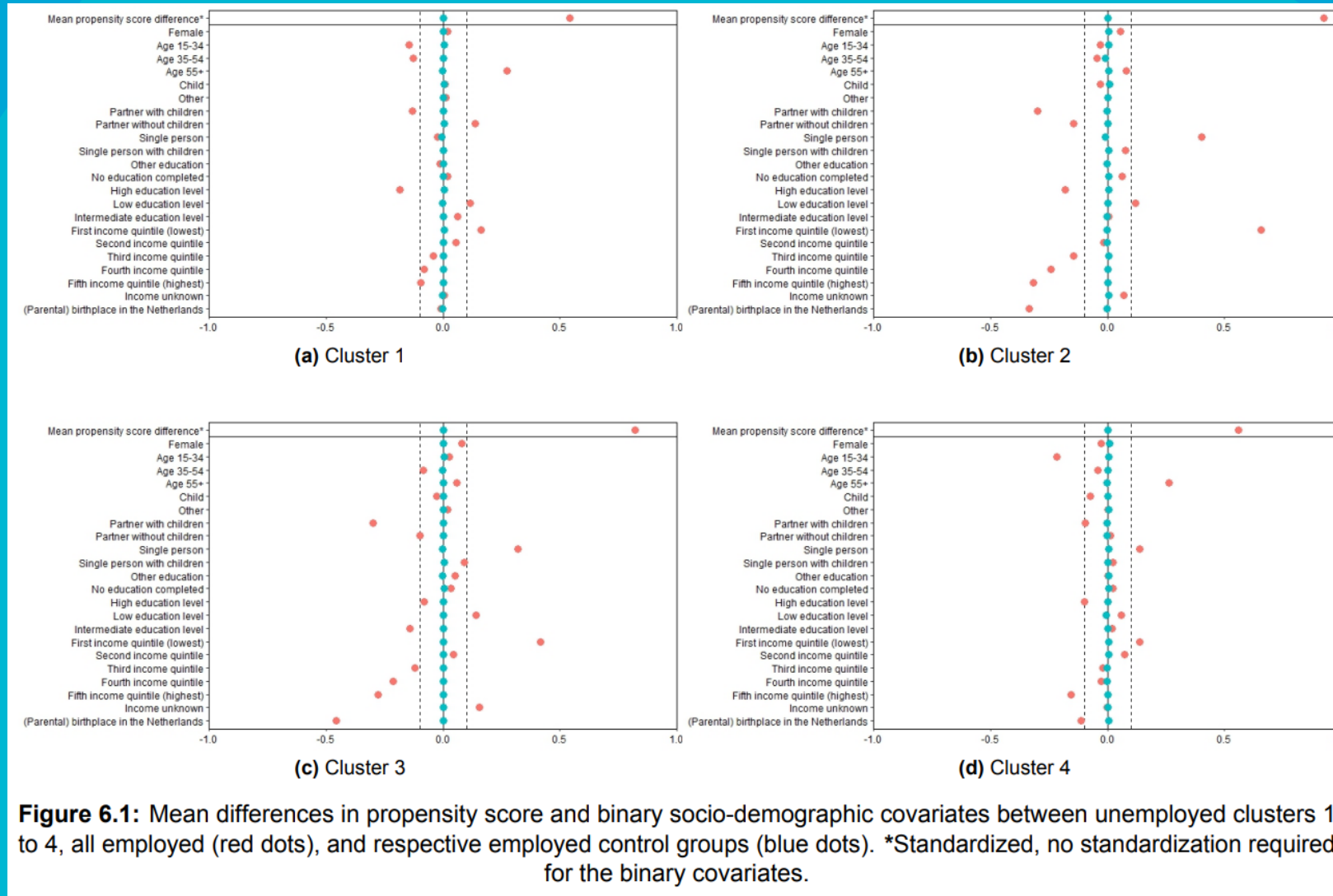


Propensity score matching

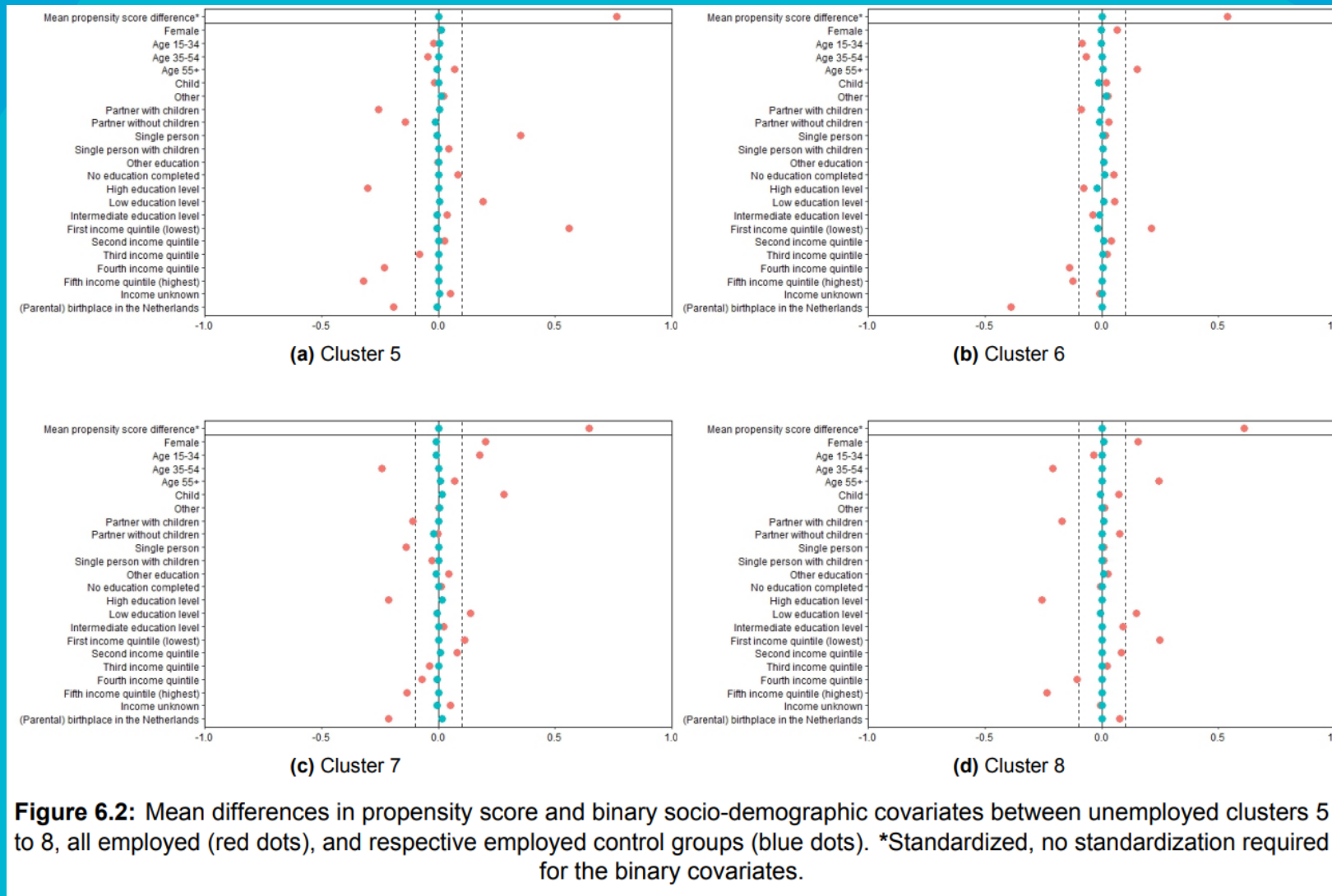
Sub-question 2 – contrast group



Employed control groups matching quality

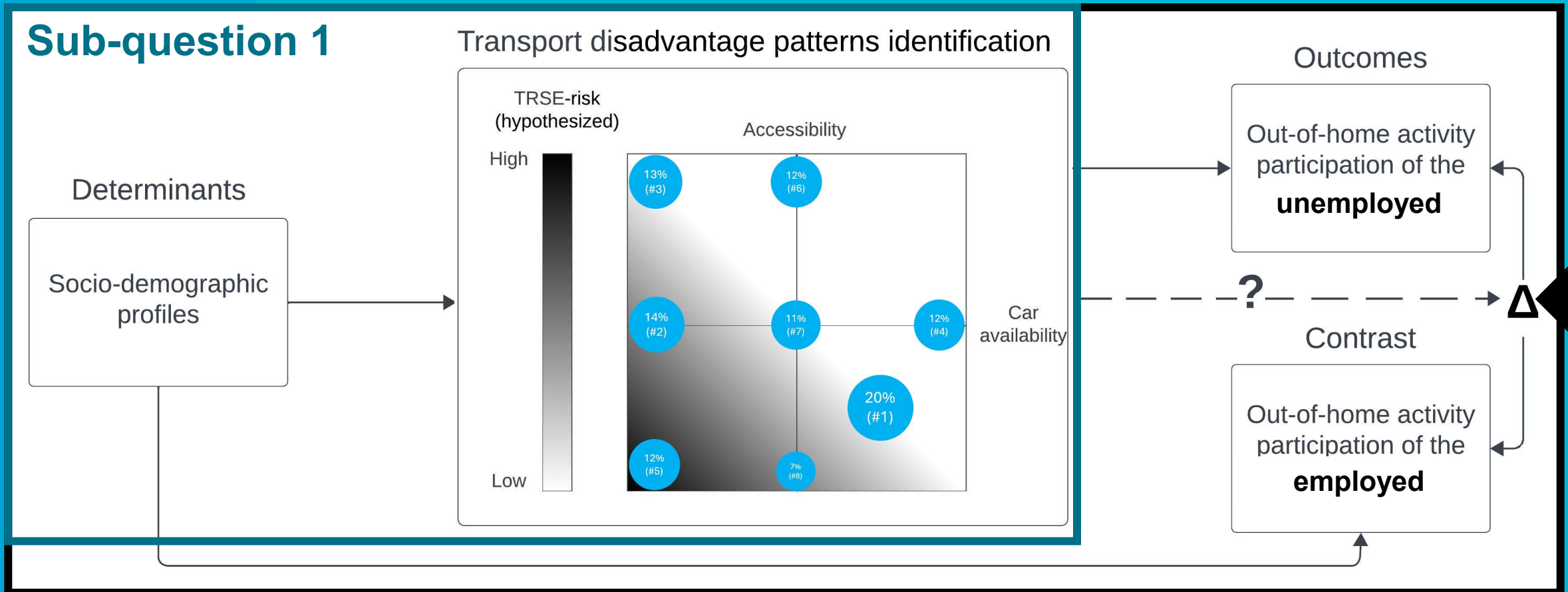


Employed control groups matching quality



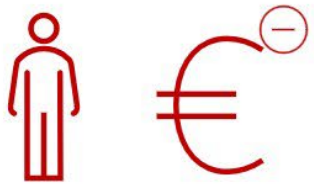
Conceptual model

Sub-question 2



Transport-related limitations to out-of-home activity participation

Socio-demographic determinants and urbanization

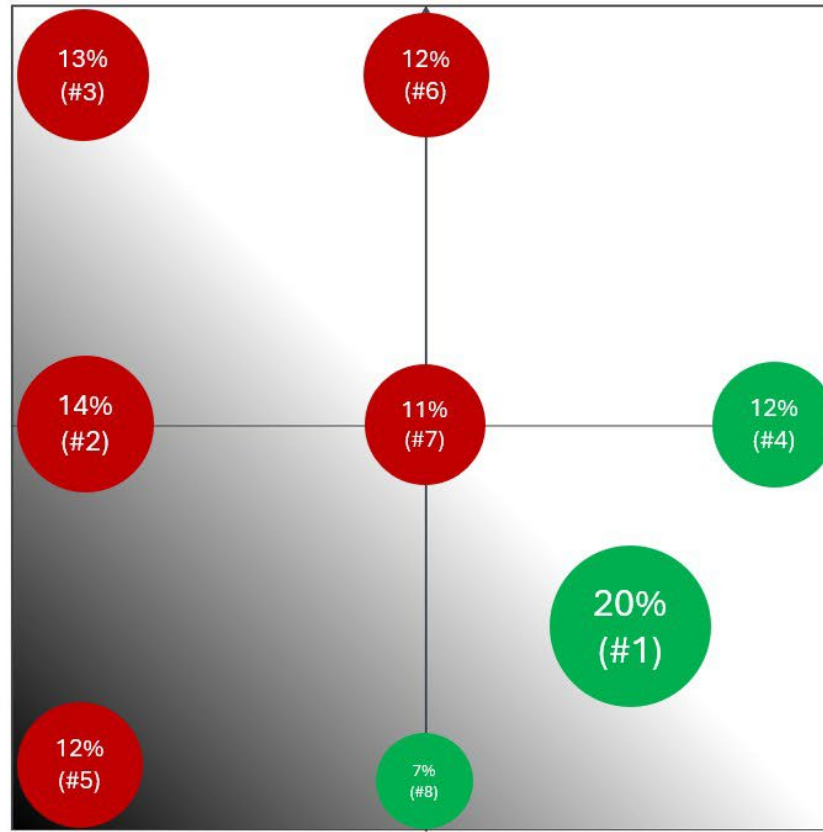


TRSE-risk (hypothesized)

High

Low

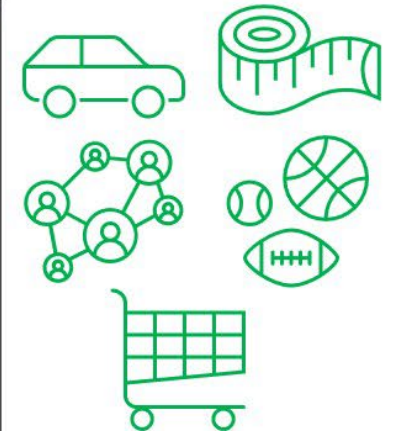
Accessibility



Activities and travel behavior outcomes



Car availability



Compensatory mechanism realization



61%



39%

Policy recommendations



Affordable active mode access:

1. Mixed-use developments
2. Cycling and walking infrastructure improvements

Affordable longer distance access:

1. Subsidized public transport fares for unemployed

Thank you for your attention

Thijs Bon

Paper



Slides

