Stimulating active modes of urban transportation

Results from the ISAAC project

Tim De Ceunynck, PhD

tim.deceunynck@vias.be

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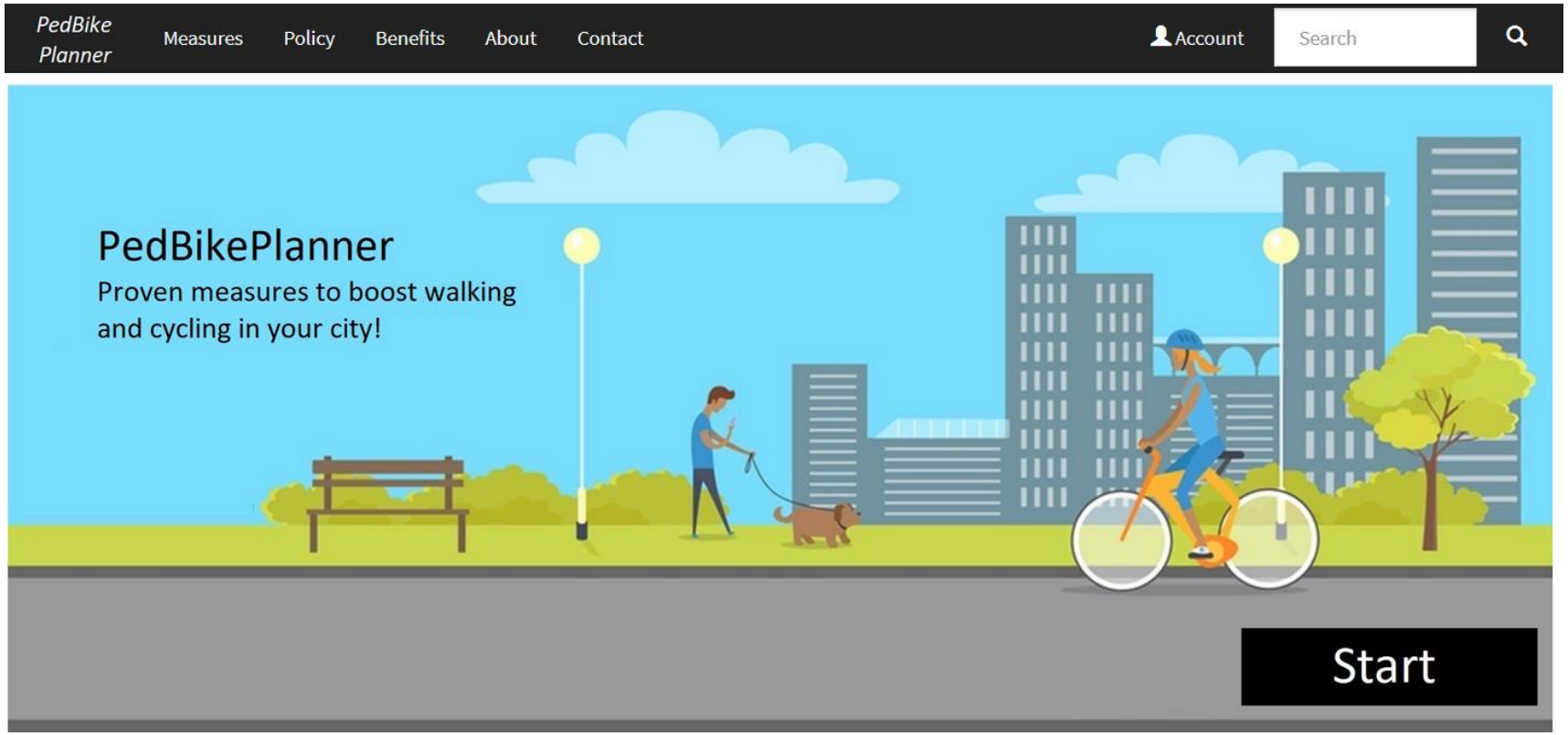
- **ISAAC project**
  - Webtool “PedBikePlanner”: tailor-made recommendations for cities and municipalities on how to stimulate walking and cycling
  - Behavioural survey in nine European cities

Funded by CEDR Conférence Européenne des Directeurs des Routes Conference of European Directors of Roads

Project partners TECHNISCHE UNIVERSITÄT DRESDEN, POLIS CITIES AND REGIONS FOR TRANSPORT INNOVATION, SWOV INSTITUTE FOR ROAD SAFETY RESEARCH, toi, VIAS institute

PedBikePlanner webtool

- www.pedbikeplanner.eu



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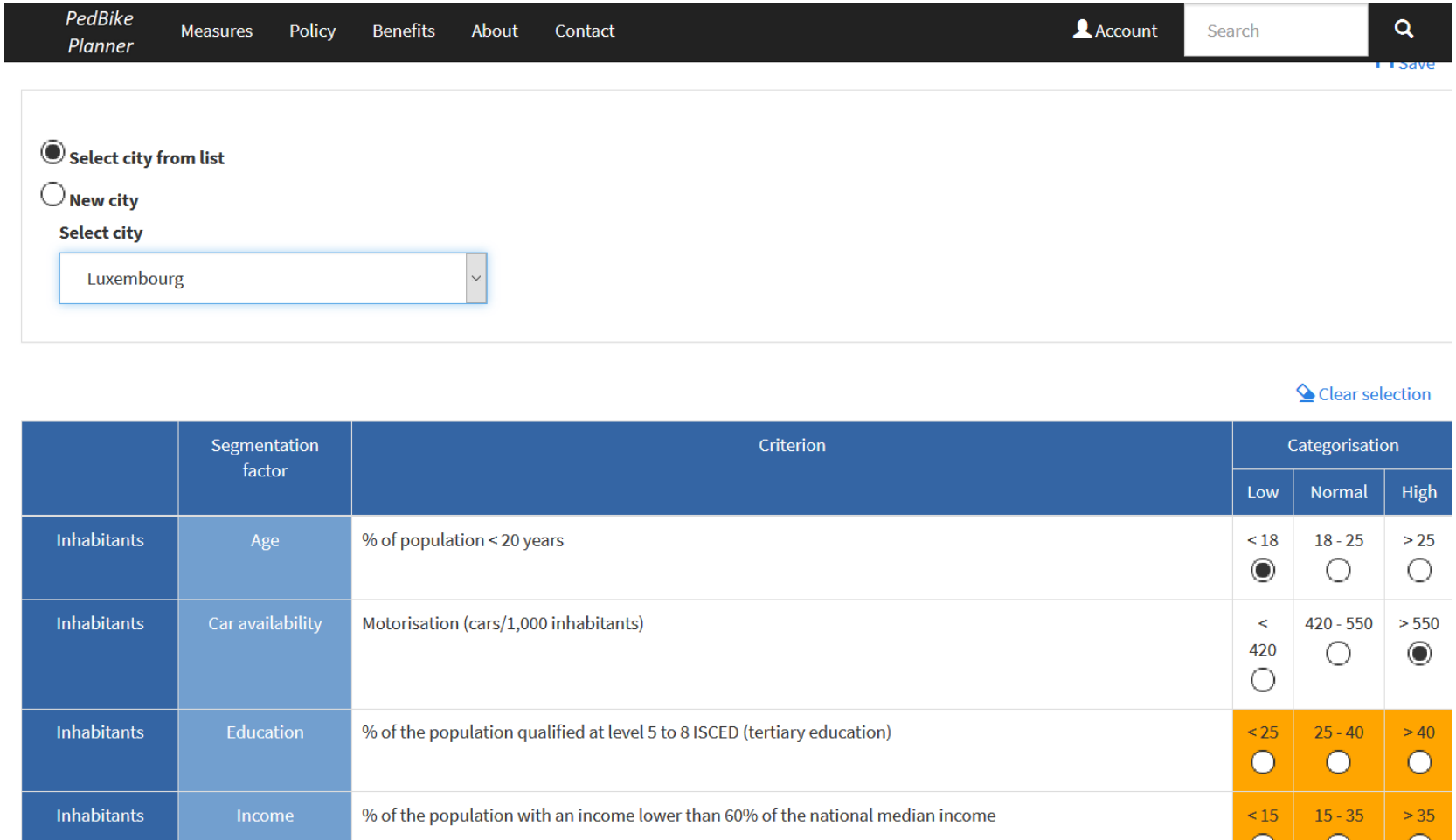

	Segmentation factor	Criterion	Categorisation		
			Low	Normal	High
Inhabitants	Age	% of population < 20 years	< 18 ◉	18 - 25 ○	> 25 ○
Inhabitants	Car availability	Motorisation (cars/1,000 inhabitants)	< 420 ○	420 - 550 ○	> 550 ◉
Inhabitants	Education	% of the population qualified at level 5 to 8 ISCED (tertiary education)	< 25 ○	25 - 40 ○	> 40 ○
Inhabitants	Income	% of the population with an income lower than 60% of the national median income	< 15	15 - 35	> 35

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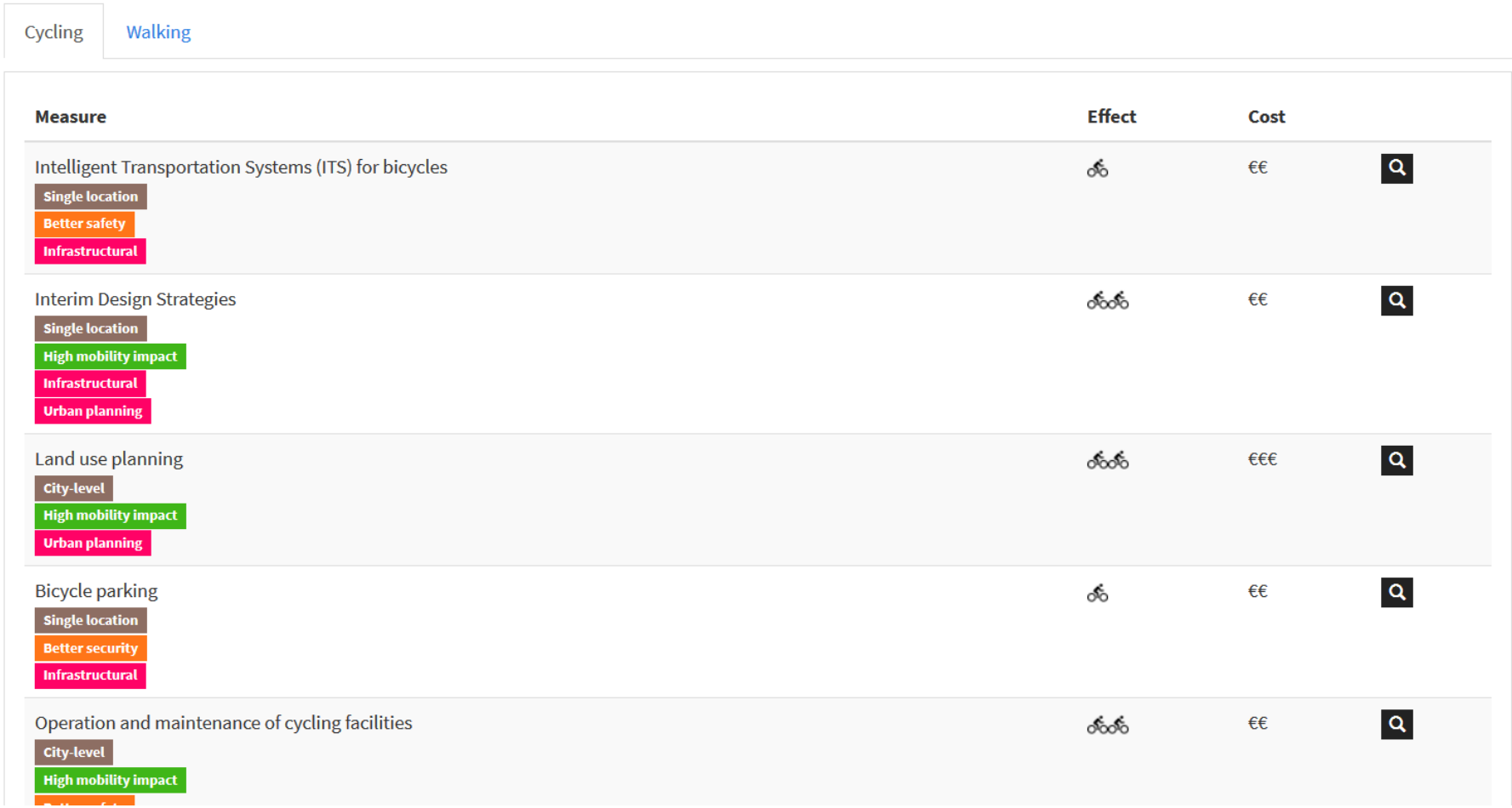

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Pdf Email

Intelligent Transportation Systems (ITS) for bicycles

ITS (Intelligent Transport Systems) and other innovative and technological solutionsfor bicycles encompass a variety of measures directed at infrastructures, cyclists, bicycles and motorized vehicles. The aim is to improve conditions for cyclists, emphasising accessibility and safety. ITS systems alone or in combination with other measures can make cycling more attractive and thus initiate a modal shift. The development of ITS technology is dynamic. Various systems are currently at a test-or development stage with so far limited knowledge about their effects e.g. on the environment.

Author: Michael W. J. Sørensen, TØI, First published on www.tiltak.no, 2013

Edited by: Rico Wittwer & Regine Gerike, TU Dresden, 2018

Introduction

Mode change effects

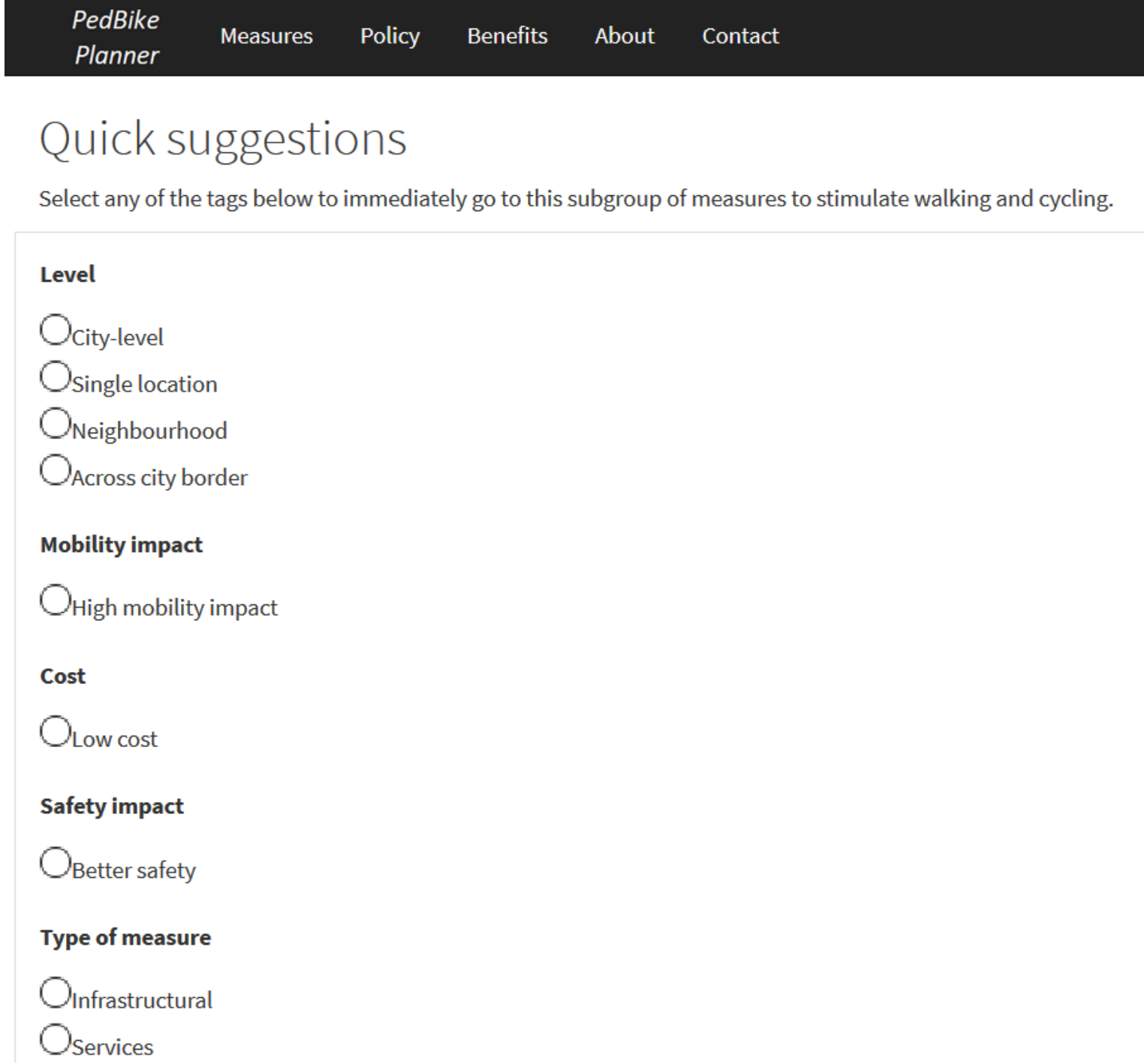
Examples of use

Effects on safety and security

Challenges and opportunities

PedBikePlanner

- www.pedbikeplanner.eu



Results survey

- **Survey about motivations behind walking, cycling, and usage of Personal e-Transporters**

- **Nine cities in four countries**
  - BE: Liège, Ghent
  - NL: Tilburg, Groningen
  - DE: Düsseldorf, Dortmund, Berlin
  - NO: Bergen, Trondheim

- **Representative sample of 250 respondents per city**

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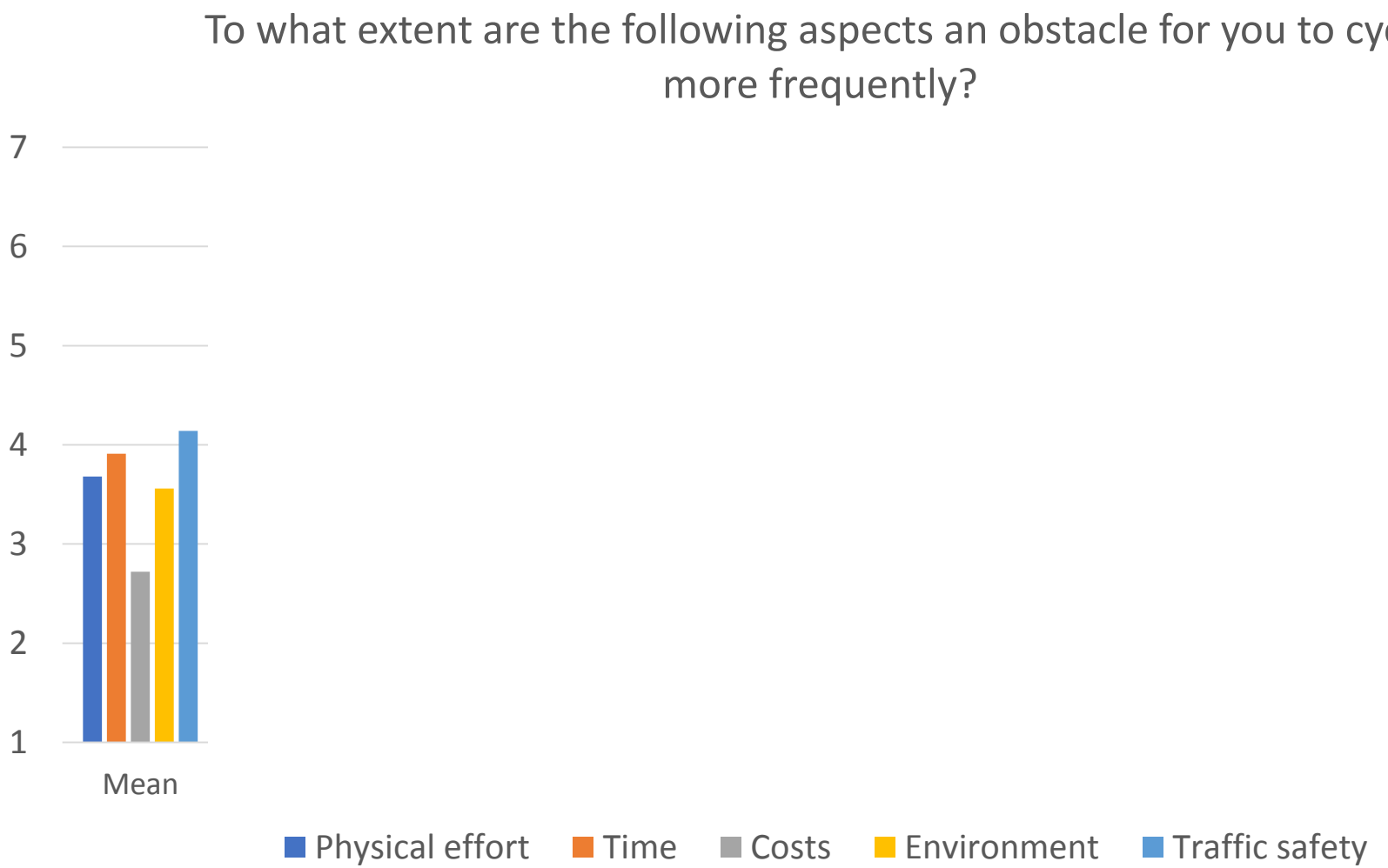
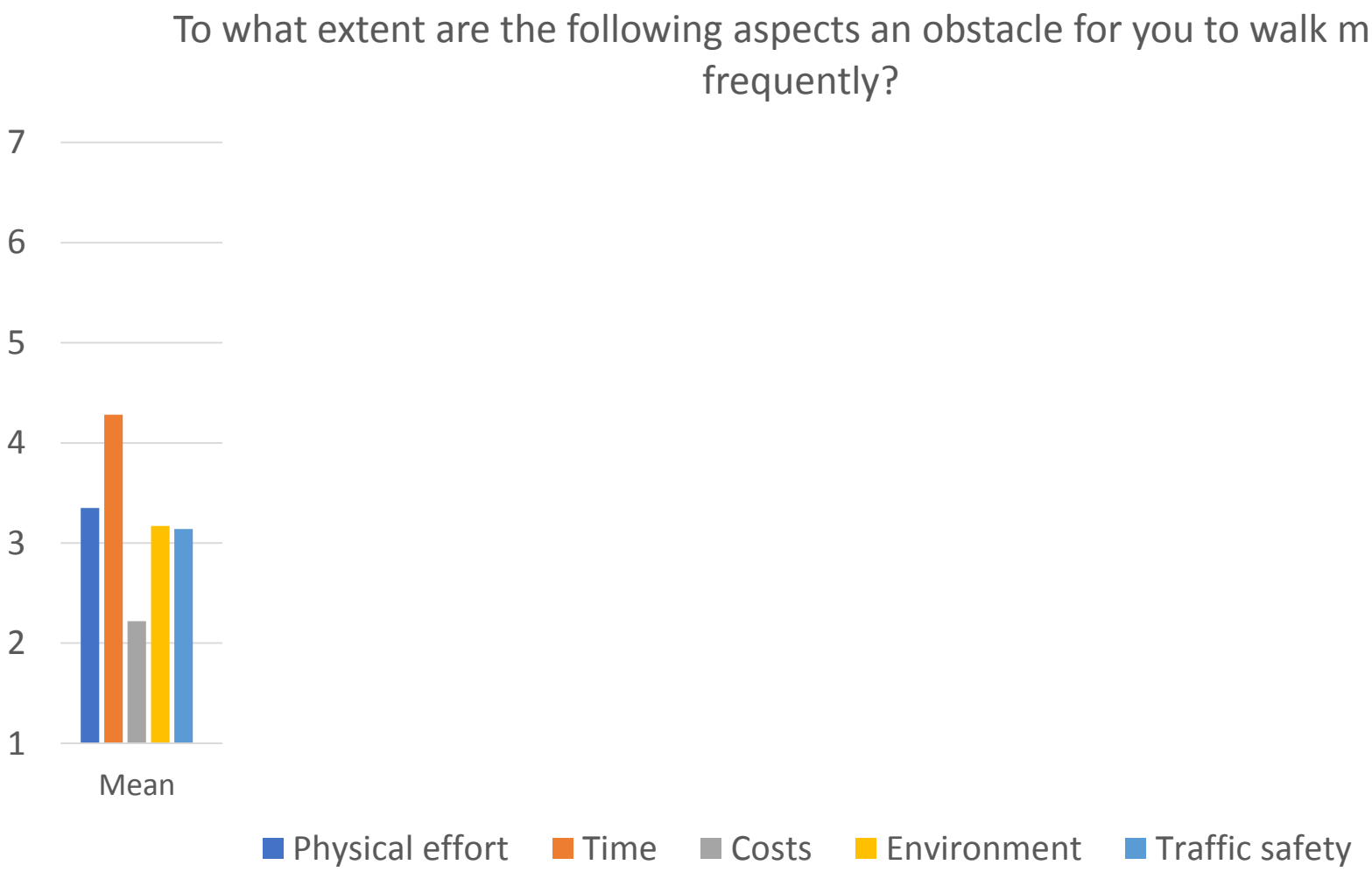
Most important obstacles hindering cycling more frequently?



Most important obstacles hindering walking more frequently?



Groups of persons with common determinants of variation in behaviour?

- **(Only) two clusters of respondents identified:**
  - Pro-cycling cluster (56%)
  - Not pro-cycling cluster (44%)
- **More variation in psychological determinants of cycling**
  - More ‘pronounced’ opinion about cycling than about walking

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Characteristics of pro-cycling cluster

- More Dutch participants; few from Bergen and Liège
- More young people
- More men
- Higher education level
- NOT more pro-environmental

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Characteristics of pro-cycling cluster

- **Make more use of ALL 'alternative modes'**
  - Cycling (obviously)
  - Walking
  - Moped/motorcycle
  - Public transport
  - Taxi
  - Personal e-Transporters
- **More subscriptions to**
  - Public transport
  - Car sharing
  - Bicycle sharing
- **… but no difference in driving license permit between both clusters (slightly lower car ownership, however)**
- **More often 'occasional' car drivers/passengers**

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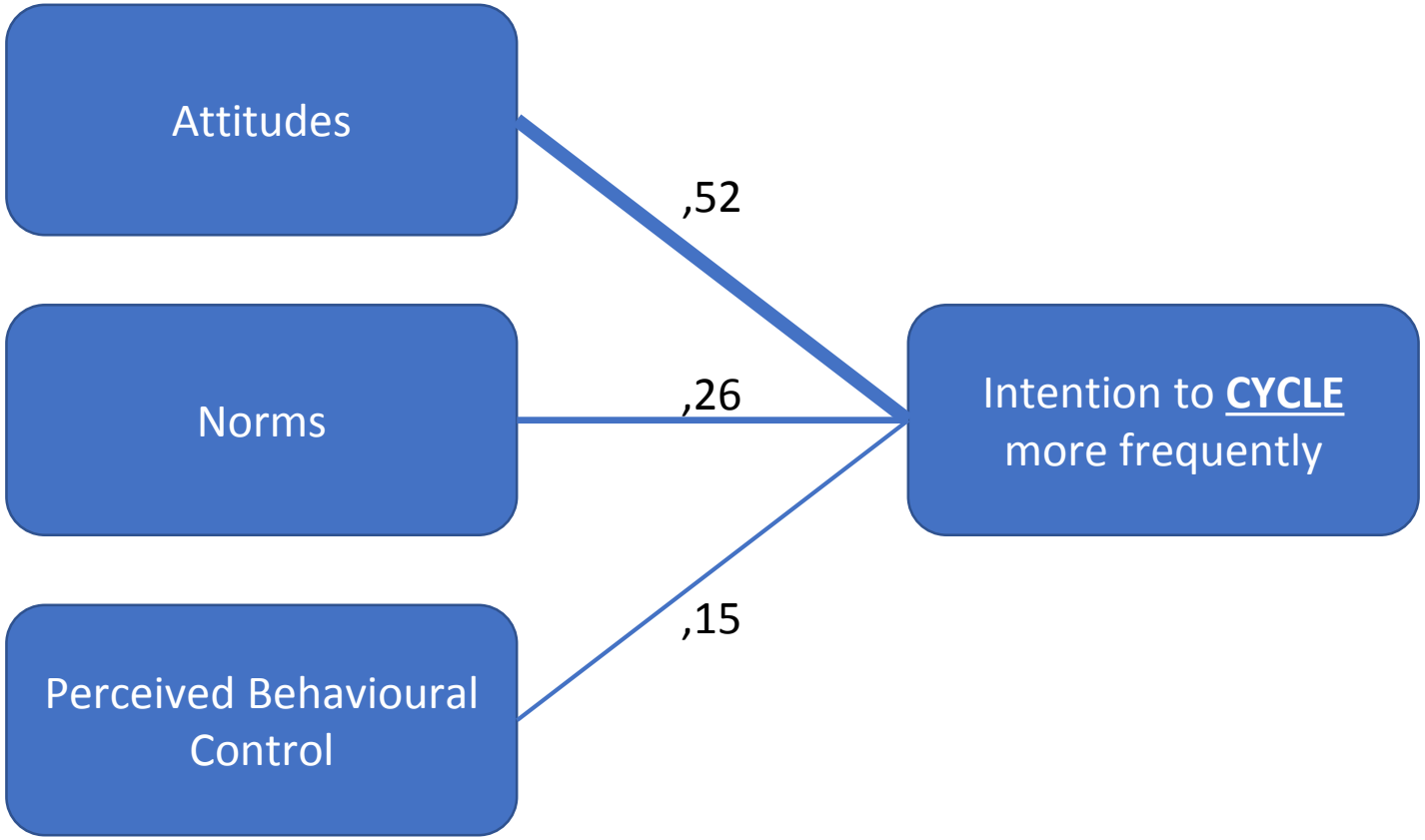
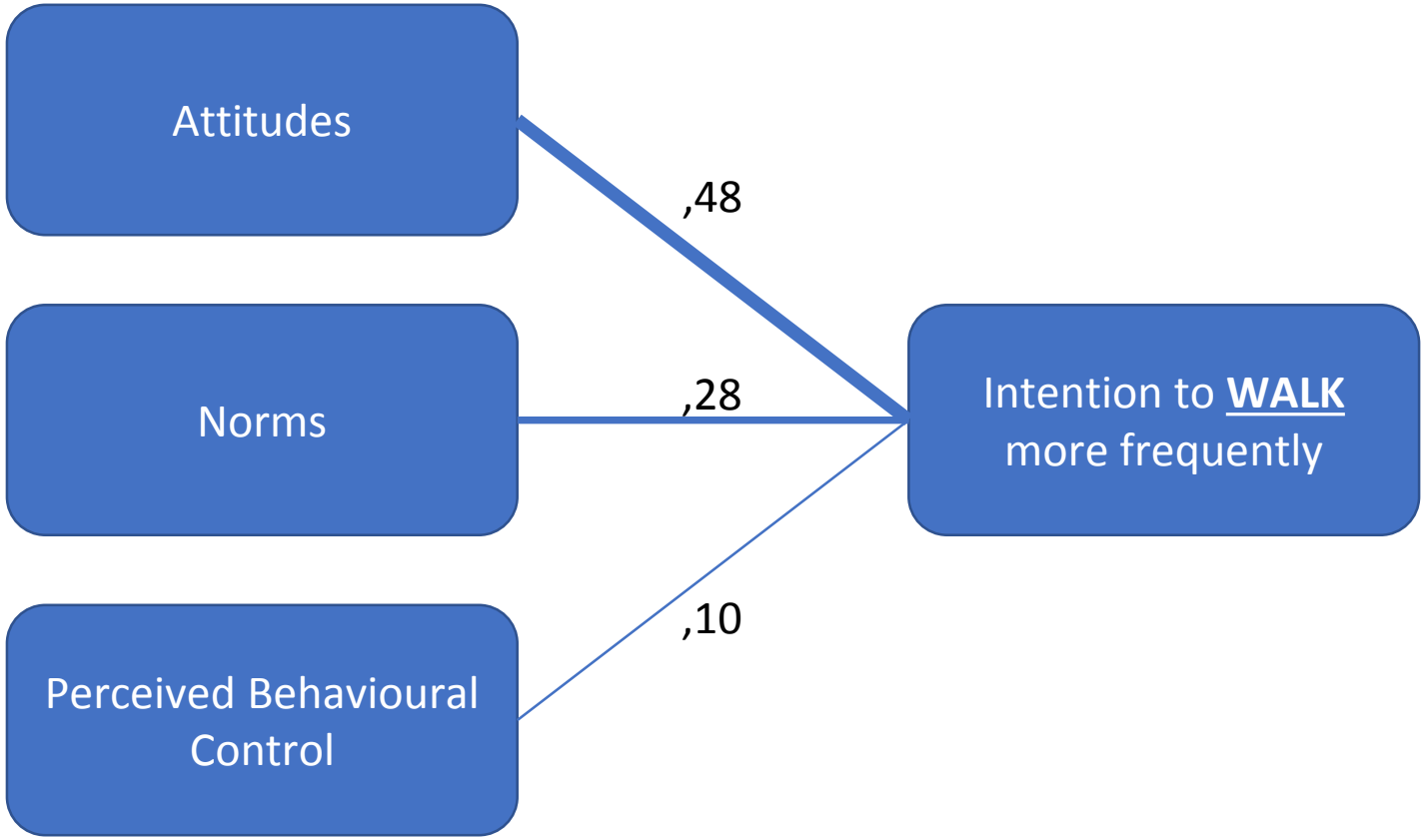
Characteristics of pro-cycling cluster

Obstacle to cycle more	Pro-cycling cluster	Not pro-cycling cluster
Physical effort		↗
Time	=	
Costs	↗	
Environment (climate, hilliness)		↗
Traffic safety		↗↗

Determinants of intention to cycle more frequently



Determinants of intention to walk more frequently



Conclusions

- Main obstacle cycling: road safety
- Main obstacle walking: time

- **Cycling/walking attitudes are crucial for behavioural change**

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