



# Household Survey Results

Same survey - somewhat different distribution methods

- Part 1: Neighbourhood and travel options
- Part 2: Travel patterns
- Part 3: Walking motivations, perceptions and satisfaction
  - Including Perceived Walkability
- Part 4: Most recent walking trip
  - Including Walking Satisfaction
- Part 5: sociodemographics



Photo: Edward Prichard, 2022



# Household survey N = 1103



**Age 18-88 (M 46.2, SD 15.4)**

Dortmund M 44.3 (SD 14.7)

Genoa M 46.4 (SD 12.8)

Gothenburg M 48.4 (SD 17.0)

(ANOVA, Sing.diff. posthoc <0.001 DE-SE)

**Gender = 52 % Women**

Dortmund 49 %

Genoa 52 %

Gothenburg 56 %

(Chi2 n.s.)



**Ø N° weekday trips 0-15**

(M 3.8, SD 2.8)

Dortmund M 4.8 (SD 2.8)

Genoa M 2.2 (SD 1.8)

Gothenburg M 3.5 (SD 2.8)

(ANOVA, Sing.diff. posthoc <0.001 DE-IT--SE)

**Ø N° weekend trips 0-15**

(M 3.5, SD 2.4)

Dortmund M 4.6 (SD 2.4)

Genoa M 3.3 (SD 2.1)

Gothenburg M 2.5 (SD 2.0)

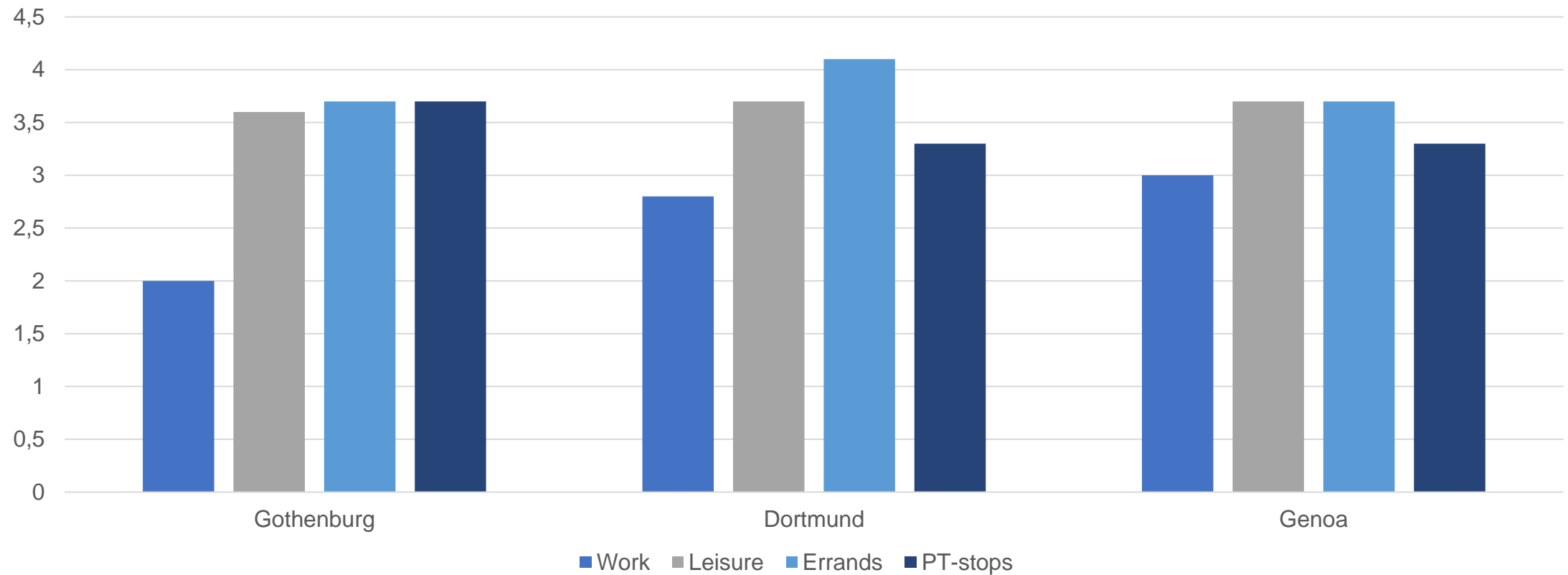
(ANOVA, Sing.diff. posthoc <0.001 DE-IT--SE)





# Where do we walk to?

Diagrammtitel





# Why do we walk & Walking conditions

## Top list motives (all cities)

Physical health

Mental health

Enjoy to walk

Walking is important to me

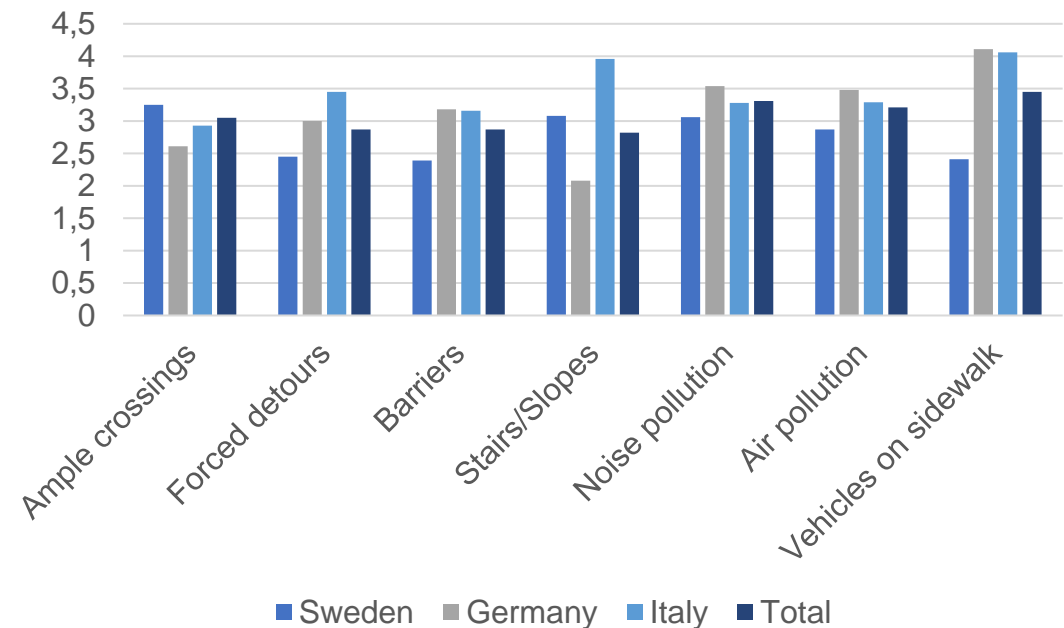
Value the benefits of walking

**Genoa:** Walking is part of my identity

**Dortmund:** Walking is fun and practical

**Gothenburg and Genoa:** Feel guilty if I don't walk

To what extent do you agree on the following statements regarding the walking conditions in your neighbourhood? (avg. mean)





# Perceived Walkability

## Short perceived walkability scale SPWS (De Vos et al. 2022)

To what extent do you agree on the following statements regarding **perceived walkability** in your neighbourhood. 5 Point Likert scale: 1= totally disagree - 5 fully agree)

It is feasible to walk to my destinations	Perceived walkability to destinations
It is convenient to walk to my destinations	
It is comfortable to walk to my destinations	
It is pleasant to walk to my destinations	
My neighbourhood stimulates me to walk to my destinations	
It is feasible to walk to public transport stops	Perceived walkability to public transport stops
It is convenient to walk to public transport stops	
It is comfortable to walk to public transport stops	
It is pleasant to walk to public transport stops	
My neighbourhood stimulates me to walk to PT stops	
It is feasible to walk recreationally	Perceived recreational walkability
It is convenient to walk recreationally	
It is comfortable to walk recreationally	
It is pleasant to walk recreationally	
My neighbourhood stimulates me to walk recreationally	

Factor analysis: 3 factors, 73% of variance explained



## SPWS M 3.8 (SD 0.7)

Dortmund M 3.7 (SD 0.7)

Genoa M 3.5 (SD 0.8)

Gothenburg M 4.0 (SD 0.6)

(ANOVA, Sing.diff. posthoc <0.001 DE-SE and IT-SE)



# SPWS determinants - and relation to walking

## Walking attitudes:

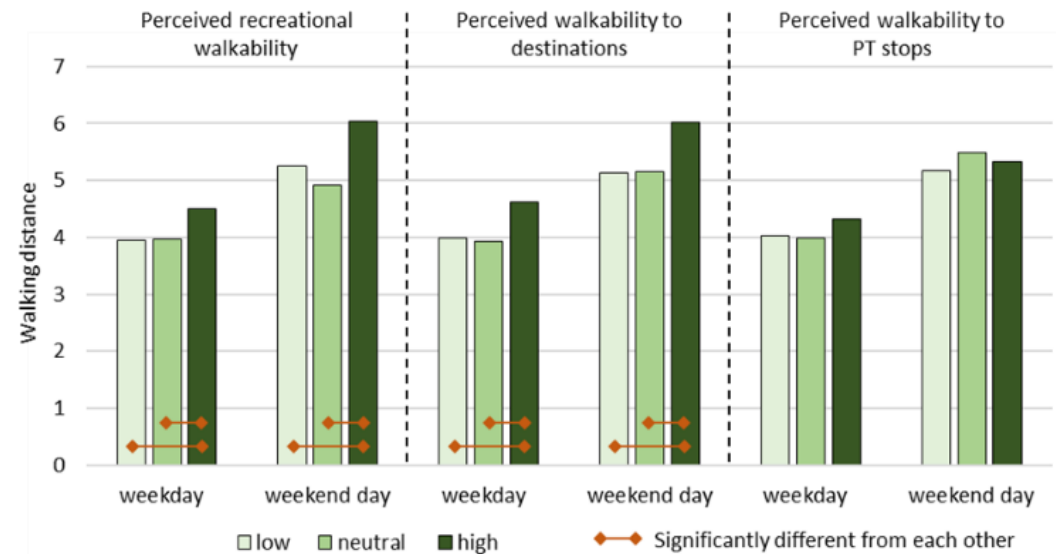
Positive attitudes towards walking (benefits)

Finding walking easy/practical

Perceived walking barriers

- Affect all types of walkability

## City and type of neighbourhood





# Walking Satisfaction

**Walking Satisfaction** with last/most recent trip; 9 items = 1 index (-3 to +3)

- STS Satisfaction with Travel Scale ;  $\alpha = .894$

(Ettema et al., 2011)



**Genoa: M = .629  
(1.03)**



**Dortmund: M =  
.632 (.95)**



**Gothenburg: M =  
1.042 (1.01)**



Genoa City centre\_2017\_1, by: Noriko Otsuka, ILS, ILS



# Determinants of Walking satisfaction

- **Age**  
 $\beta = .107$   $p < .001$
- **Social norms**  
 $\beta = .117$   $p < .001$
- **Intrinsic regulation motivation**  
 $\beta = .119$   $p = .003$
- **Satisfaction with local accessibility**  
 $\beta = .197$   $p < .001$
- **Neighbourhood conditions: Barriers and detours**  
 $\beta = -.183$   $p < .001$

## Dortmund:

Social norms, accessibility sat., introjected reg (neg), alone (neg)

## Genoa:

Accessibility sat., introjected regulation (pos), alone (neg)

## Gothenburg:

Age, accessibility sat., intrinsic reg, alone (neg)





# References

De Vos, J., Lättman, K., Van der Vlugt, A. L., Welsch, J., & Otsuka, N. (2023). Determinants and effects of perceived walkability: a literature review, conceptual model and research agenda. *Transport reviews*, 43(2), 303-324.

Van der Vlugt, A. L., Lättman, K., Welsch, J., Prichard, E., Otsuka, N., & De Vos, J. (submitted). Analysing the determinants of perceived walkability, and its effects on walking

And a few working papers in the pipeline..