

Today

9.2.2021

SPT-E5020

Marketta Kyttä

	12.1.	19.1.	26.1.	2.2.	9.2.	16.2.	23.2
What happens?	Start of the course	Lectures & group work presentations	Lectures & group work presentations	Lecture & group work	Lecture & group work	Lecture & group work	Final session
Teaching mode	Online	Online	Online	Hybrid	Hybrid	Hybrid	Online
Contents of contact session	Introduction	Perceived safety	Sense of Community	Knowledge from people in planning	Socially sustainable and health promoting environment	Various urban user groups	Final rehearsal?
	Student's pre-tasks concerning personally meaningful places	Child-friendly environments	Restorative environments	The preparation of PPGIS data for analysis	Activity space modelling	Age-friendly environments	
		Aesthetic Experiences	Place Attachment	Various levels of PPGIS data analysis	Urban walkability	From city streets to playgrounds and suburban woodlands	Final presentations
				Online and onsite PPGIS data analysis	Residential relocation and travel behavior change		
Group work	Group work 1 starts	Group work 1 presentations	Group work 1 presentations	Group work 2 starts	Group work 2	Group work 2	
Individual work							

TODAY

SOCIAL SUSTAINABILITY &
HEALTH PROMOTIVE ENVIRONMENT

PROGRAMME OF TODAY

Lectures

10.15-11.30

Marketta Kyttä: Socially sustainable & health promotive environments

Kamyar Hasanzadeh: Spatial units of analysis: Use of activity space models in environmental health promotion studies

LUNCH

12.30-14.00

Anna Kajosaari: Urban Walkability

Samira Ramezani: Residential relocation and travel behavior change

GROUP WORK CONTINUES

Online analysis support clinics by Kamyar, Tiina & Anna

Groups 1-4 -> Tiina: tiina.rinne@aalto.fi

Groups 5-8 -> Anna: anna.kajosaari@aalto.fi

Groups 9-11 -> Kamyar: kamyar.hasanzadeh@aalto.fi

PLEASE CONTACT Tiina, Anna & Kamyar to get support!

THANK YOU!

Group 3

Fahlenbock, Nils

Jalava, Joonas

Peltomäki, Tuulikki



- You identified an essential, but easy-to-fix problem in the Espoo dataset
- The corrected dataset is now available in MyCourses
- Please remember: the pos/neg information in the cluster tool is not correct. Please use the Excel and Shapefile datasets for the closer analysis of the clusters

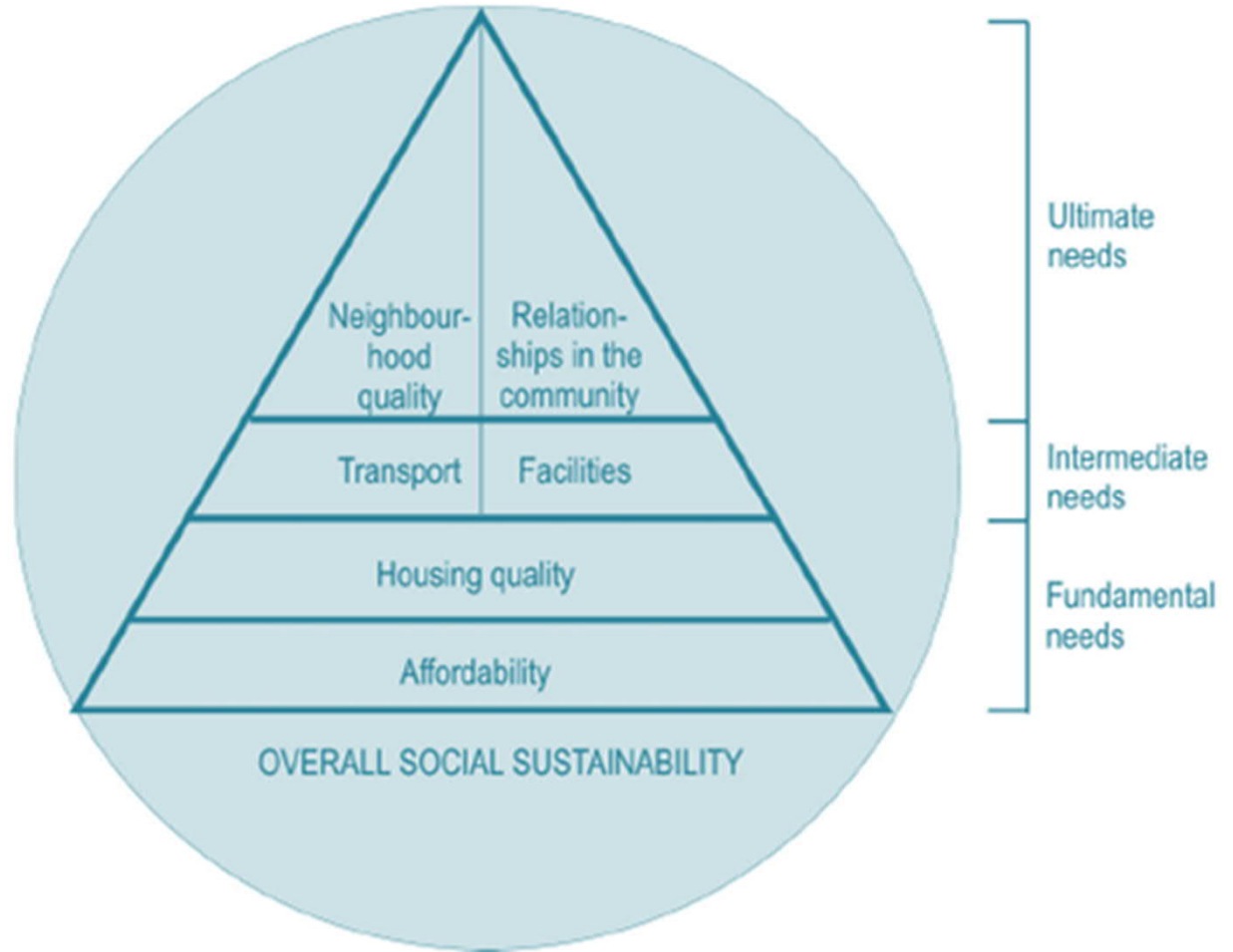
Discuss with another student:

- What are the essential characteristics of socially sustainable environment?

THERE ARE MANY DEFINITIONS FOR SOCIAL SUSTAINABILITY ...

“To be socially sustainable, there needs to be equitable distribution and consumption of resources and assets, harmonious social relations, and acceptable quality of life”

Chiu, R. L. H. (2003) Social sustainability, sustainable development and housing development: the experience of Hong Kong, in: R. Forrest & J. Lee (Eds) Housing and Social Change: East-West Perspectives. London: Routledge.



Ancell & Thompson-Fawcett
 (2008) The Social Sustainability of
 Medium Density Housing: A
 Conceptual Model and
 Christchurch Case Study. *Housing
 Studies*, Vol. 23, No. 3, 423–441.

Figure 3. Conceptual evaluation model of the social sustainability of housing

Inhabitants' health and well-being

Sustainability of community

- pride in and attachment
 - social interaction
 - safety or security
- perceived quality of environment
 - satisfaction with the home
 - stability
- participation in collective groups

Social equity

- access to services and opportunities
 - shops, schools
 - health centres
- recreational opportunities, open space
 - public transport
 - jobs
- affordable housing

A Venn diagram with three overlapping circles. The top circle is yellow and labeled 'Health & wellbeing'. The bottom-left circle is teal and labeled 'Perceived environmental quality'. The bottom-right circle is teal and labeled 'Accessibility'. The circles overlap in the center, and the top circle overlaps with both bottom circles.

**Health &
wellbeing**

**Perceived
environmental
quality**

Accessibility

How to change or promote ecofriendly behavior?

BRIDGE SOCIAL SUSTAINABILITY

Why people behave the way they do?

MAINTENANCE SOCIAL SUSTAINABILITY

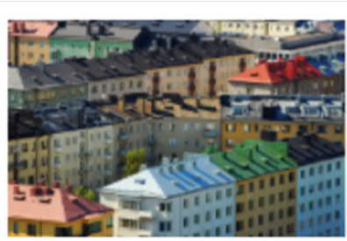
How various contexts meet the basic needs of people?

DEVELOPMENT SOCIAL SUSTAINABILITY

Our model in Urban Happiness -study: the combination of the two



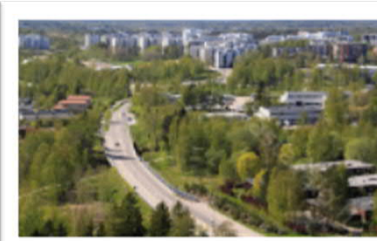
Urban
Happiness–
project



Tööli
Kallio



Pohjois-Haaga
Kannelmäki
Lassila
Kontula
Mellunmäki



Suvela
Leppävaara
Matinkylä
Soukka

pehmoGIS HELSINKI

Background info Environment values Propose improvements Everyday places Feedback

Evaluate your living environment

Evaluate your living environment from four different perspectives. Mark on the map positive and negative locations concerning:

Hide my locations

The appearance
 Positive Negative

The social life
 Positive Negative

The atmosphere
 Positive Negative

The functional possibilities
 Positive Negative

Previous Next

Please tell more about the social life of the environment here...

- The social life is vivid
- Neighbour relations here are harmonious
- The residents take care of the surroundings well
- The residents care for each other
- The people significant to me are nearby
- Reputation of this place is good
- The diversity of residents is adequate
- I feel socially secure
- Other*

Save target

Urban intensification policy

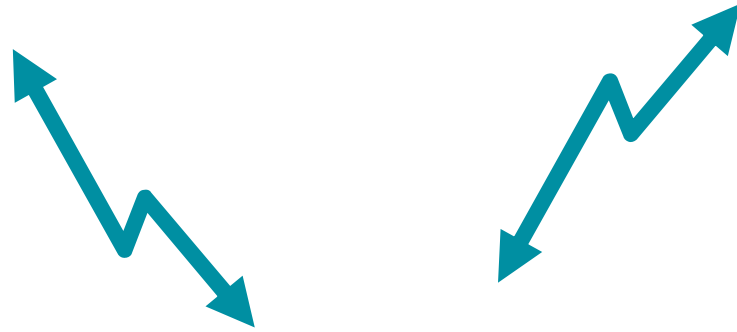


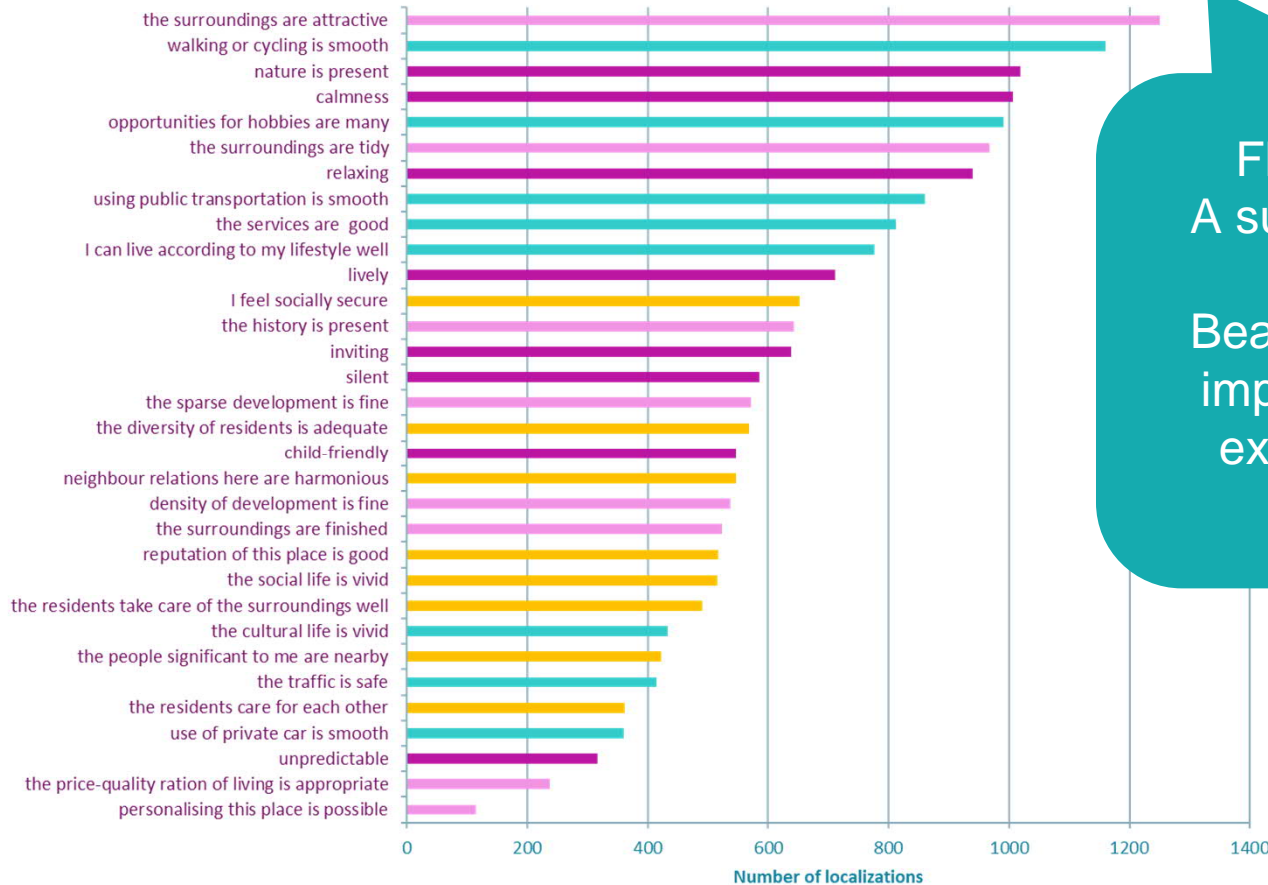
Figure: Sirkku Huisko

INDIVIDUALLY SENSITIVE ANALYSIS OF URBAN STRUCTURE



The contents of positive quality factors

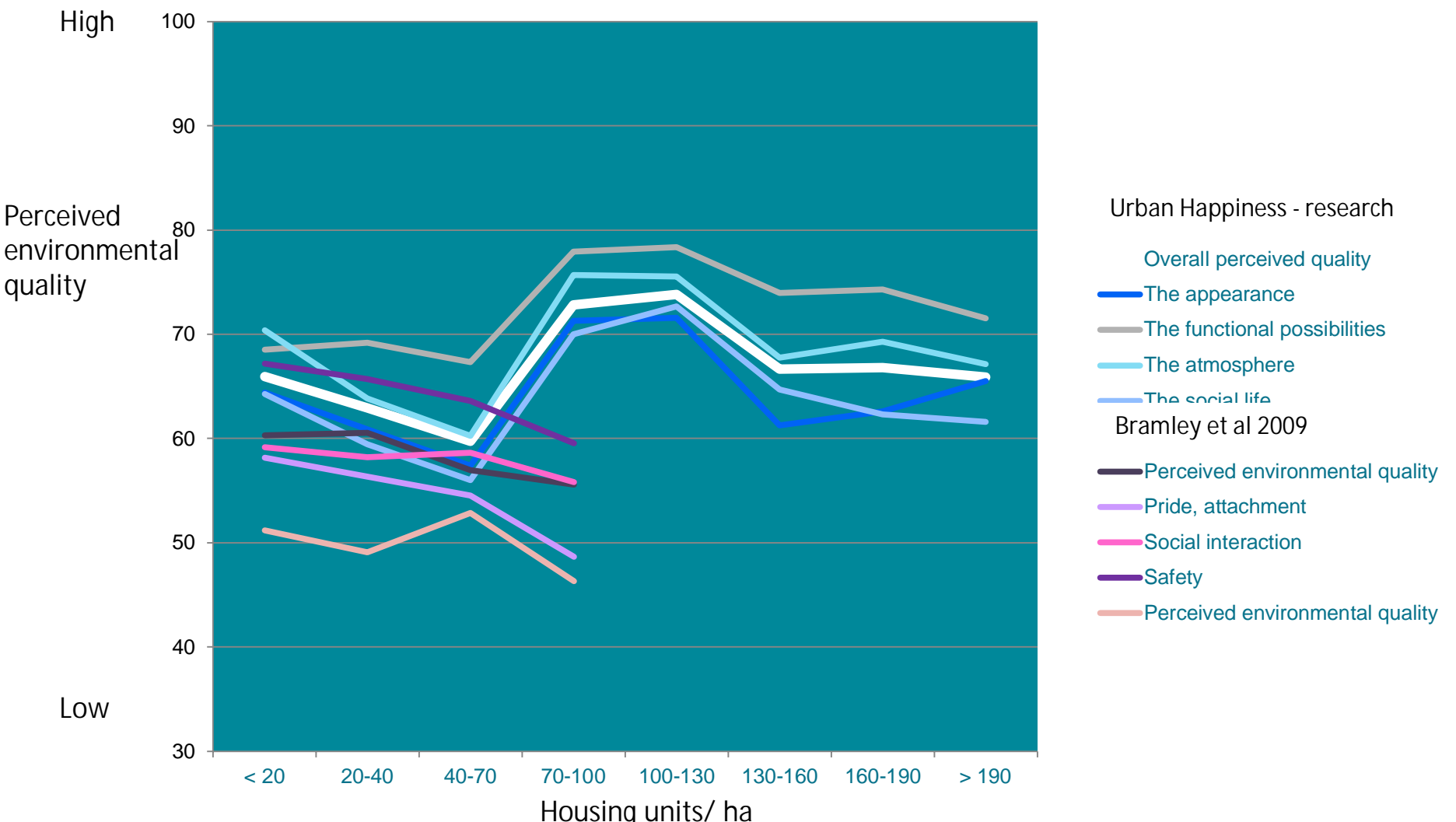
(Urban Happiness –study)



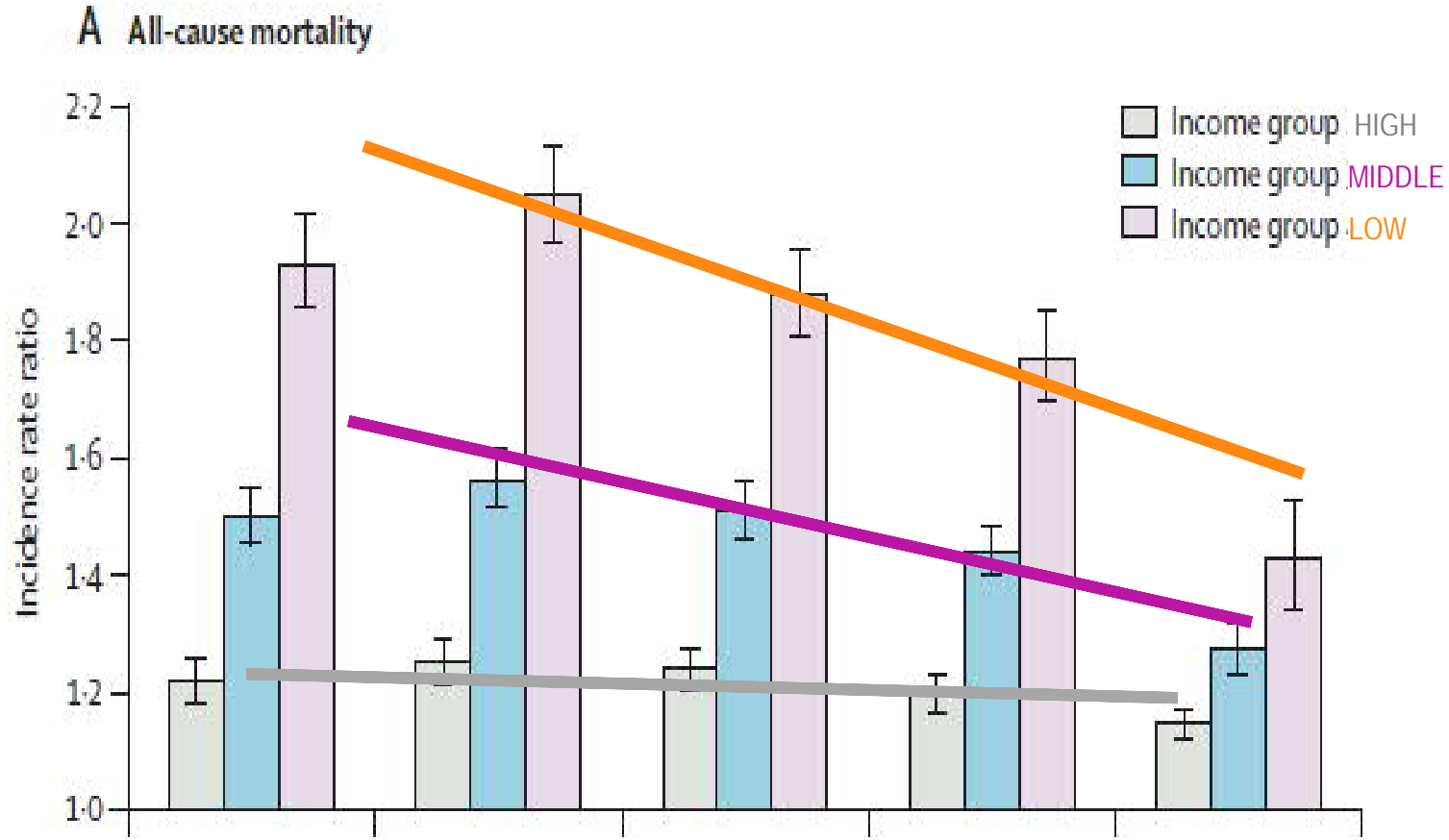
Florida et al. (2011)
 A survey among 28 000
 dwellers in US:
 Beauty among the most
 important factors when
 explaining residential
 satisfaction.

■ = The atmosphere
■ = The appearance
■ = The social life
■ = functional possibilities

Urban density & perceived environmental quality



GREEN STRUCTURE AND MORTALITY IN VARIOUS SOCIO-ECONOMIC GROUPS



Mitchell, R & Popham, F. (2008) Effect of exposure to natural environment on health inequalities: an observational population study. *The Lancet*, Vol.372, Issue 9650, 1655-1660.

ALSO GREEN PLACES EXTREMELY VALUABLE EXPERIENTIALLY!

Green structure proportion
& various types of quality places



BUT

HOW ABOUT HEALTH AND WELLBEING?

"Planning and health is big news"

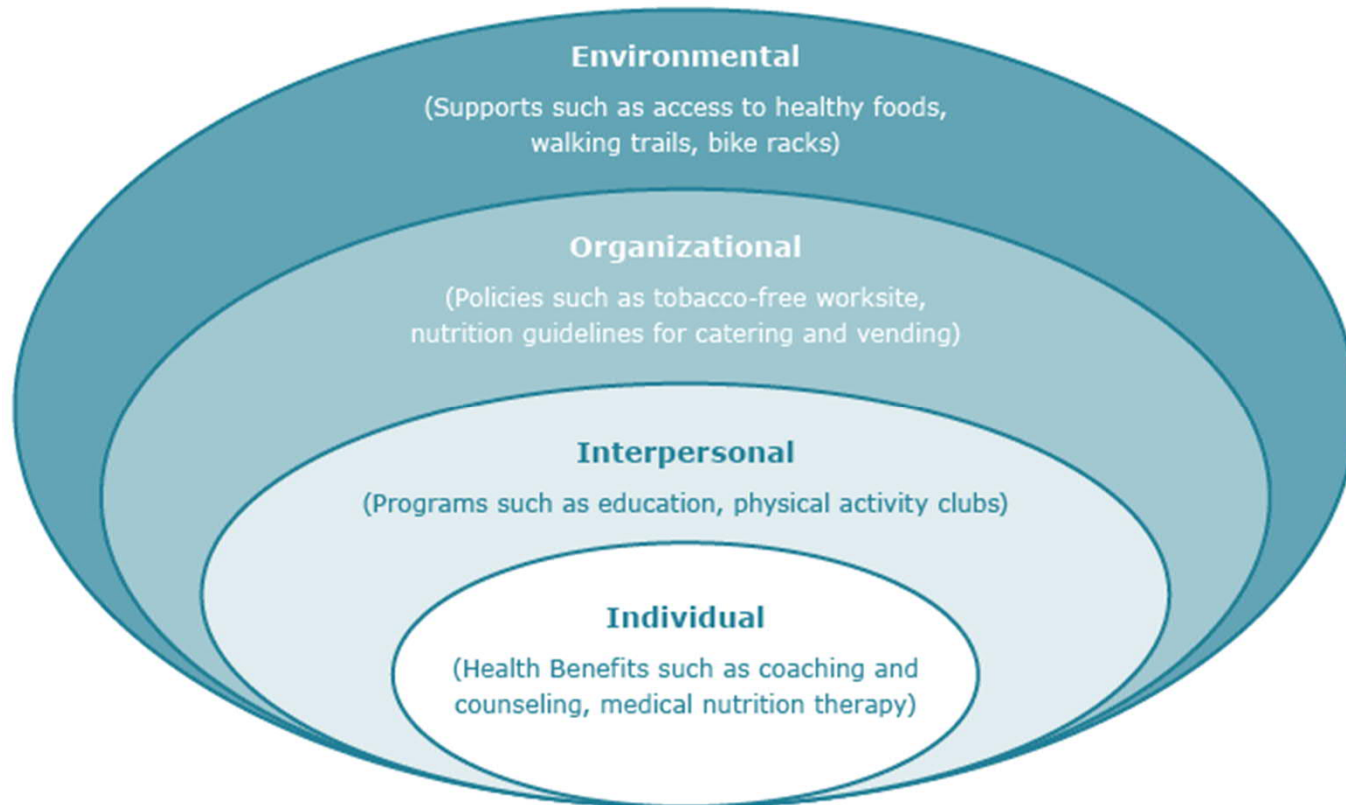
(Boarnet, 2006)

TWO WAVES OF ENVIRONMENTAL HEALTH PROMOTION RESEARCH

Indirect **Health promotive** characteristics of environment

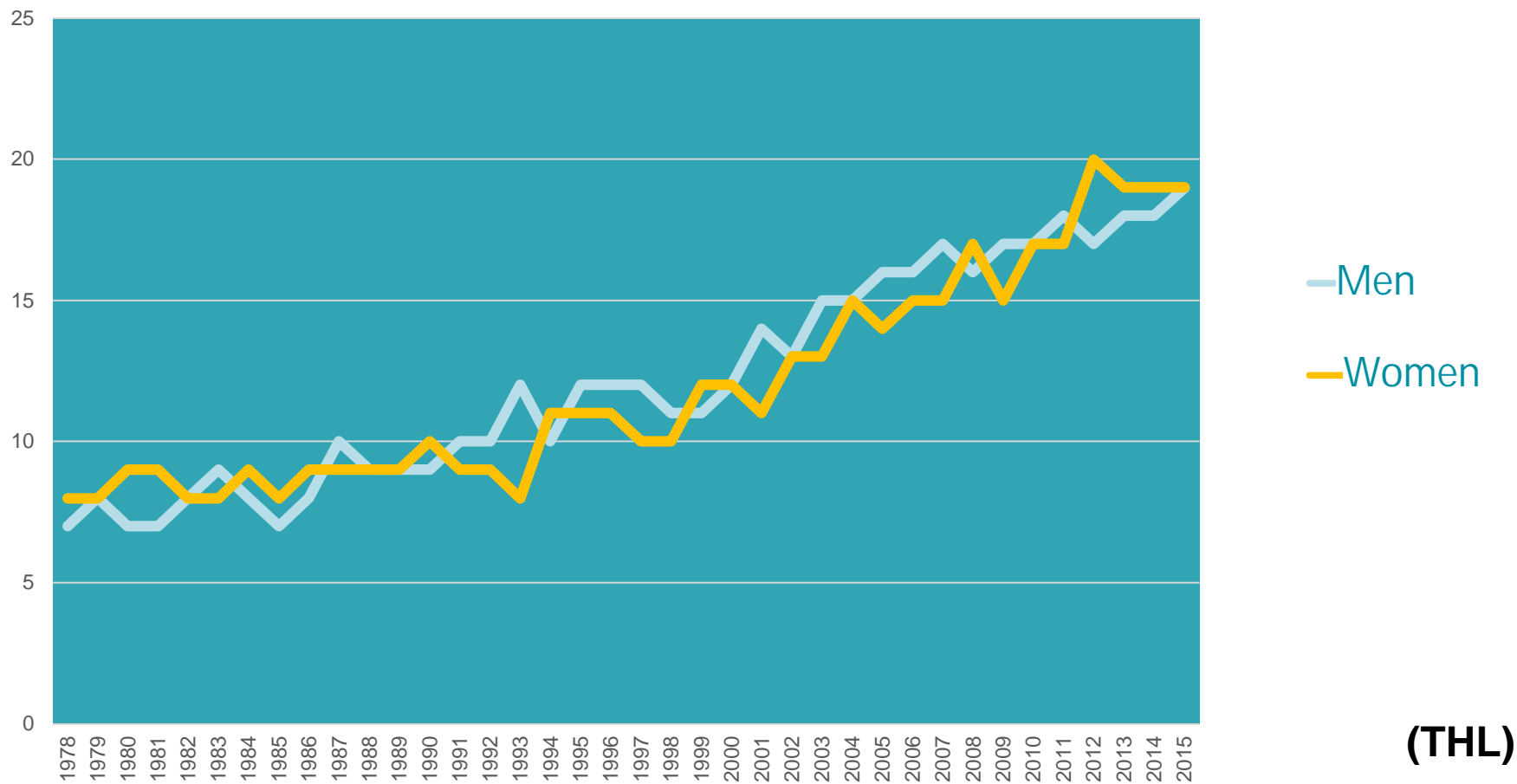
Direct **Illness producing** characteristics of environment

ECOLOGICAL MODEL(S) OF ENVIRONMENTAL HEALTH PROMOTION



THE PROPORTION OF OVERWEIGHT 25-65-YEAR-OLDS FINNS BETWEEN 1978-2015

(Self-reported weight and height, BMI>30)



(THL)

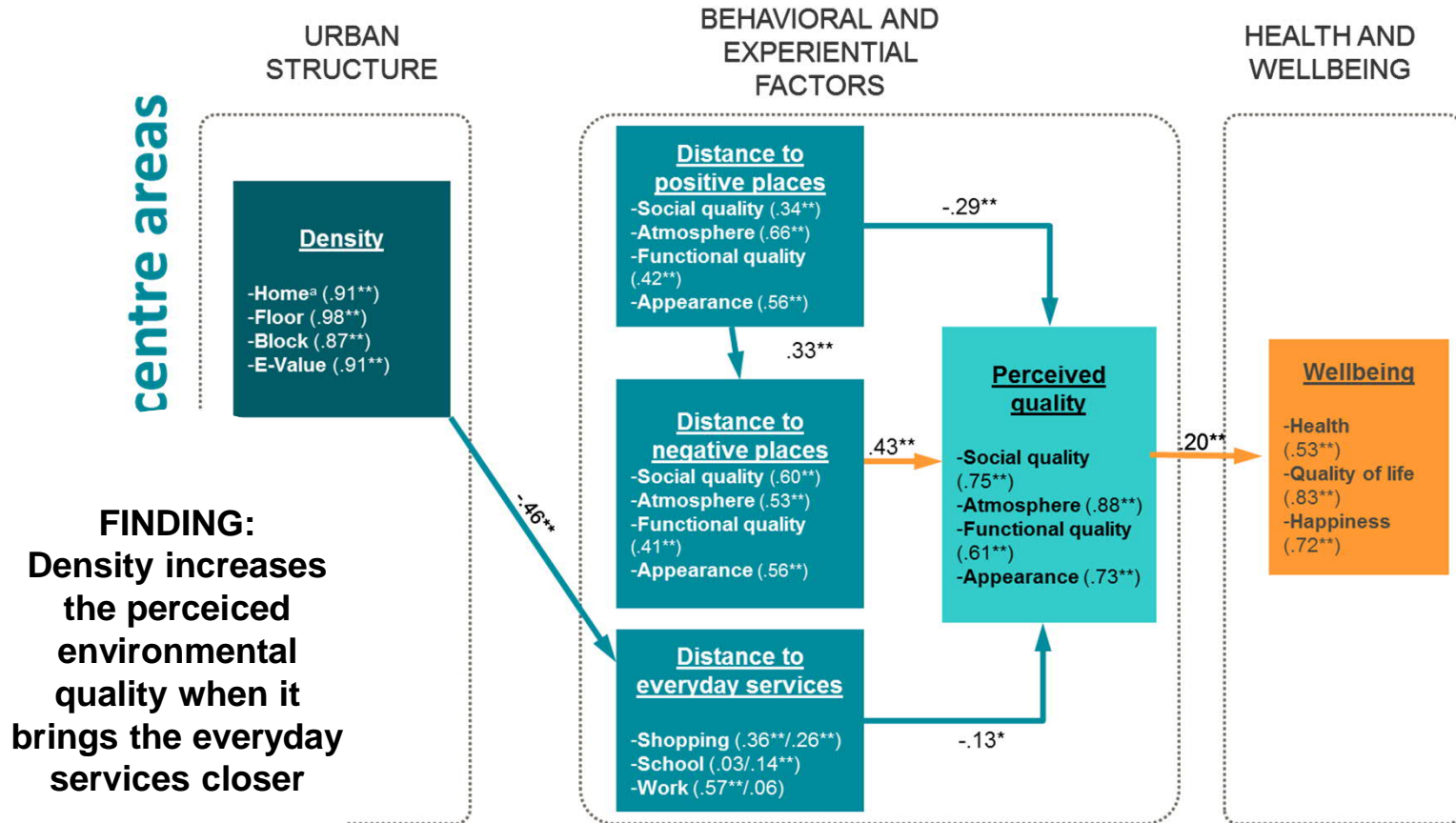
RESEARCH ON THE HEALTH PROMOTIVE CHARACTERISTICS OF LIVING ENVIRONMENT



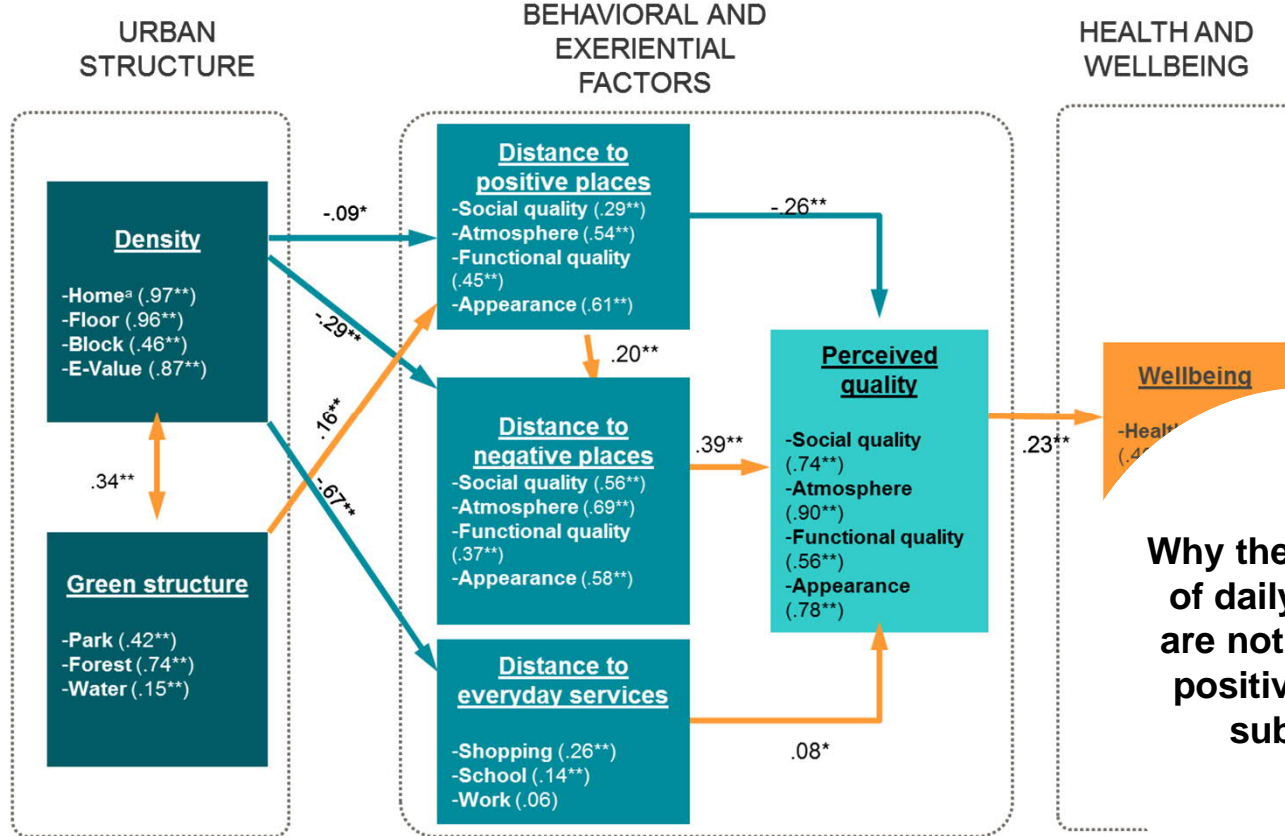
Our model: health is an outcome of socially sustainable environment



CONTEXTUALLY VARYING ASSOCIATIONS



Suburbs



Why the closeness of daily services are not perceived positively in the suburbs?

Kyttä, M. Broberg, A., Haybatollahi, M., and Schmidt-Thomé, K. (2016) Urban happiness – Context-sensitive study on the social sustainability of urban settings. *Environment and Planning B: Planning and Design*, vol 43, 34 – 57.

PARALLEL FINDINGS FROM STUDIES OF CHILDREN

Taustatiedot Liikuttaminen Millälaian Helsinki on Hyvinvointi Päätös

Vastaa ja kerro omille tärkeille aloilla kurti ympäri ja sivuilla, jotta silvut Mailla kinnostaa, että kaikkea teet kaupungissa ja mitä se tuntuu. Kerro näkömies, sillä jokainen vastaus on yksi tärkeä!

Kyivetyin enni vastata koulukunnan aikana. Täpöttävästi päätät vastata kaksikin kysymykseen ja vastata kättäsiavolta sivulla. Tärkeää on! Jos et kullumkaan enni vastata kaksikin kysymykseen ylöstä kurtaa, voit keskeyttää kyselyin vastaamisen ja palata myöhemmin täydentämään vastauksiasi. Kyselyin on monta vaihtelua, ja tiedot tallennuvat sitä mukaa, kun eteneä sivuilla. Voit myös palata aiemmille sivuille korjaamaan vastauksiasi. Jos tarvitset ohjeita vastaamiseen kyselyn aikana, klikkaa hiirellä merkkiä tai kysy neuvoa kutsuaan sivulta avustajasta.

Moiikka, kerro mitiltä ympäristösi tuntuu!

Aloita vastaaminen

Tutustu kyselyin osallistumista tutkijoihin (kotonaan kirkki ja kalleissa)

Kaupunkiympäristö ja lieten liikuttaminen (KYLE) - tutkimushanke on Opetusministeriön rahoittama. Tutkimuskauppareita toimivat Tehtävien korkeakoulun Yhdyskuntasuunnittelun tutkimus- ja koulutuskeskus, Tampereen teknillisen yliopiston TODE -kaupunkiympäristötutkimuskeskus sekä OY, muuttamassa. Tutkimus toteutetaan Helsingin kaupungin Opetuskeskusten suunnitelmalla. Lisätietoja tutkimuksesta

pehmogis HELSINKI

Reittiopas Kulkus Helsingin Yhteisö Tiedot

Harjoitus Helsingin!

Fuudera ja kor alla väliä kaksikin kirkki.

Te etäde mitä mukana alla ylöste: välj etäde de vahing och placar som ja väggja för dig. Du kan manna högt för gator ar samma sak.

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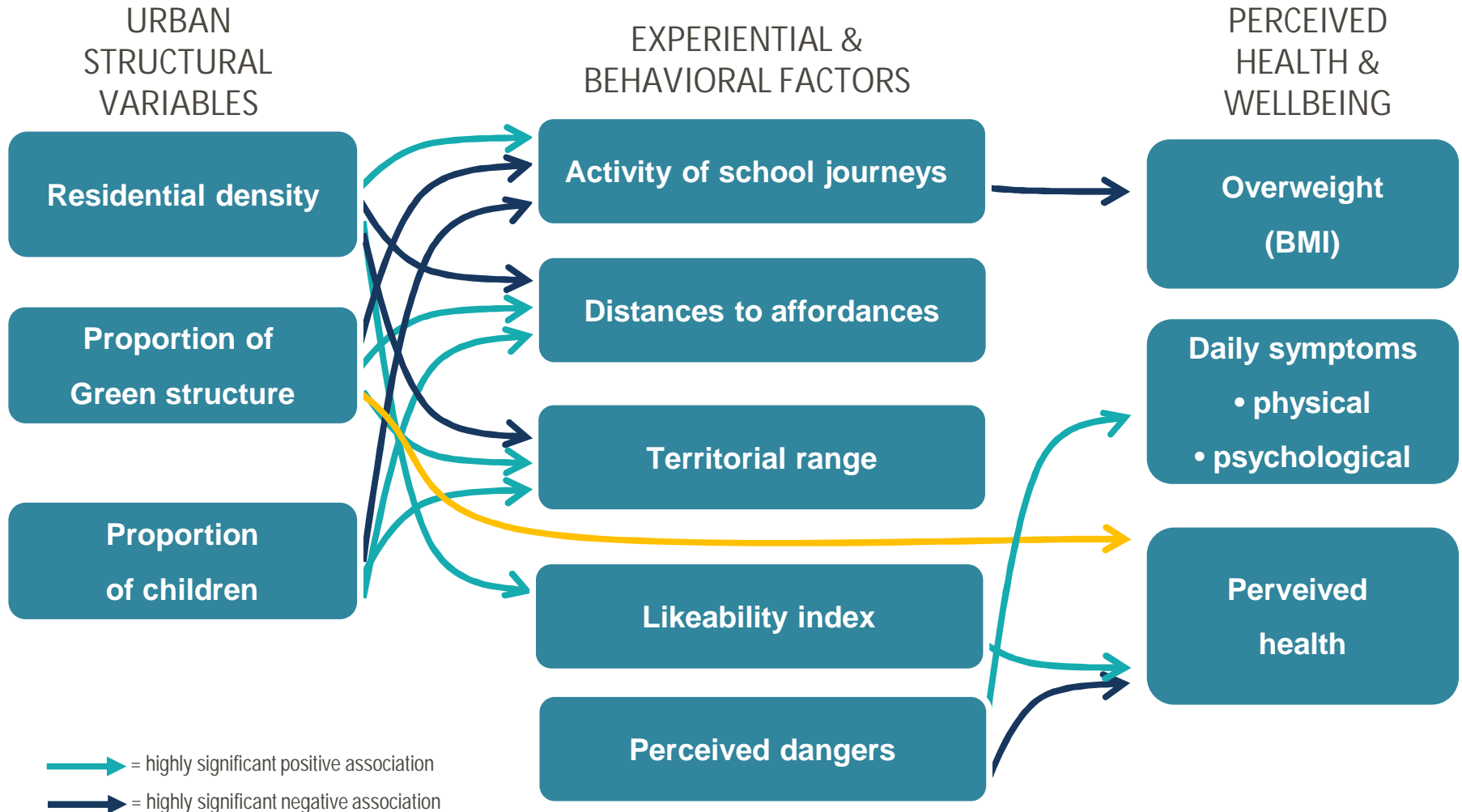
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Is the route right?

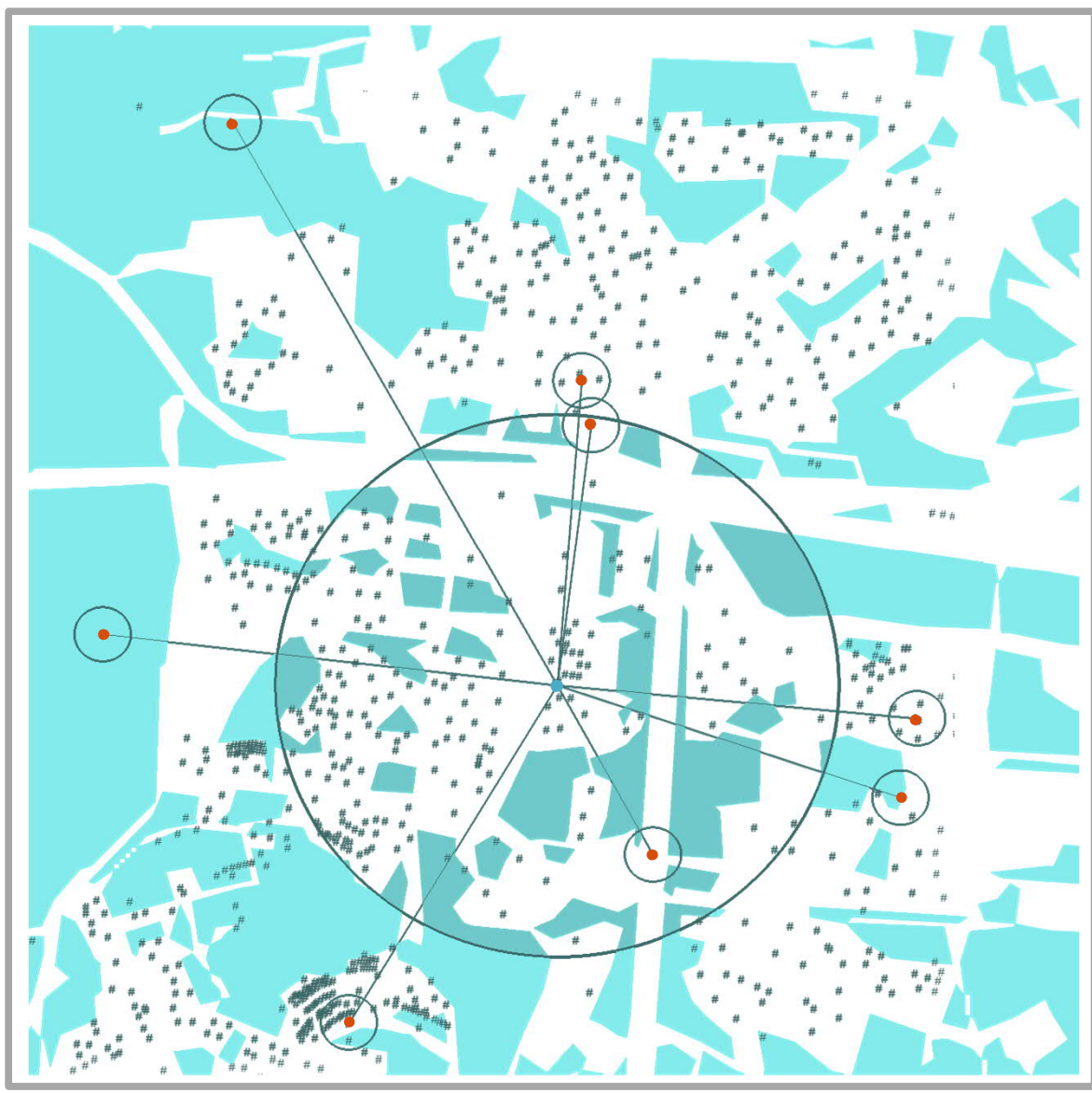
yes no

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Factors that predict childrens' environmental experiences and their perveived health and wellbeing



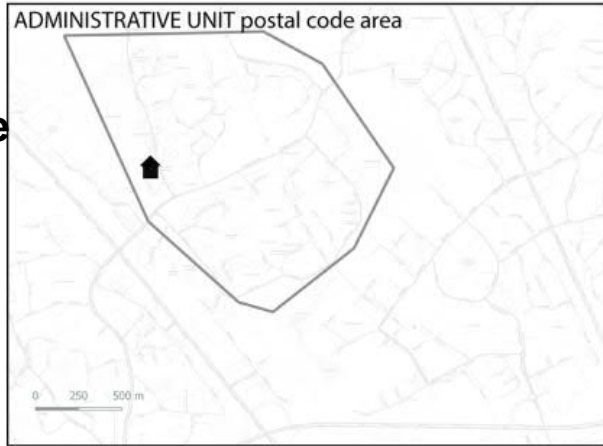
WHAT IS
THE
PROBLEM?



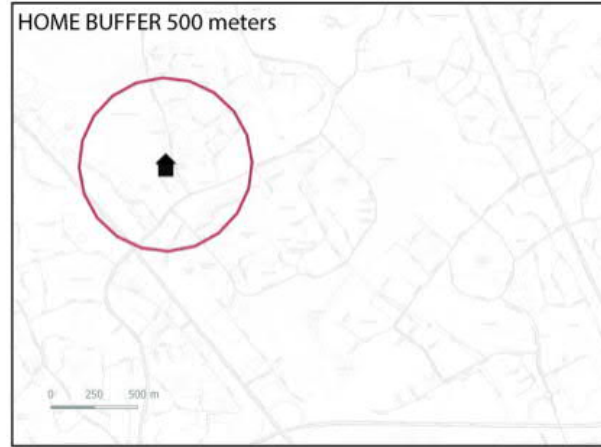
DEFINING THE INDIVIDUAL, DYNAMIC ACTIVITY SPACE

Hasanzadeh, K. (2018) IASM: Individualized activity space modeler.
SoftwareX, Volume 7, January - June 2018, Pages 138-142

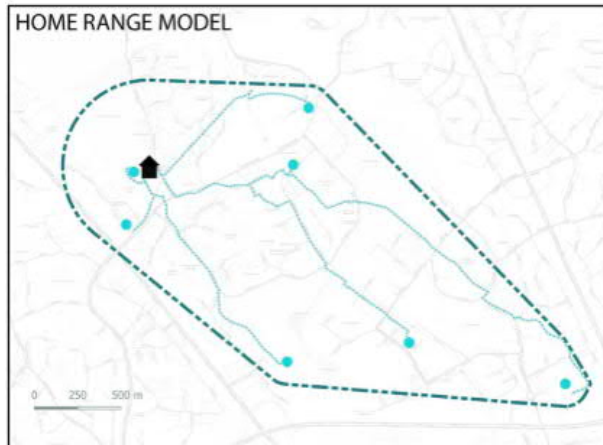
1. Static administrative area



2. Static buffers around home



3. Dynamic, individual activity space



4. Dynamic fabric of an individual activity space



ACTIVE AGING

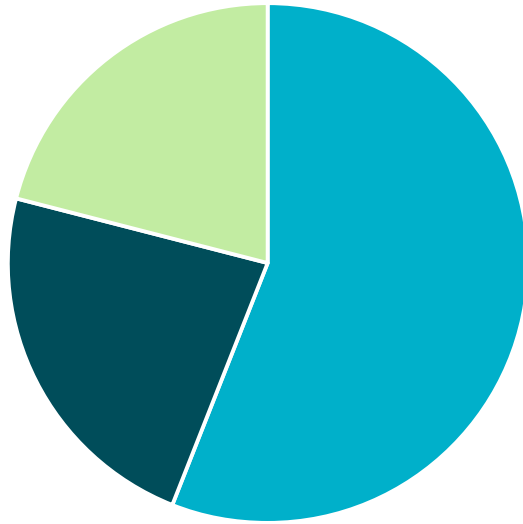
PhD project:

Tiina Laatikainen



SOME RESULTS

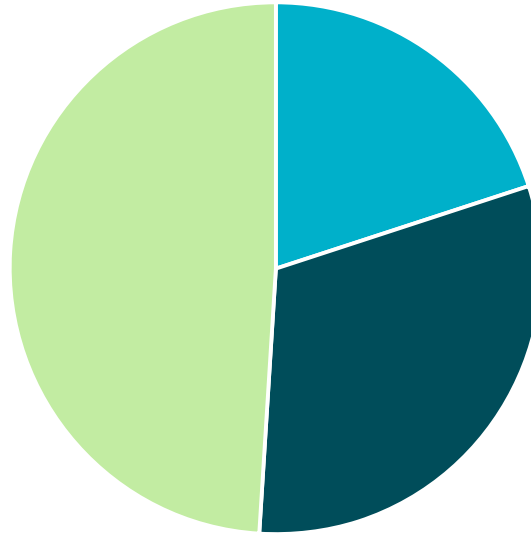
OLDER ADULTS



■ Monocentric

■ Bivalent

YOUNG ADULTS



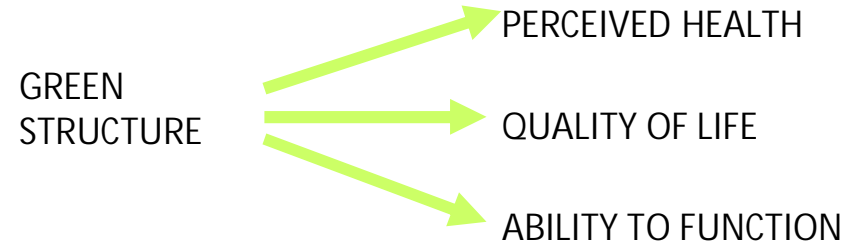
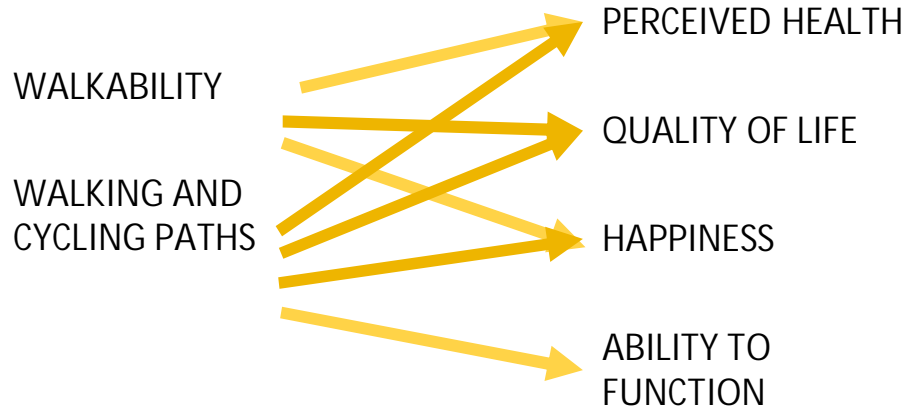
Monocentricity & perceived health

- In both groups, monocentric lifestyle was associated with better perceived health

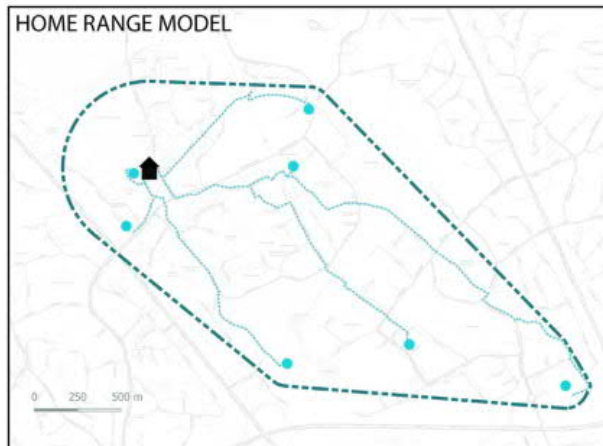
Polycentricity & quality of life

- Among young adults monocentric lifestyle was also associated with higher perceived quality of life
- Among older adults polycentric lifestyle was associated with lower perceived quality of life

AGAIN: HOW ABOUT HEALTH & WELLBEING?



3. Dynamic, individual activity space



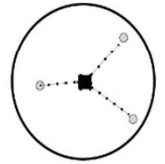
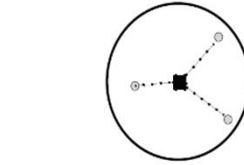
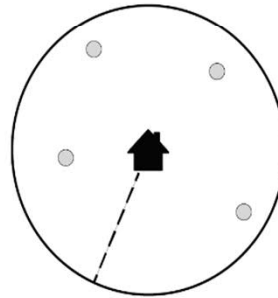
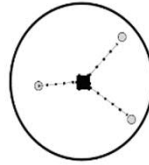
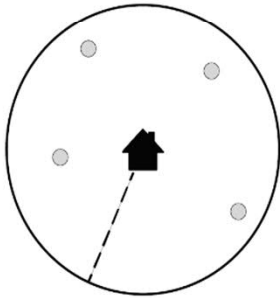
4. Dynamic fabric of an individual activity space


ACTIVITY SPACE TYPOLOGY

MONOCENTRIC

BICENTRIC

POLYCENTRIC

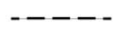


 Home location

 Activity cluster centroid

 activity point

 Activity cluster

 Home range distance (3300 m)

 Distance to activity cluster centroid (≤ 1000 m)

TO CONCLUDE: RESEARCH ON THE HEALTH PROMOTIVE CHARACTERISTICS OF LIVING ENVIRONMENT



RECENT STUDY: 14 CITIES, 10 COUNTRIES, 5 CONTINENTS

Urban structural characteristics promoting active living:



- **Population density** $p=0.001$



- **Intersection density** $p=0.019$



- **Public transportation stop density** $p=0.0007$



- **Number of parks** $p=0.010$

68–89
min/week
more
physical
activity

LINEAR PARKS!

Brown, G. Schebella, M.F. & Weber, D. (2014) Using participatory GIS to measure physical activity and urban park benefits. *Landscape and Urban Planning*, 121, 34-44.





EE

**Everyday mobility +
Exposure to vitamin Green**

Helsinki Master Plan project: Locations for infill development

Support for the idea of urban boulevards?



How about joint effects?

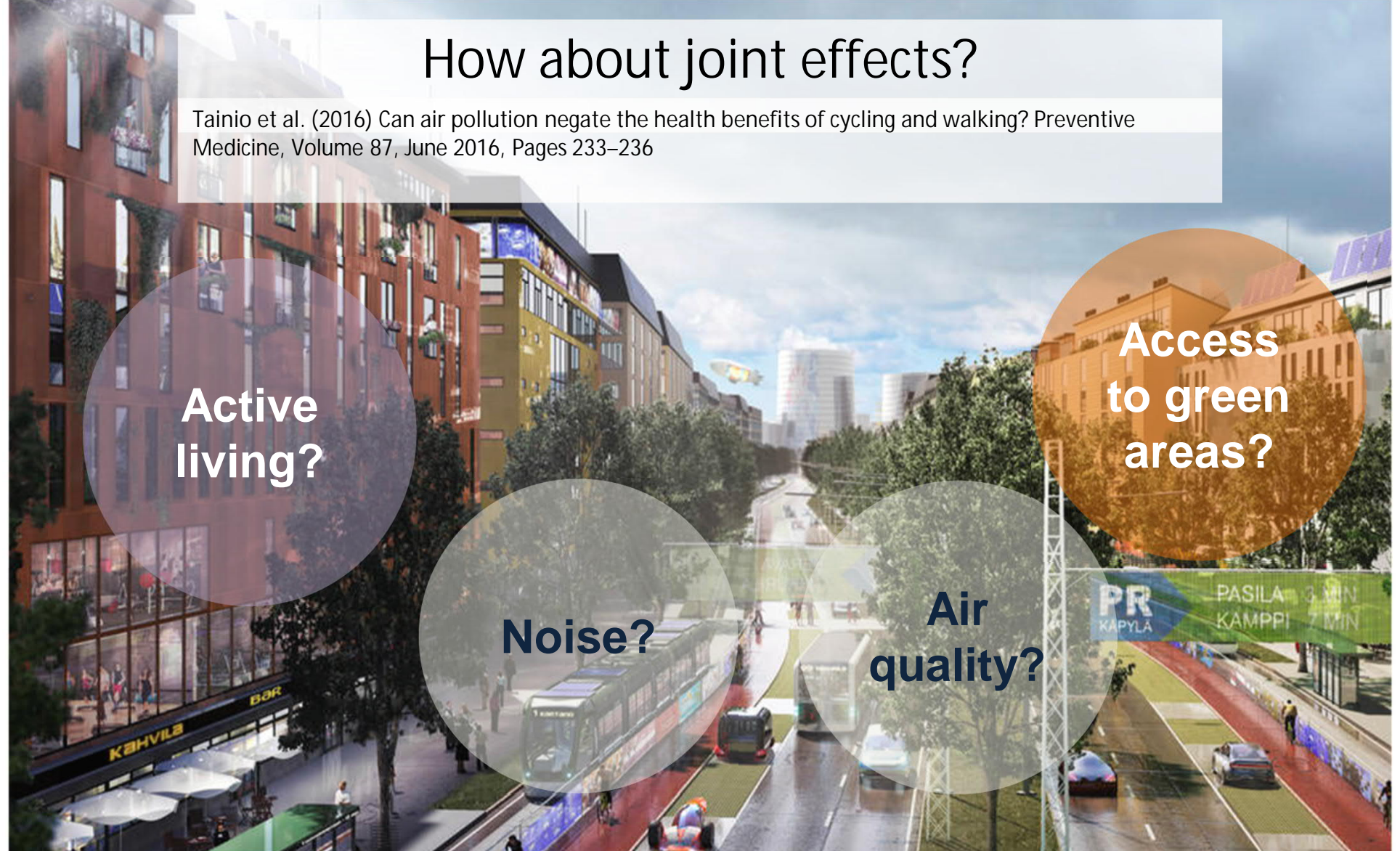
Tainio et al. (2016) Can air pollution negate the health benefits of cycling and walking? Preventive Medicine, Volume 87, June 2016, Pages 233–236

Active living?

Access to green areas?

Noise?

Air quality?





**THANK
YOU!**