



PROMOTING MENTAL WELL-BEING IN OLDER AGE IN THE CITY

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Promoting mental well-being and healthy ageing in cities



Our contribution



Source: Global Age-friendly Cities: A Guide (Worl Health Organisation, 2007)



The Global Network for Age-friendly Cities and Communities

Looking back over the last decade, looking forward to the next



THE MINDMAP CONSORTIUM

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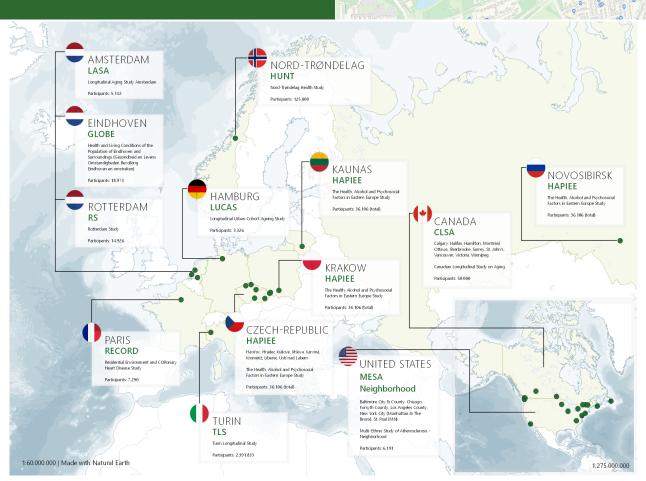
Urban policies ... Health-related behaviours Physical activity Walking Health behaviour models Socio-ecological models Sports participation Nutrition Fruit & vegetable intake Fat intake Sodium intake Smoking Tobacco consumption Alcohol Alcohol consumption Mental well-being Urban environment Biological factors (allostatic load) Neuroendocrine Epinepherine, norepinepherine, dopamine cortisol, DHEAS, aldosterone Mental disorders Depression Structural Population density Anxiety Residentuial segregation Dementia Interleukin-6, tumor necrosis factoralpha, c-reactive protein, insulin-like growth factor-1. Mental well-being Loneliness Physical Land mix diversity and urban sprawl HDL and LDL cholesterole, triglyoundes, Metabolic Life satisfaction Social and traffic safety glucosylated hemoglobin, glucose insulin. albumin, creatinine, homocysteine Quality of life Green spaces and aesthetics Facilities for health-related behaviours Cardiovascular Systolic blood pressure, diastolic blood Cognitive functioning Memory & respiratory pressure, peak expiratory flow, heart rate Executive functioning Social cohesion Social Antropometric Waist-to-hip ratio, body mass index (BMI) Processing speed Social network Social support Genetic factors Genes Single nucleatide polymorphisms (SNPs) Biological ageing models Gene-environment interaction models





APPROACH

PARTICIPATING COHORTS







APPROACH

URBAN DATA COLLECTION

- INSPIRE: European collaboration on spatial data:
 - A substantial part of the requested environmental will be available for every
 European city as part of the INSPIRE directive



- Green spaces
- Pollution
- Residential density
- Transportation
- Facilities

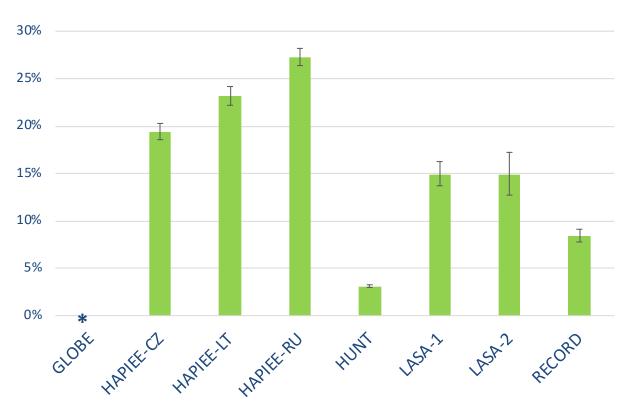
Noordzij et al., in progress





VARIATION ACROSS STUDIES

PROBABLE DEPRESSION









- NEED FOR:
- COMPARATIVE APPROACH AND COLLABORATION
- COMPARATIVE URBAN DATA IMPORTANT
- CONTEXT DRIVEN
 UNDERSTANDING



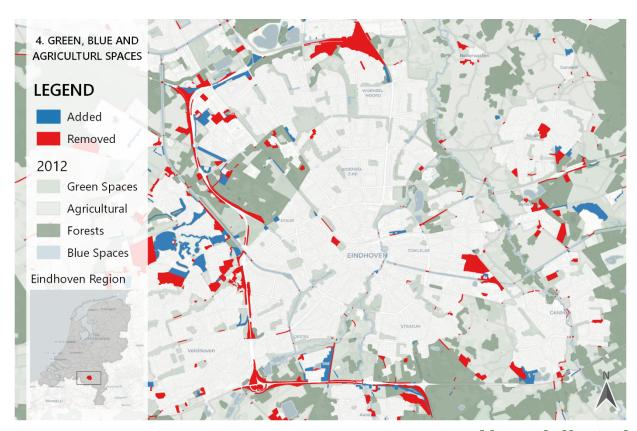




GREEN SPACE AND MENTAL HEALTH

CHANGES IN GREEN SPACE 2004 - 2011





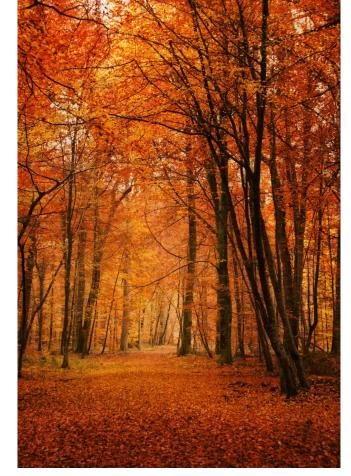


Noordzij et al., submitted



• CHANGES TO THE PHYSICAL ENVIRONMENT WOULD NEED TO BE SUBSTANTIAL TO IMPACT MENTAL WELLBEING AT THE POPULATION LEVEL

 SIMPLY ADDING MAY BE TOO SIMPLE



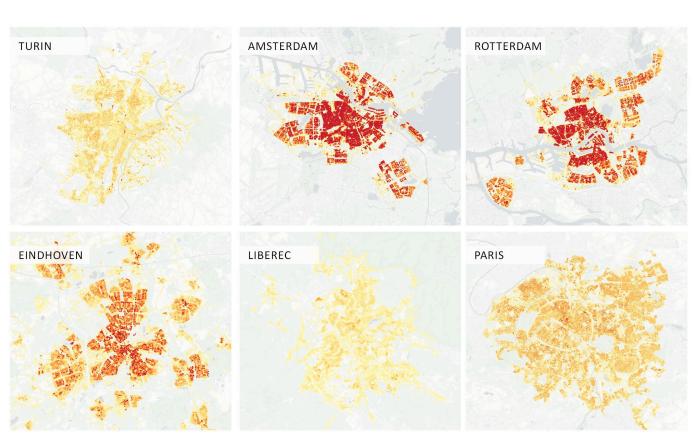
Promoting mental well-being and healthy ageing in cities





RESIDENTIAL DENSITY

WITHIN CITY VARIATION









BUILDING DENSE IS A
PROMISING STRATEGY, BUT
NOT A UNIVERSAL
RECOMMENDATION

EXPLORE FACTORS
SIMULTANEOUSLY: URBAN
DENSITY, GREEN, SAFETY







• POLICIES THAT PROMOTE SOCIAL PARTICIPATION OFFER PROMISE TO IMPROVE THE MENTAL WELLBEING OF OLDER PEOPLE







POLICY DATABASE

POLICY DOMAINS

- Employment
- Participation
- Outdoor space
- Transport
- Housing





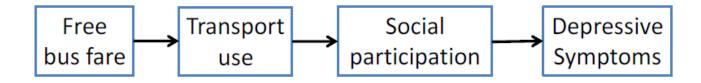


PUBLIC TRANSPORT AND DEPRESSION

RESEARCH QUESTIONS

Did the introduction of free bus fares increase transport use among the eligible population?

 Does the increase in transport use as a result of bus fare eligibility reduce depressive symptoms





Reinhard et al., JECH 2018; 72 (5): 361-368



HOME-CARE AND DEPRESSION

RESEARCH QUESTION

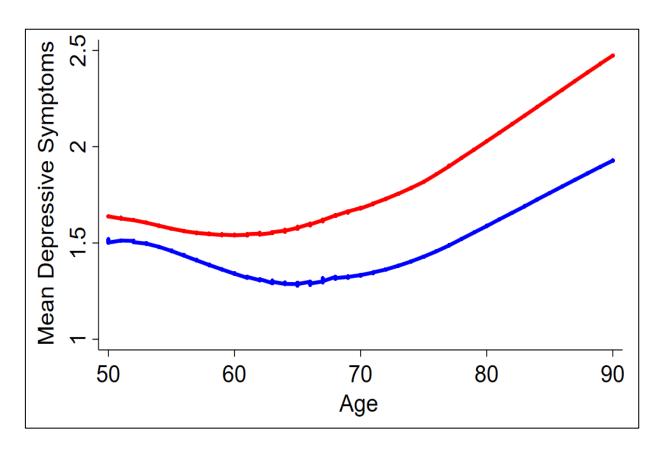


Does the increase in care use as a result of eligibility to public programmes reduce depressive symptoms?





MEAN DEPRESSIVE SYMPTOM (CESD) SCORE BY AGE



Non-users of public transport

Public transport users





INCREASED TRANSPORT USE AS A RESULT OF THE BUS PASS REDUCES DEPRESSION AND IMPROVES COGNITION

	Effect Estimate
Depression scores	-0.952 (-1.712, -0.192)*
_ JF = 33333 = 3 3 3 3 3 3 3 3 3 3 3 3 3 3	(= = ,)

Total Cognitive Function

0.346 (0.017, 0.674)*



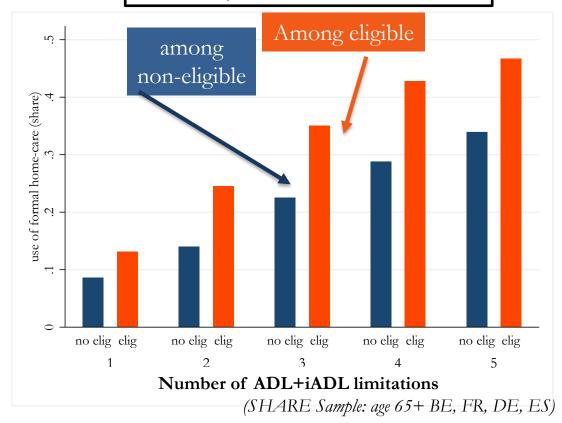


ELIGIBILITY TO HOME-CARE AS CRUCIAL DETERMINANT OF CARE USE

Rules vary largely across Europe

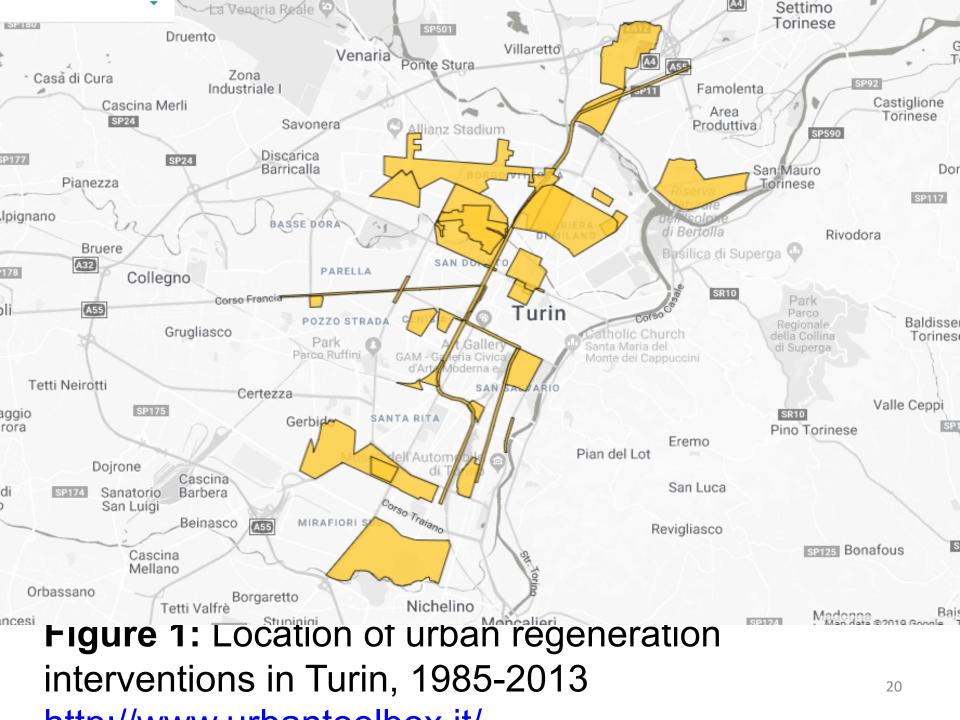


Probability of formal home-LTC use



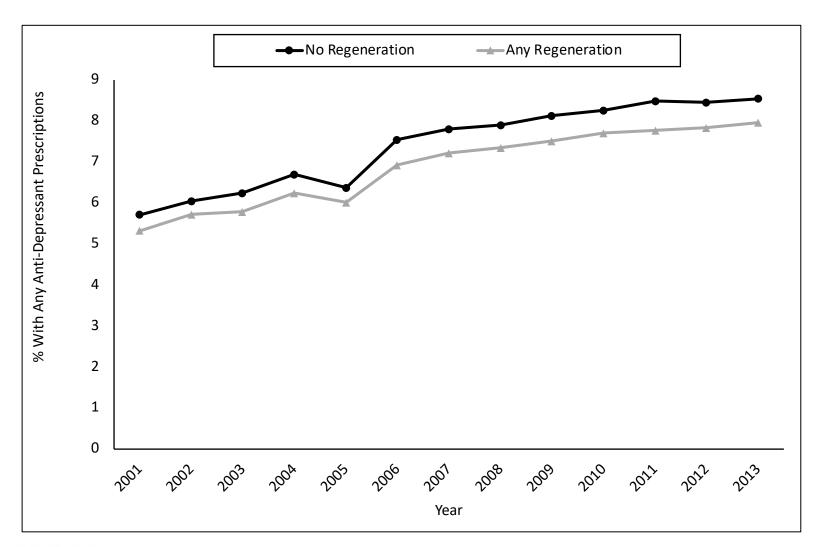
- eligibility→ higher probability of formal-care use
 - Even among people with similar functional limitations







URBAN REGENERATION AND ANTIDEPRESSANT USE IN TURIN, ITALY







SYSTEMS APPROACH

Adopt a systems approach

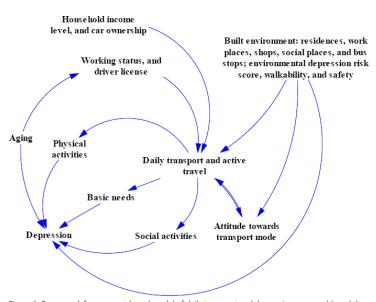
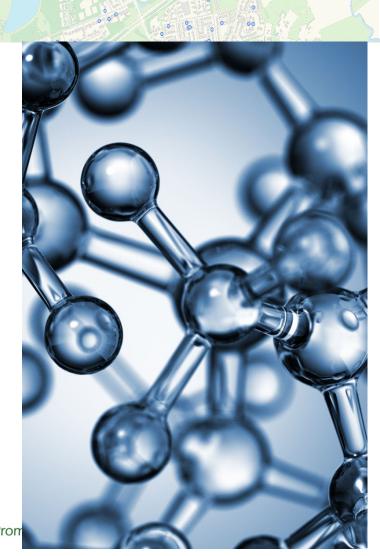


Figure 1. Framework for an agent-based model of daily transport and depression among older adults.







URBAN ENVIRONMENTS, AGEING AND MENTAL WELLBEING

• Physical changes threathen mental well being older residents (segregation, less green..)

 COVID provides an opportunity to emphasize the importance of healthy urban environments

Important entry point via the social environment

Systems approaches allow answering policy relevant questions





FURTHER INFORMATION

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