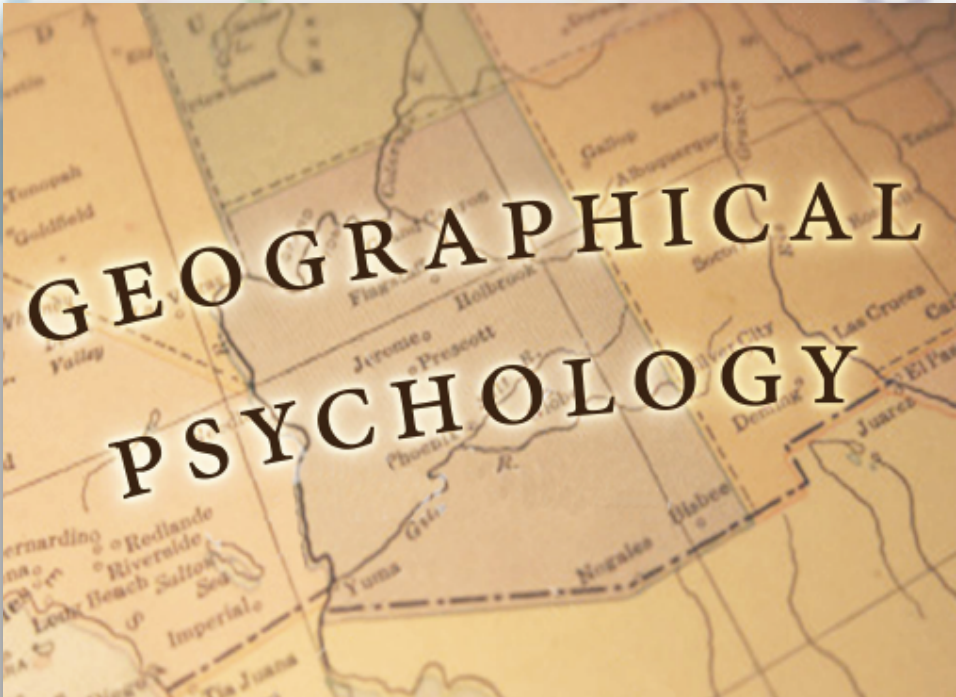


Urban—rural differences in successful aging





GEOGRAPHICAL PSYCHOLOGY

Exploring the Interaction
of Environment
and Behavior

EDITED BY
Peter J. Rentfrow

Research Report

Temperament and Migration Patterns in Finland

Markus Jokela,¹ Marko Elovainio,² Mika Kivimäki,³ and Liisa Keltikangas-Järvinen¹



Contents lists available at ScienceDirect

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journal homepage: www.elsevier.com/locate/jrp



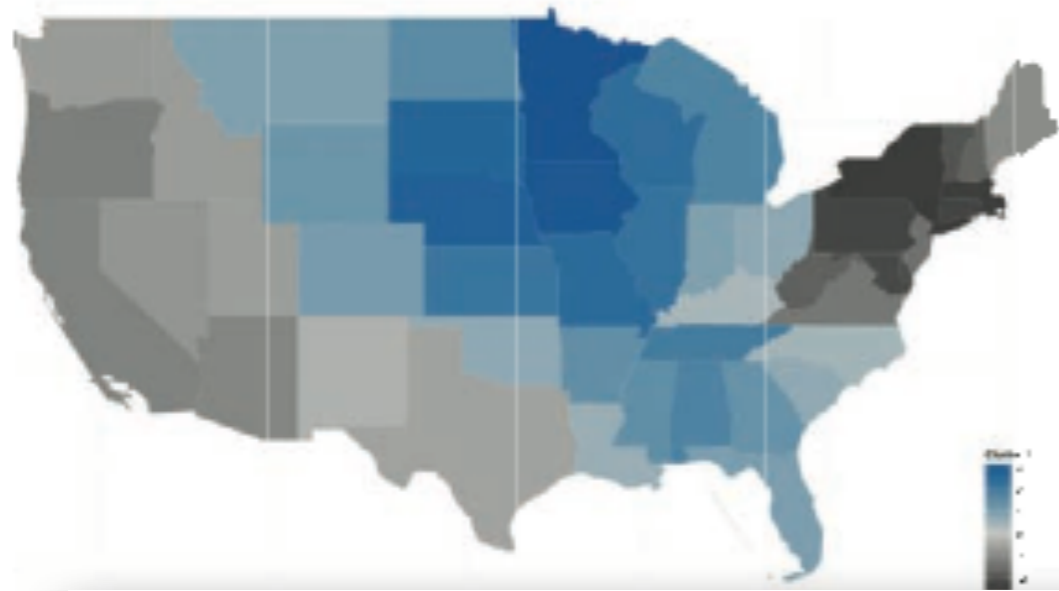
Brief Report

Personality predicts migration within and between U.S. states

Markus Jokela

Department of Psychology, University of Helsinki, Siltavuorenpenger 20D, P.O. Box 9, FIN-00014, Helsinki, Finland

A. Cluster 1: Friendly & Conventional Region



Divided We Stand: Three Psychological Regions of the United States and Their Political, Economic, Social, and Health Correlates

Peter J. Rentfrow
University of Cambridge

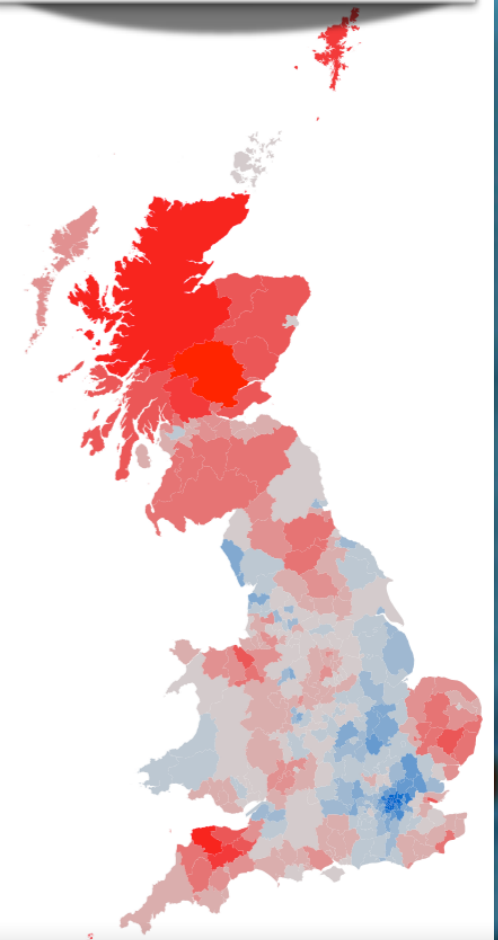
Samuel D. Gosling
University of Texas at Austin

Markus Jokela
University of Helsinki

David J. Stillwell and Michal Kosinski
University of Cambridge

Jeff Potter
Atof Inc., Cambridge, Massachusetts

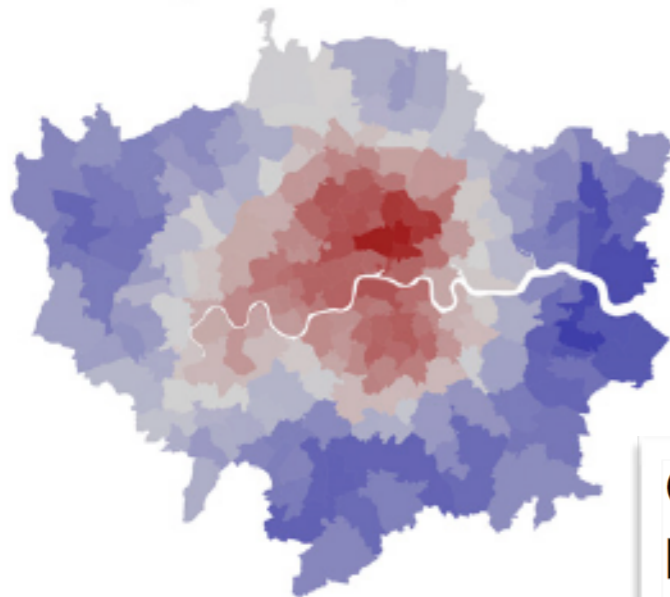
AGREEABLENESS



Regional Personality Differences in Great Britain

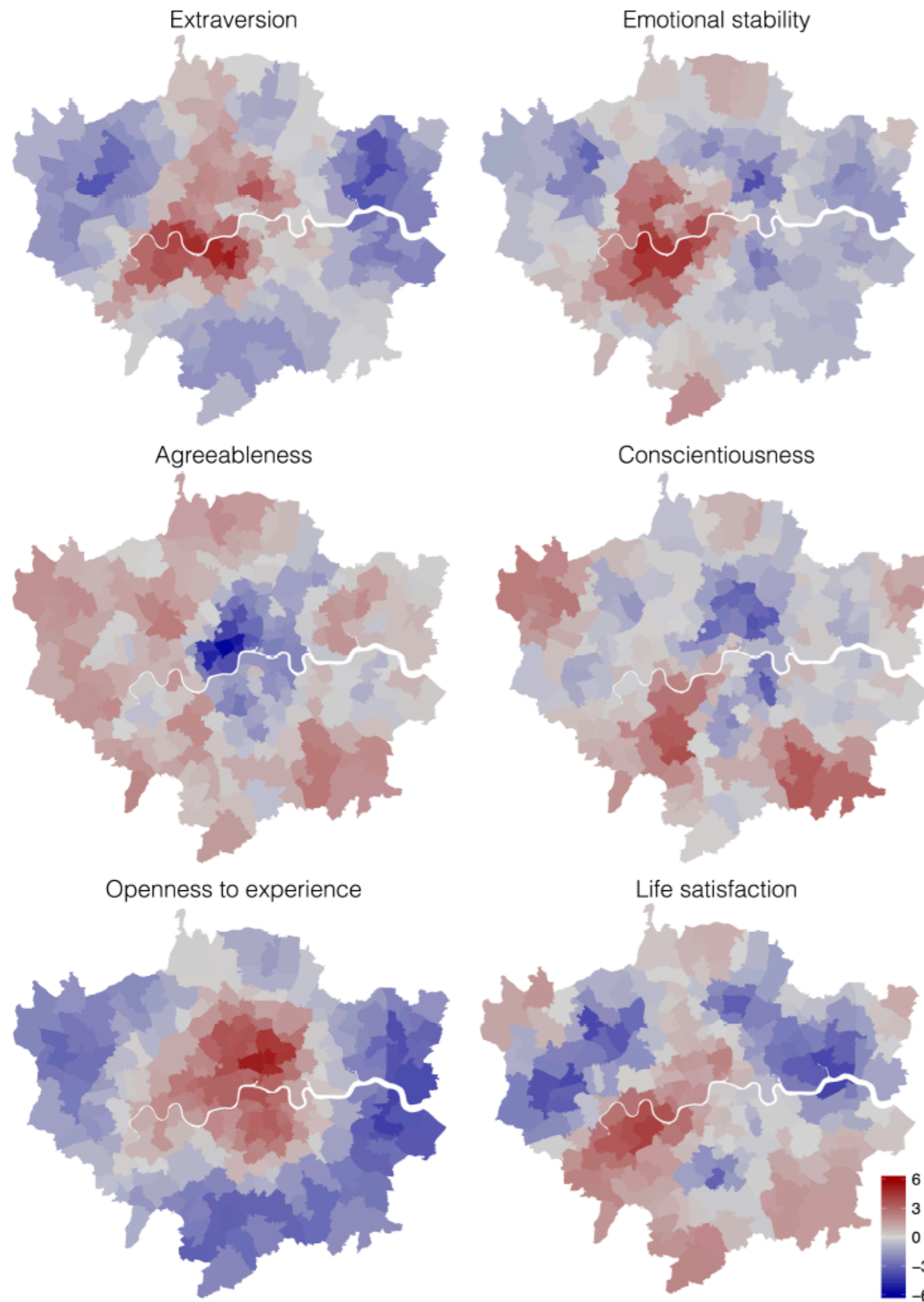
Peter J. Rentfrow^{1*}, Markus Jokela², Michael E. Lamb¹

Openness to experience



Geographically varying associations between personality and life satisfaction in the London metropolitan area

Markus Jokela^{a,b,1}, Wiebke Bleidorn^{c,d}, Michael E. Lamb^b, Samuel D. Gosling^e, and Peter J. Rentfrow^b



Geographically varying associations between personality and life satisfaction in the London metropolitan area

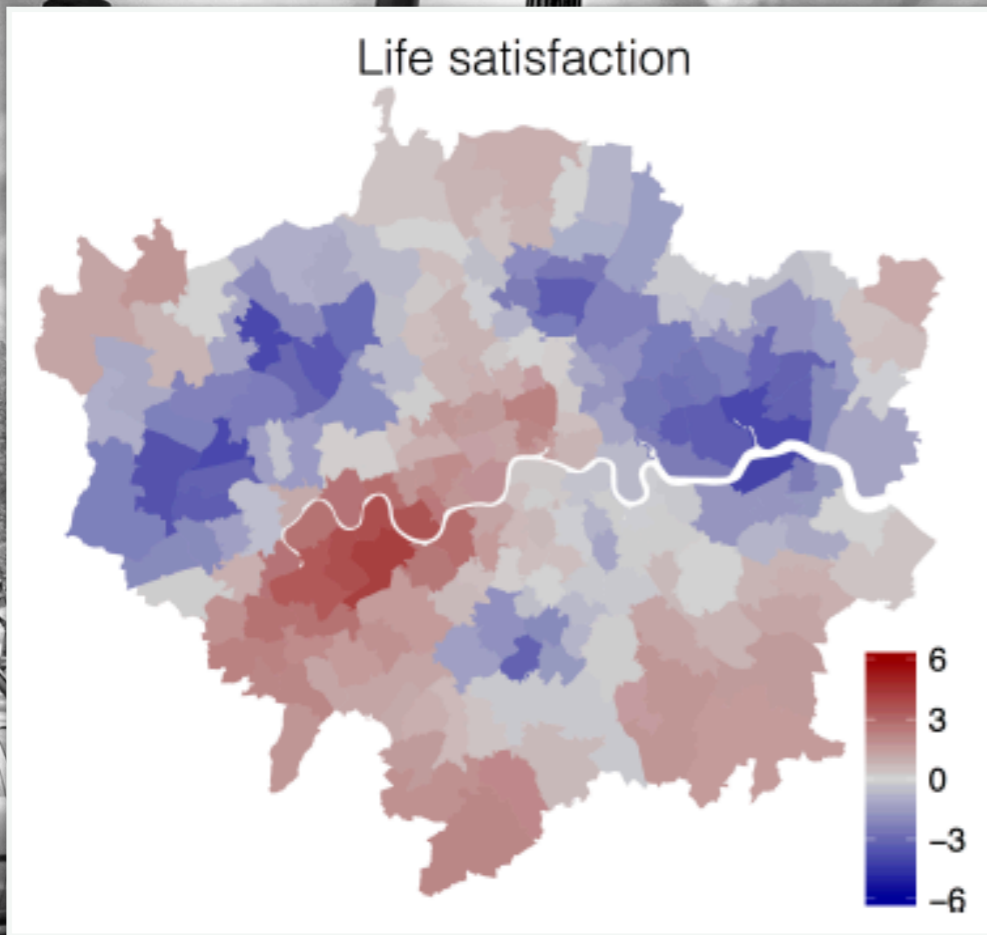
Markus Jokela,^{1,2} Wiebke Bleidorn,^{3,4} Michael E. Lamb,² Samuel D. Gosling⁵, Peter J. Rentfrow²

Where in Britain would you be happiest?

Answer ten questions to get your personality traits

Discover the place in Britain predicted to improve your life satisfaction

No question or postcode data are stored by the BBC – all calculations take place on your computer



Geographically varying associations between personality and life satisfaction in the London metropolitan area

Markus Jokela,^{1,2} Wiebke Bleidorn,^{3,4} Michael E. Lamb,² Samuel D. Gosling⁵, Peter J. Rentfrow²

Table 2. Selected sociodemographic and personality correlates of regression slopes of personality scores predicting life satisfaction in different postcode districts.

	E	S	A	C	O
Population structure					
% Older people (65+)				-23	-27
% Couple households with children			24		-35
% Lone-parent households				25	
Fertility rate			24		
Mortality rate				19	
Population density					33
% Christian religion					-25
% White ethnic background			-17	-14	-22
Physical environment & Housing					
Mean house price			-22	-17	19
% Domestic Buildings					25
% Domestic Gardens			14		-21
% Non-Domestic Buildings					27
% Greenspaces					-22
Social indicators					
Turnout Borough election				-22	-17
Total crime rate					15
Income rank				-22	-17
Employment rate rank				-23	-20

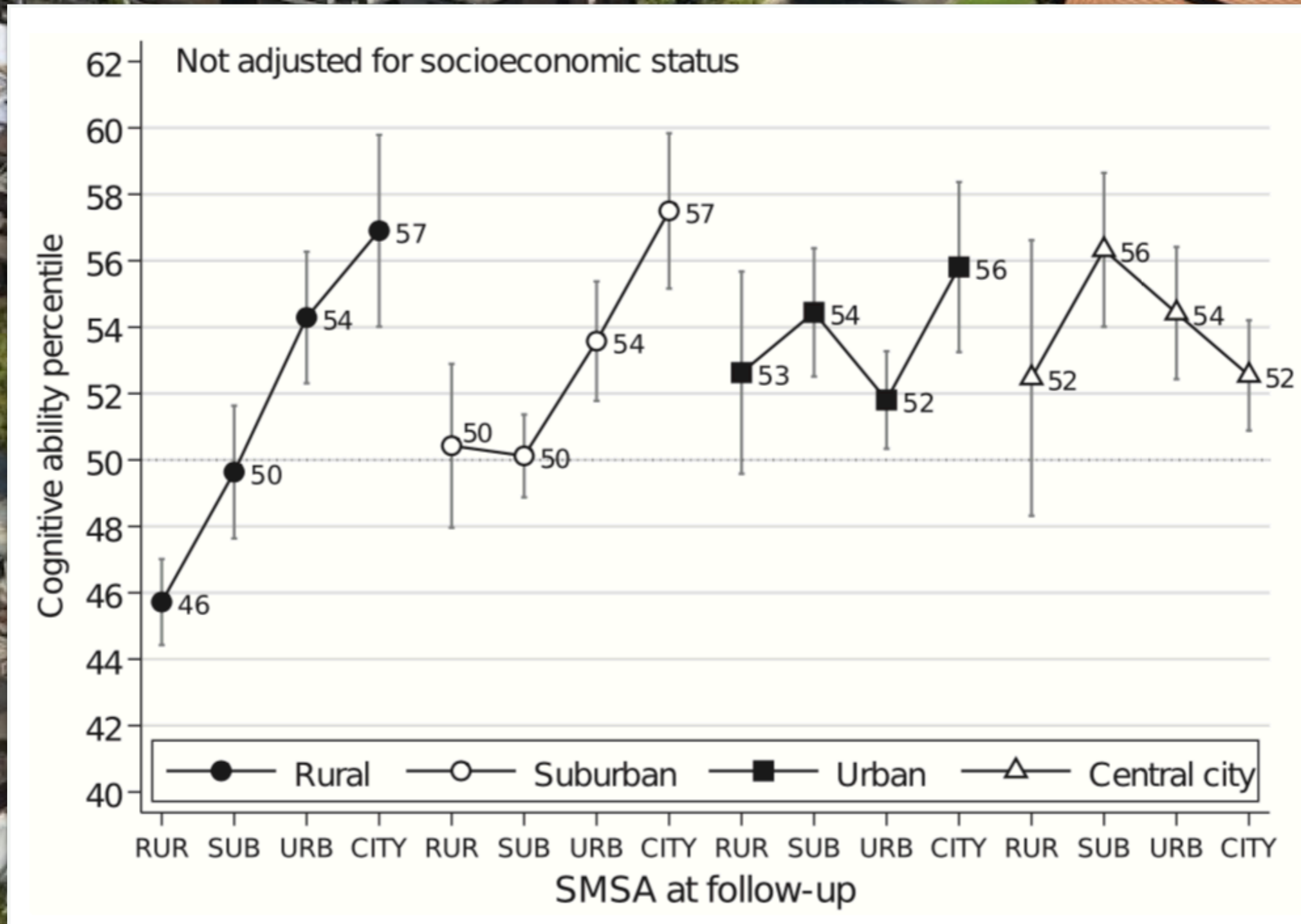
Note: Correlations are reported as $r * 100$. All correlations with absolute value ≥ 14 are statistically significant ($n=216$ postcode districts) and only these are shown.

E=Extraversion, S=Emotional stability (low Neuroticism), A=Agreeableness, C=Conscientiousness, O=Openness to Experience

Flow of cognitive capital across rural and urban United States

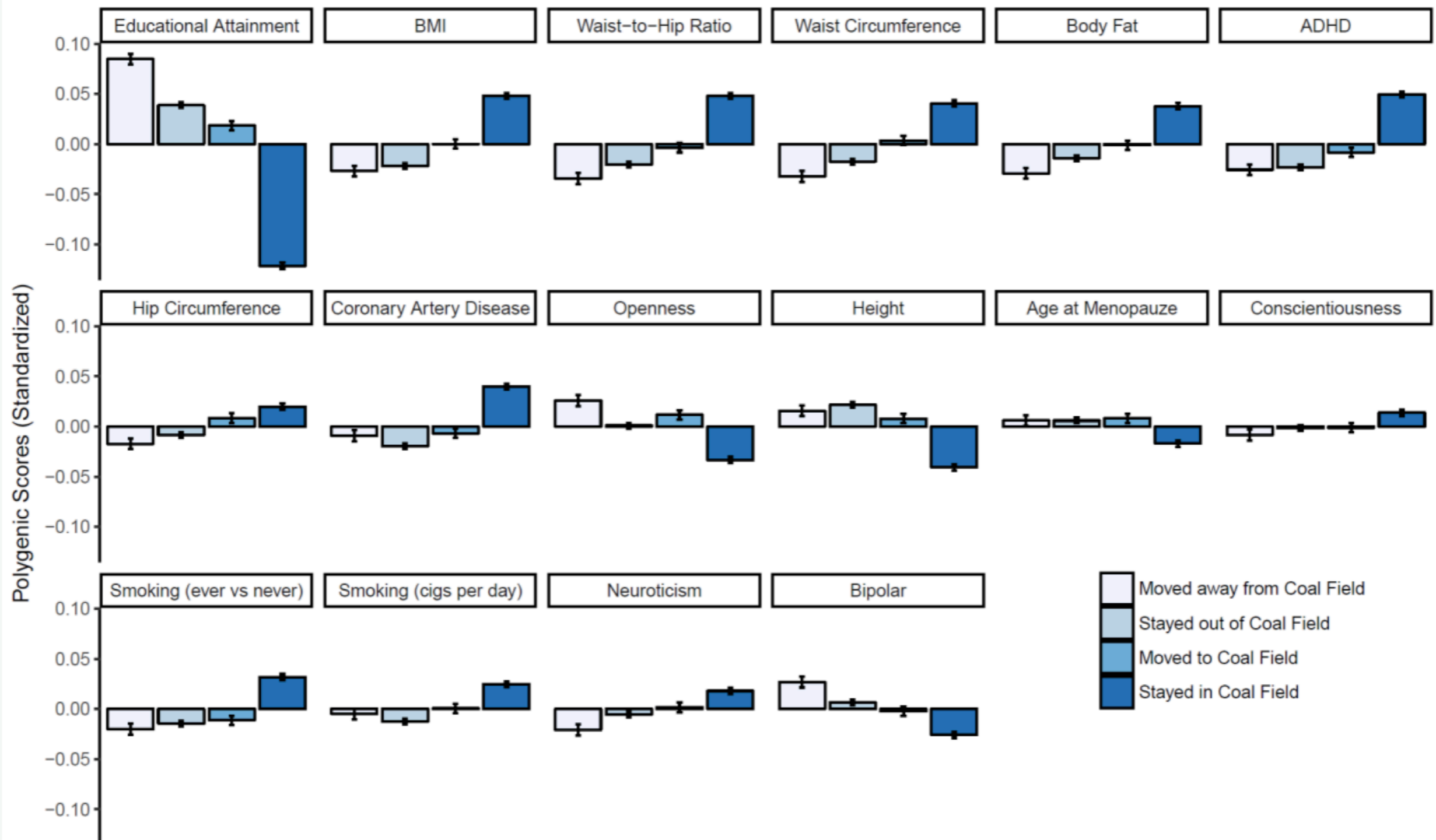
Markus Jokela *

Adolescence to adulthood



GENETIC CONSEQUENCES OF SOCIAL STRATIFICATION IN GREAT BRITAIN

Abdel Abdellaoui^{1,*}, David Hugh-Jones², Kathryn E. Kemper³, Yan Holtz³, Michel G. Nivard⁴, Laura Veul¹, Loic Yengo³, Brendan P. Zietsch⁵, Timothy M. Frayling⁶, Naomi Wray^{3,7}, Jian Yang^{3,7}, Karin J.H. Verweij¹, Peter M. Visscher^{3,7,*}

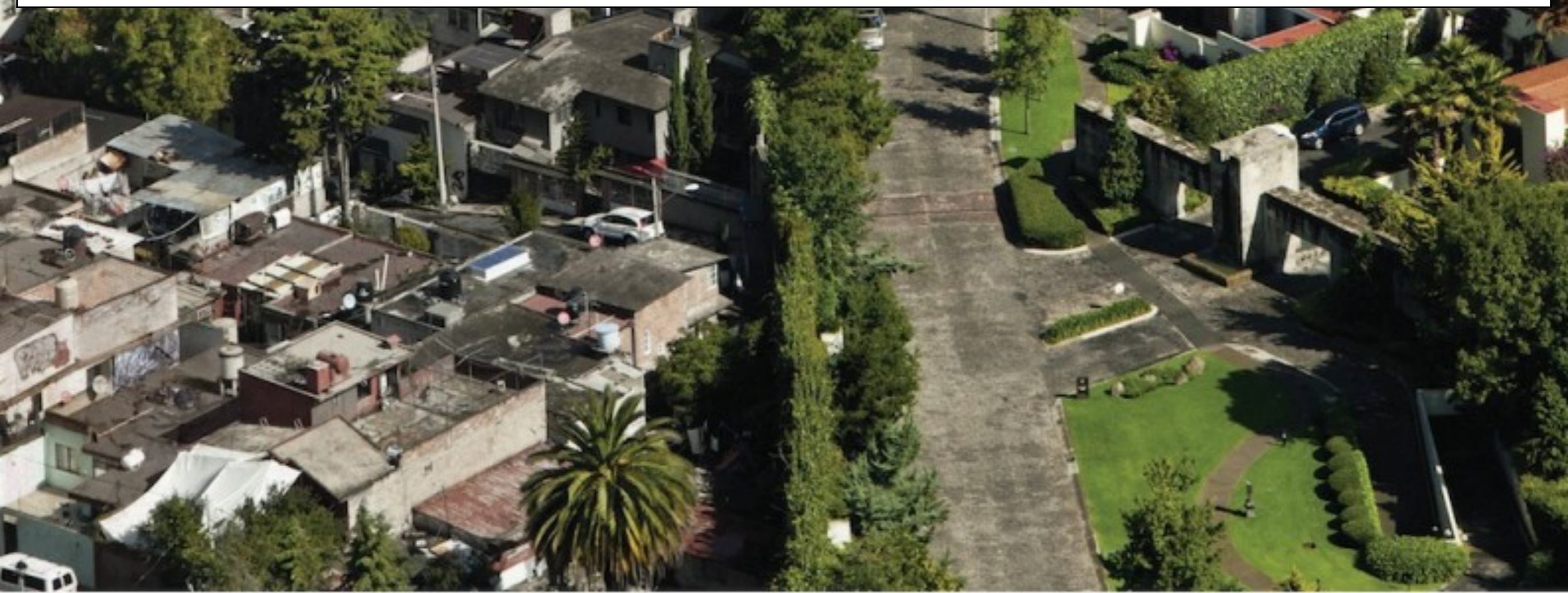


Problem of social selection

$$y_{it} = B_0 + B_W(x_{it} - x_{i.}) + B_B(x_{i.}) + \varepsilon_{it}$$

**Within-individual
(variation across time)**

**Between-individuals
(average residence across time)**



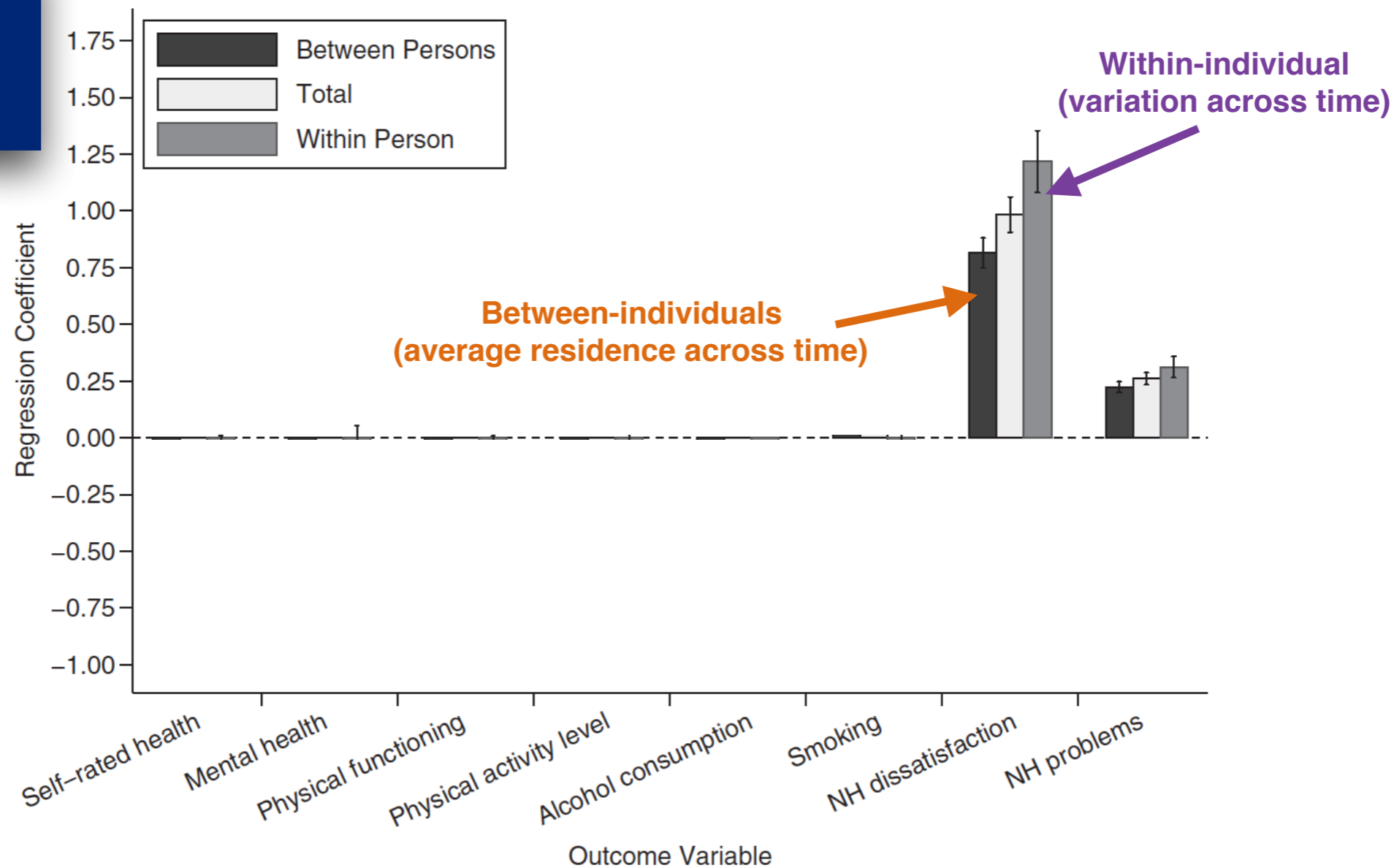


Figure 1. Associations between neighborhood (NH) disadvantage and outcome variables based on between-person (dark bars), total (light bars), and within-person (dark gray bars) regressions using 10 annual repeated measurements of neighborhood disadvantage and outcomes (112,503 person-observations from 20,012 unique persons), Household, Income, and Labour Dynamics in Australia Survey, 2001–2010. The shaded bars illustrate the magnitude of regression coefficients (linear regression coefficients for continuous outcomes and logit odds ratios for dichotomous outcomes). All differences between within-person and between-person regression coefficients were statistically significant ($P < 0.05$). See Web Table 1 for statistical details. Bars, 95% confidence intervals.

Are Neighborhood Health Associations Causal? A 10-Year Prospective Cohort Study With Repeated Measurements

Markus Jokela*

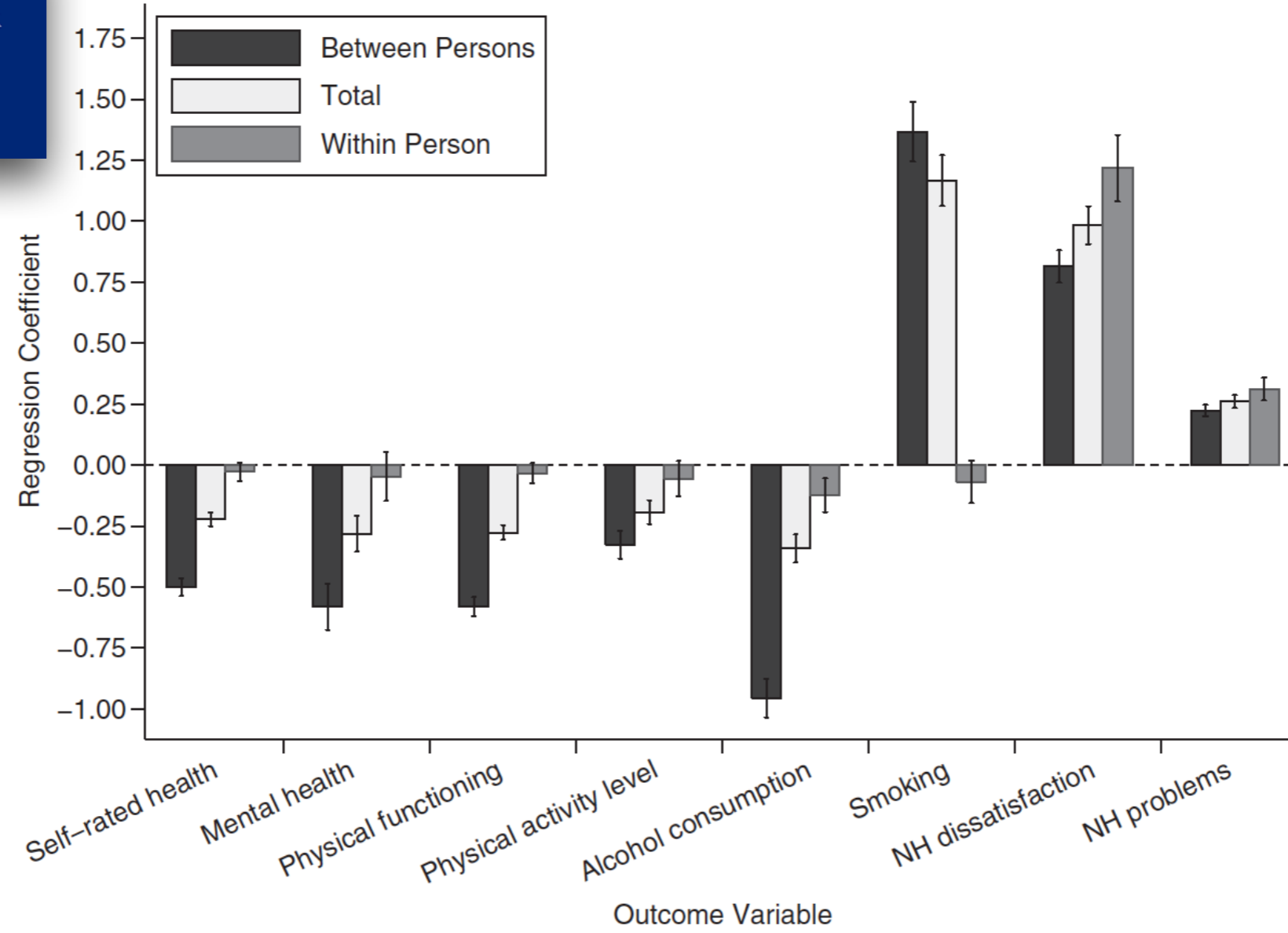


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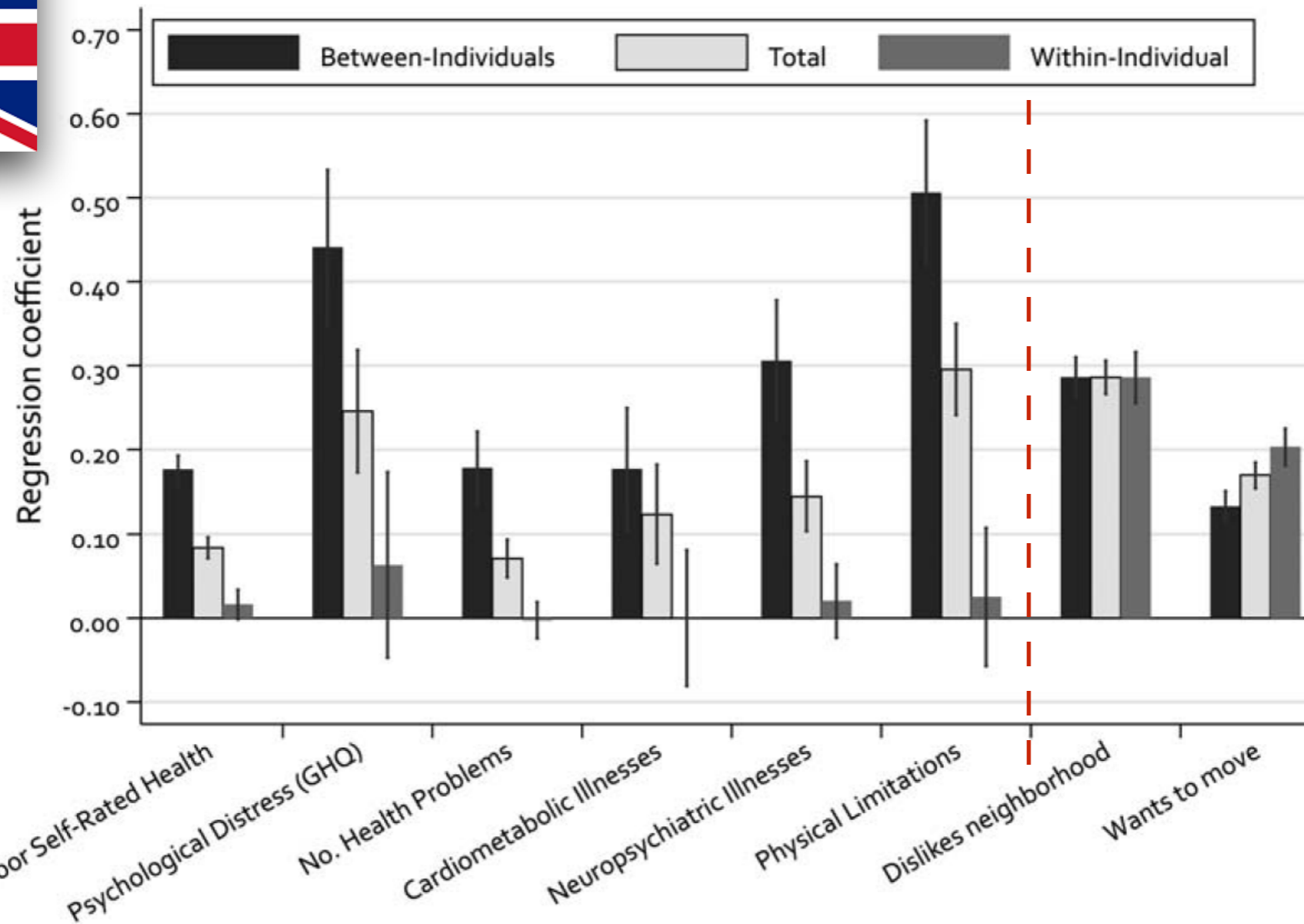
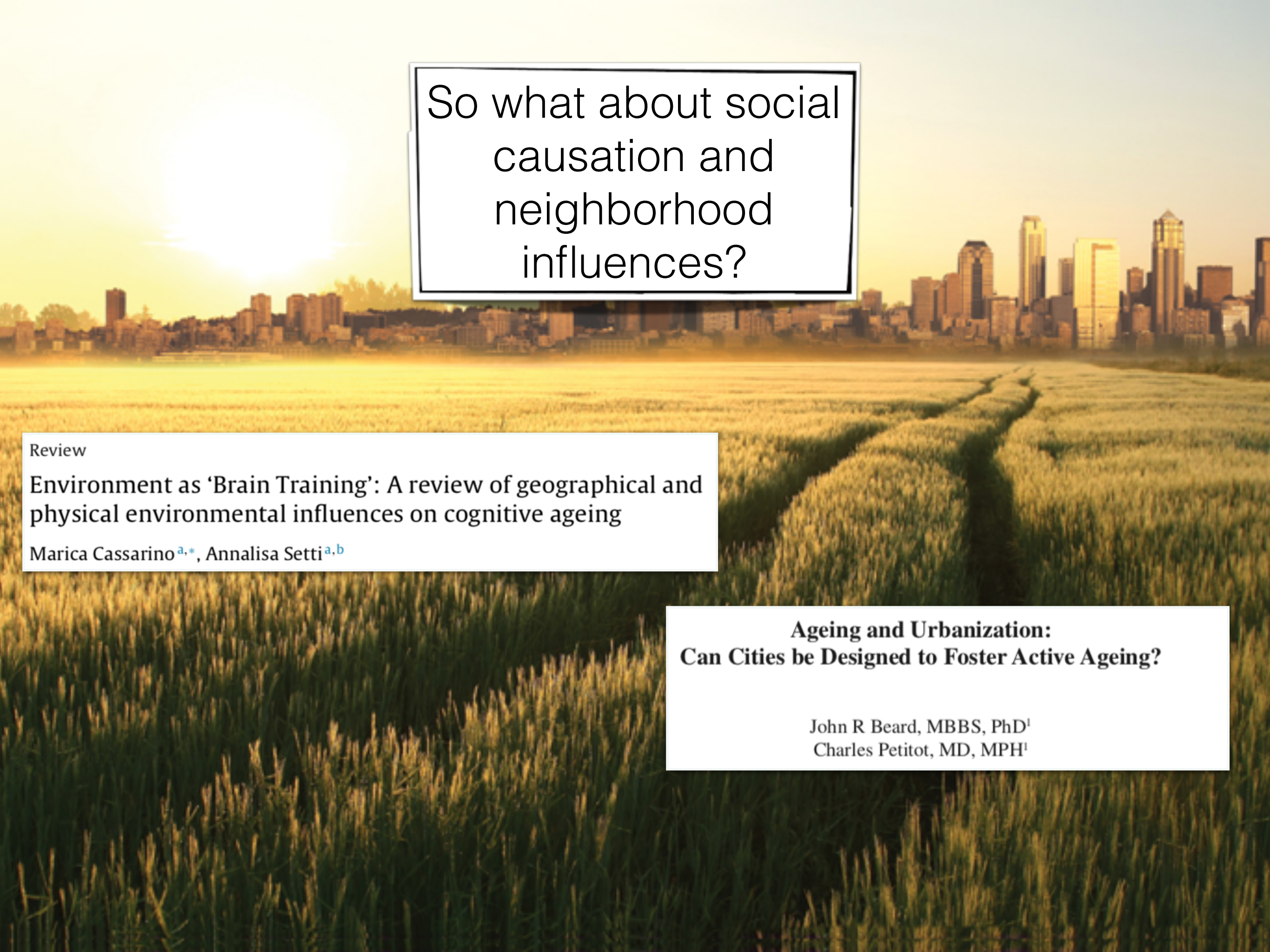


Figure 1 Associations between neighbourhood deprivation and health outcomes for between-individuals, total and within-individual regressions. Bars represent the magnitude of linear regression coefficients per 20 units of multiple deprivation index (for self-reported health and psychological distress), logged Poisson regression coefficients per 20 units of multiple deprivation index (for the count variables of illnesses), and logit ORs per 5 units of multiple deprivation index (for disliking the neighbourhood and wanting to move). Error bars are 95% CIs. N=up to 137 884 person-observations from 17 001 unique individuals between years 1991 and 2009. See online supplementary table S2 for numerical details.

Does neighbourhood deprivation cause poor health?
Within-individual analysis of movers in a prospective cohort study

Markus Jokela^{1,2}



So what about social
causation and
neighborhood
influences?

Review

Environment as 'Brain Training': A review of geographical and physical environmental influences on cognitive ageing

Marica Cassarino^{a,*}, Annalisa Setti^{a,b}

**Ageing and Urbanization:
Can Cities be Designed to Foster Active Ageing?**

John R Beard, MBBS, PhD¹
Charles Petitot, MD, MPH¹

Successful aging

- No physical disabilities or limitations
- Good mental health
- Good cognitive functioning
- Social activity and engagement

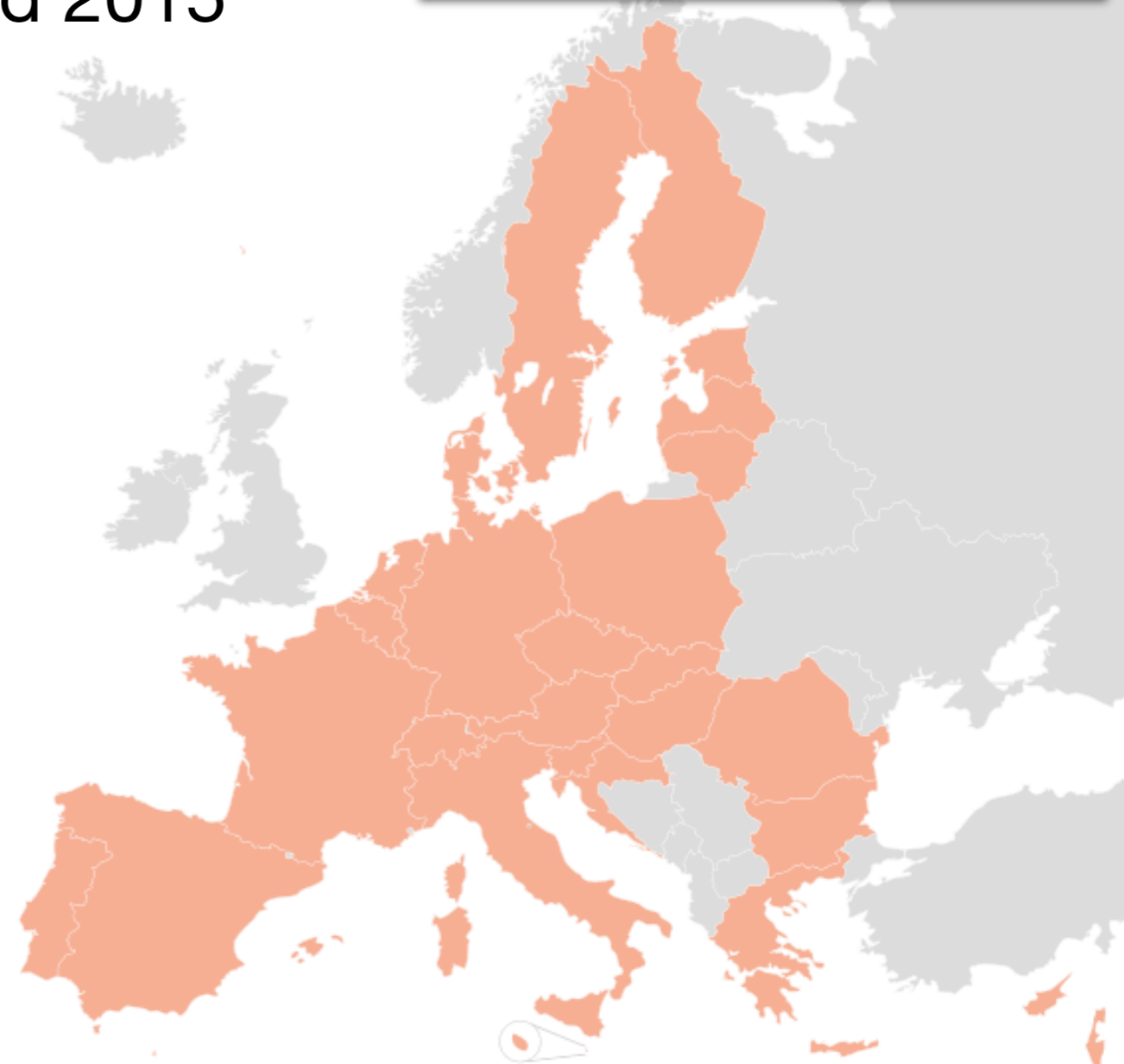


Longitudinal data from 27 European countries
N=60,000 to 100,000 participants
Five study waves between 2004 and 2015



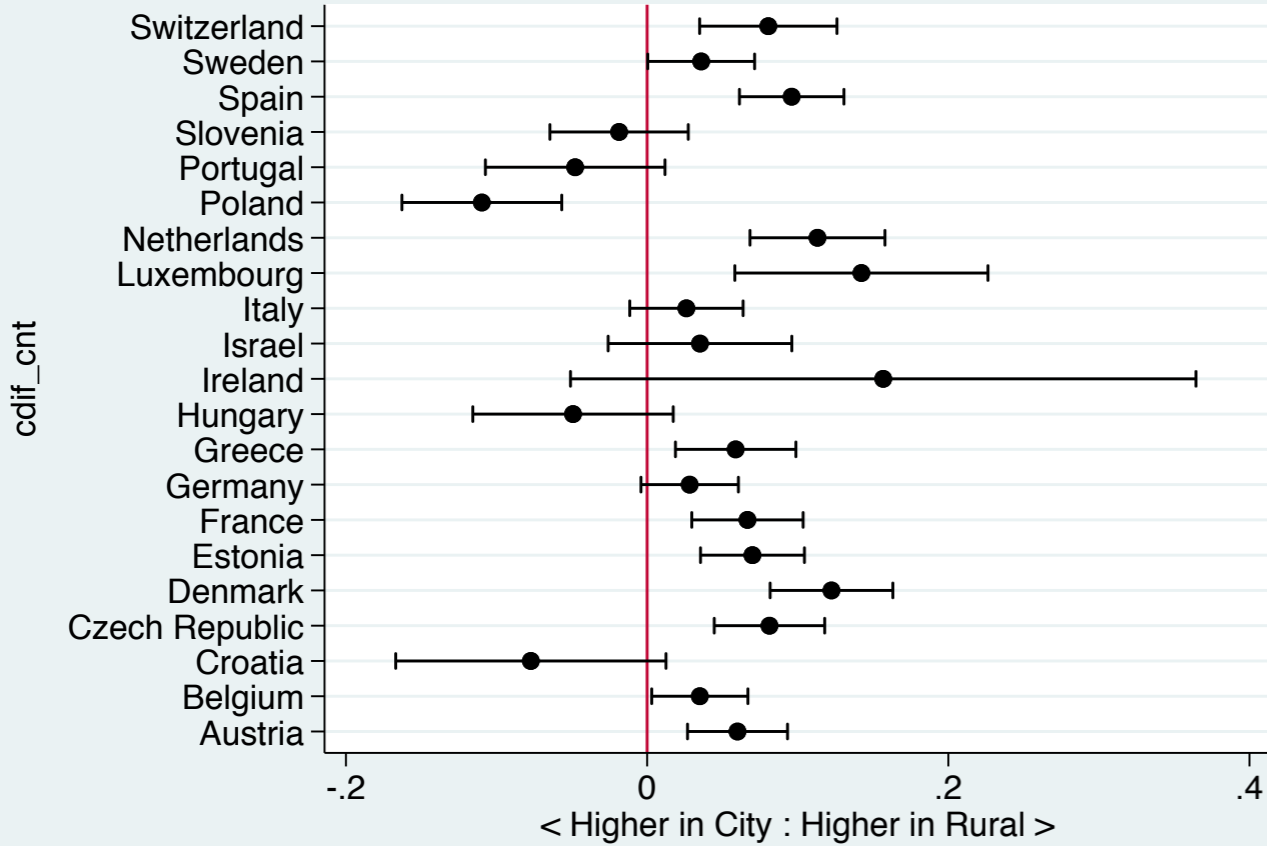
Measures:

- * Physical capability
 - Grip strength
 - Activities of Daily Living (ADL)
- * Psychological functioning
 - Cognitive ability
 - Depression
- * Social activity
 - Loneliness
 - Participation in activities

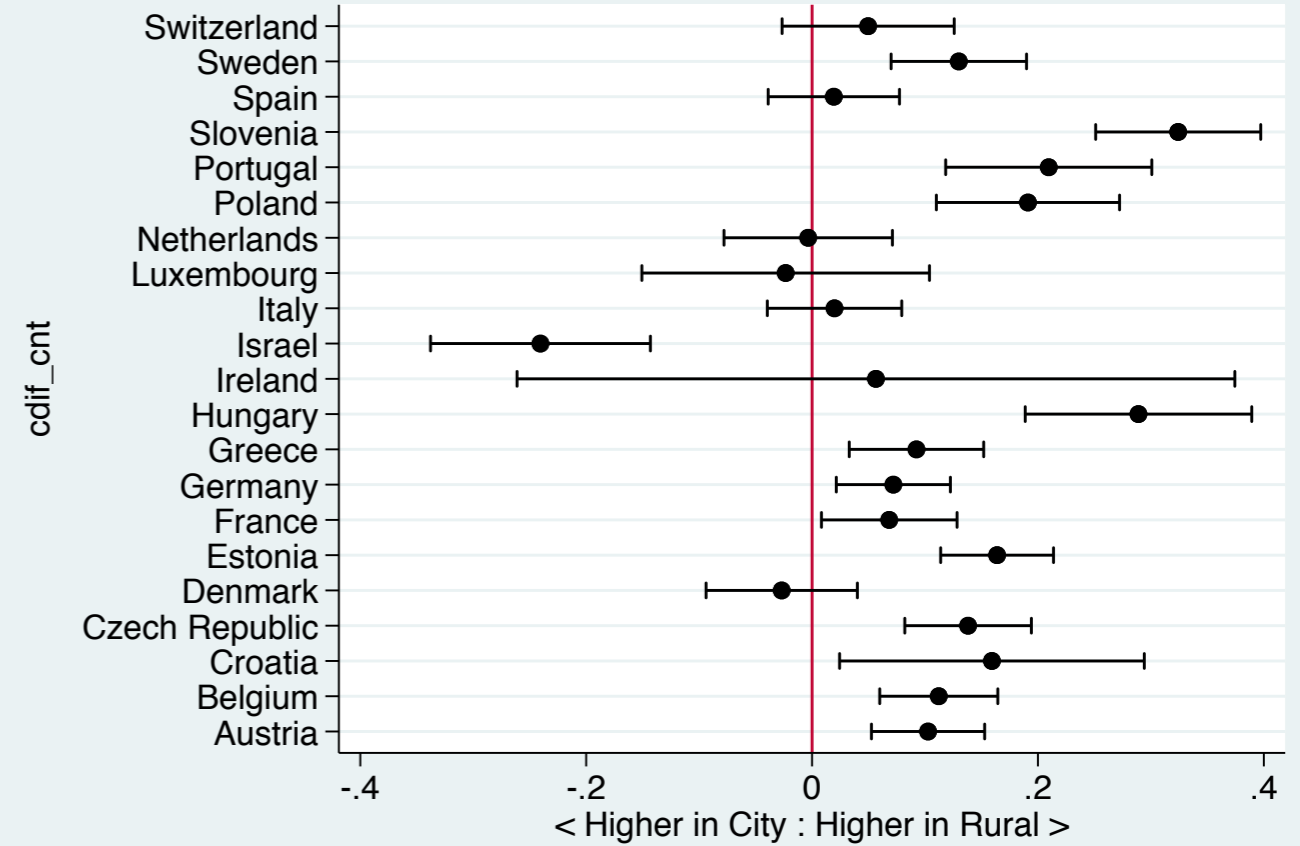




Grip strength



Instrumental activities of daily living

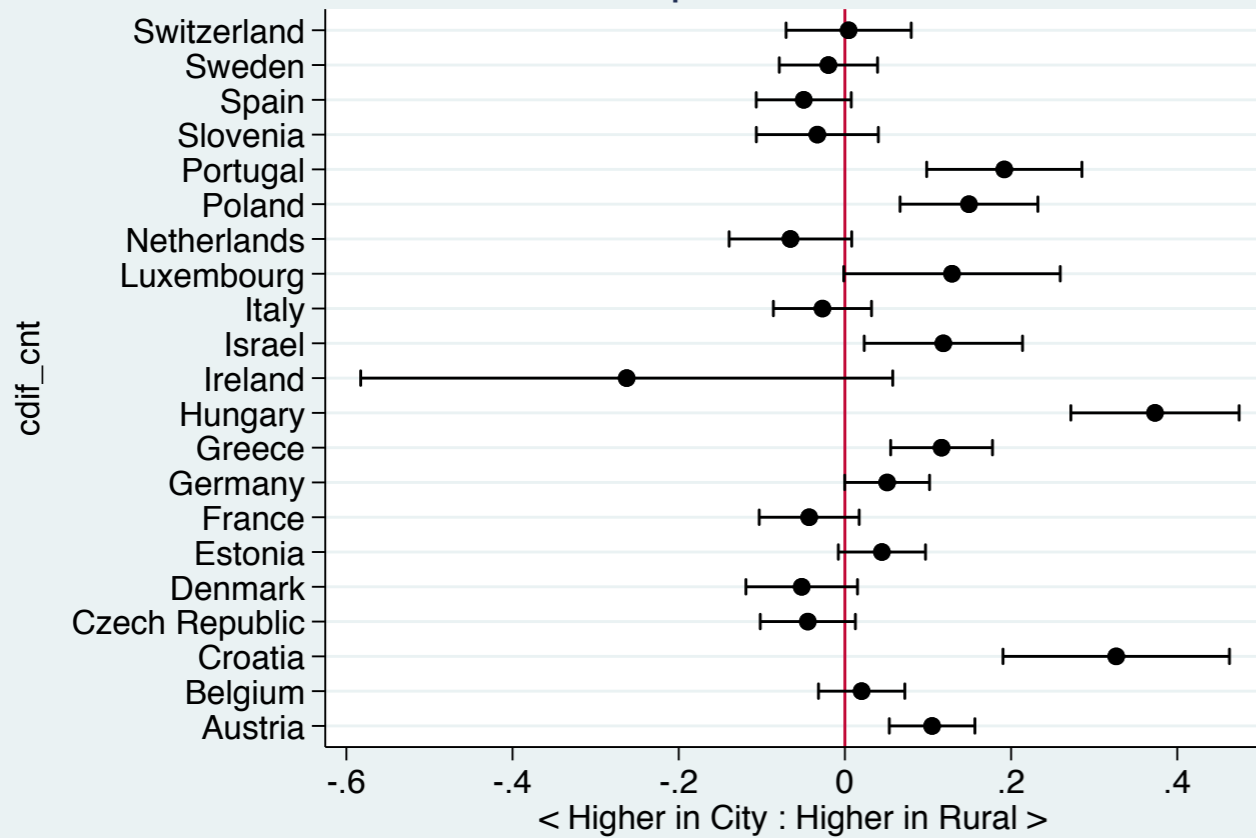


Physical capability

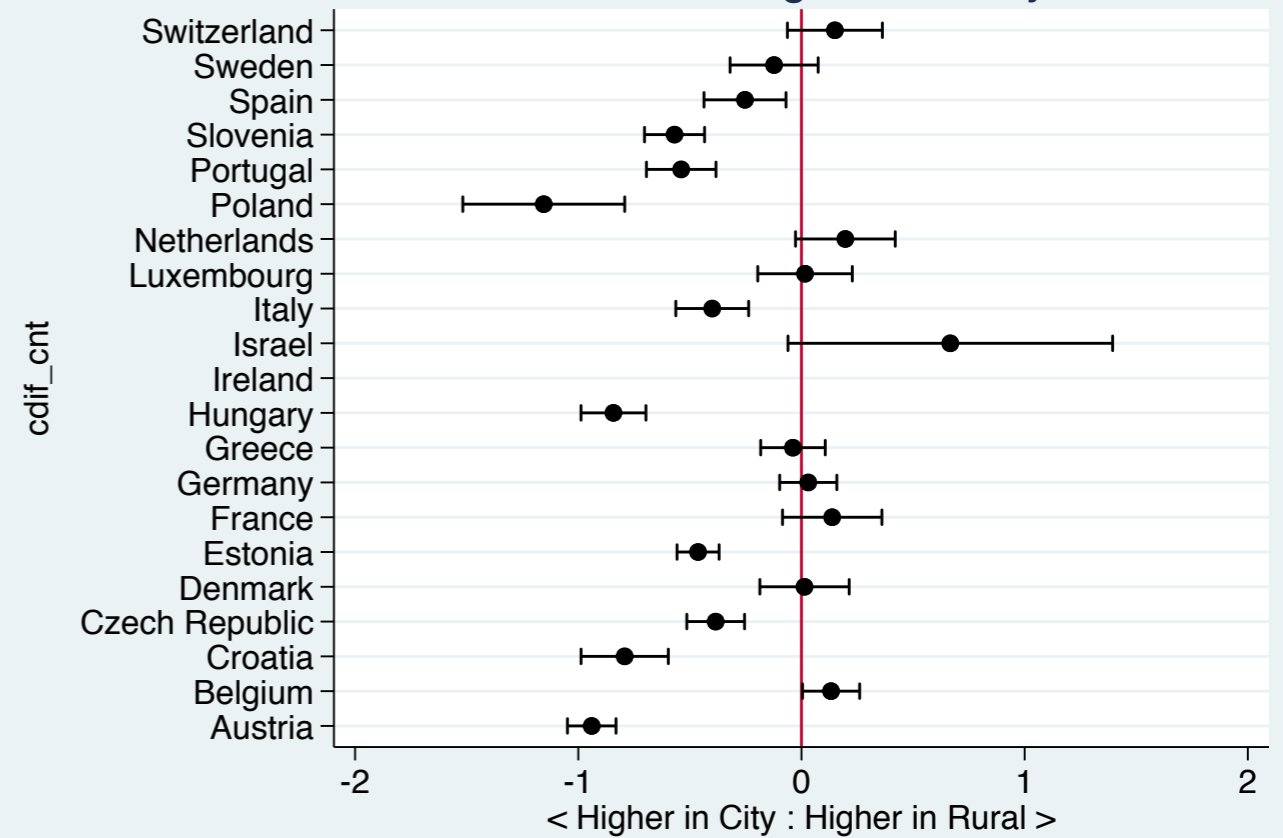
Cross-sectional differences between “Rural area” (to the left) vs “Big city” (to the right)



Depression score

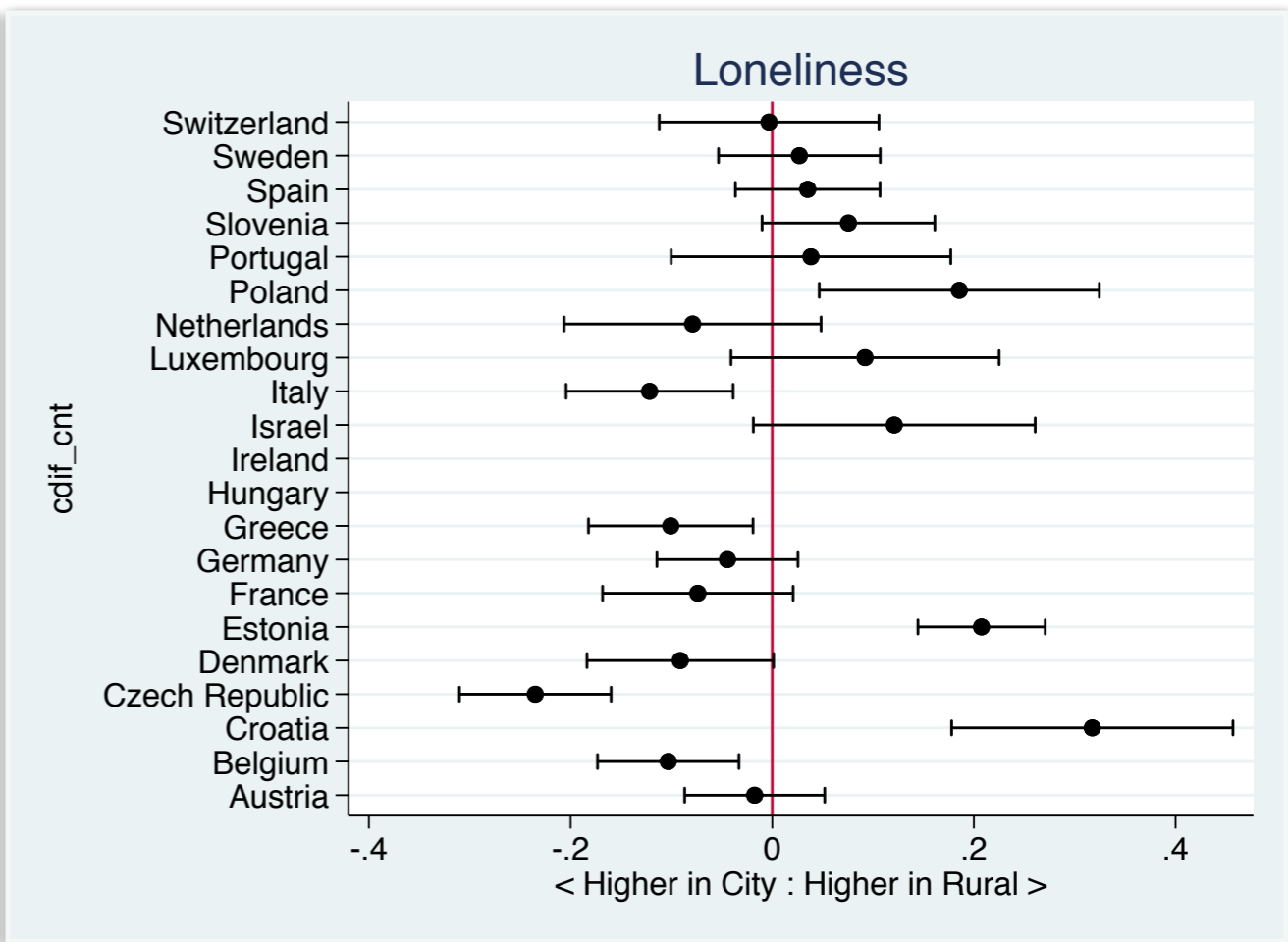
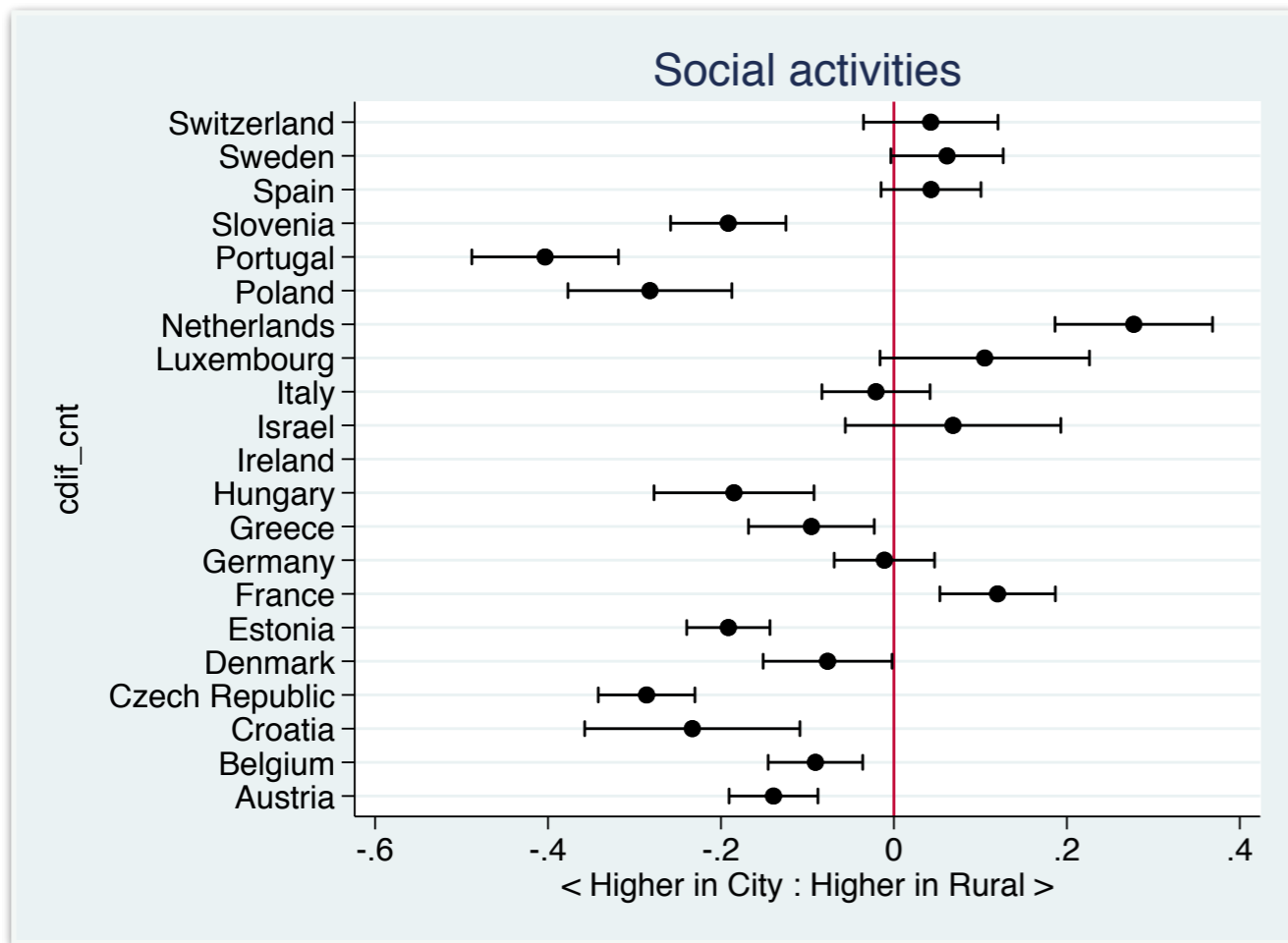


General cognitive ability



Psychological functioning

Cross-sectional differences between “Rural area” (to the left) vs “Big city” (to the right)



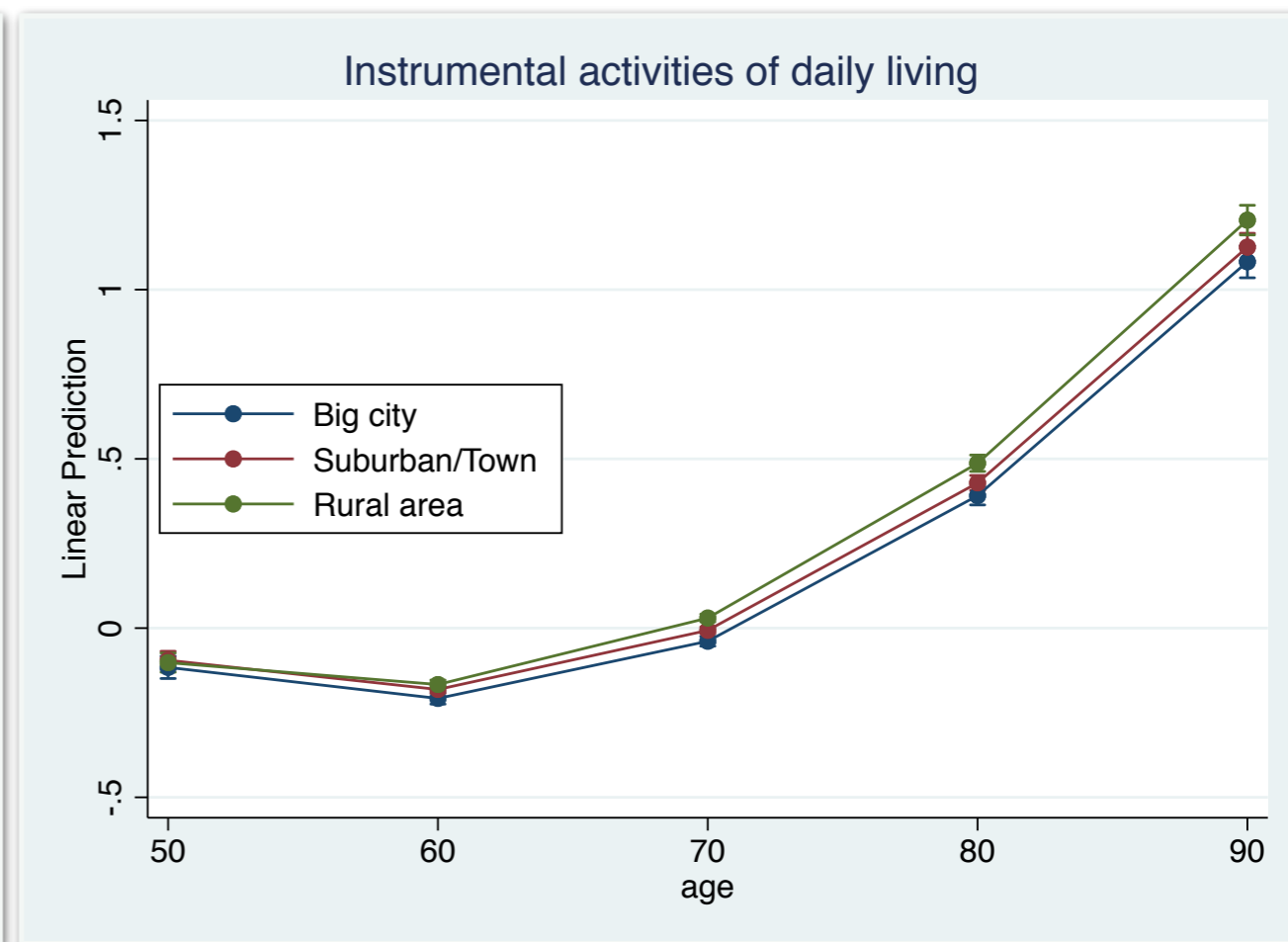
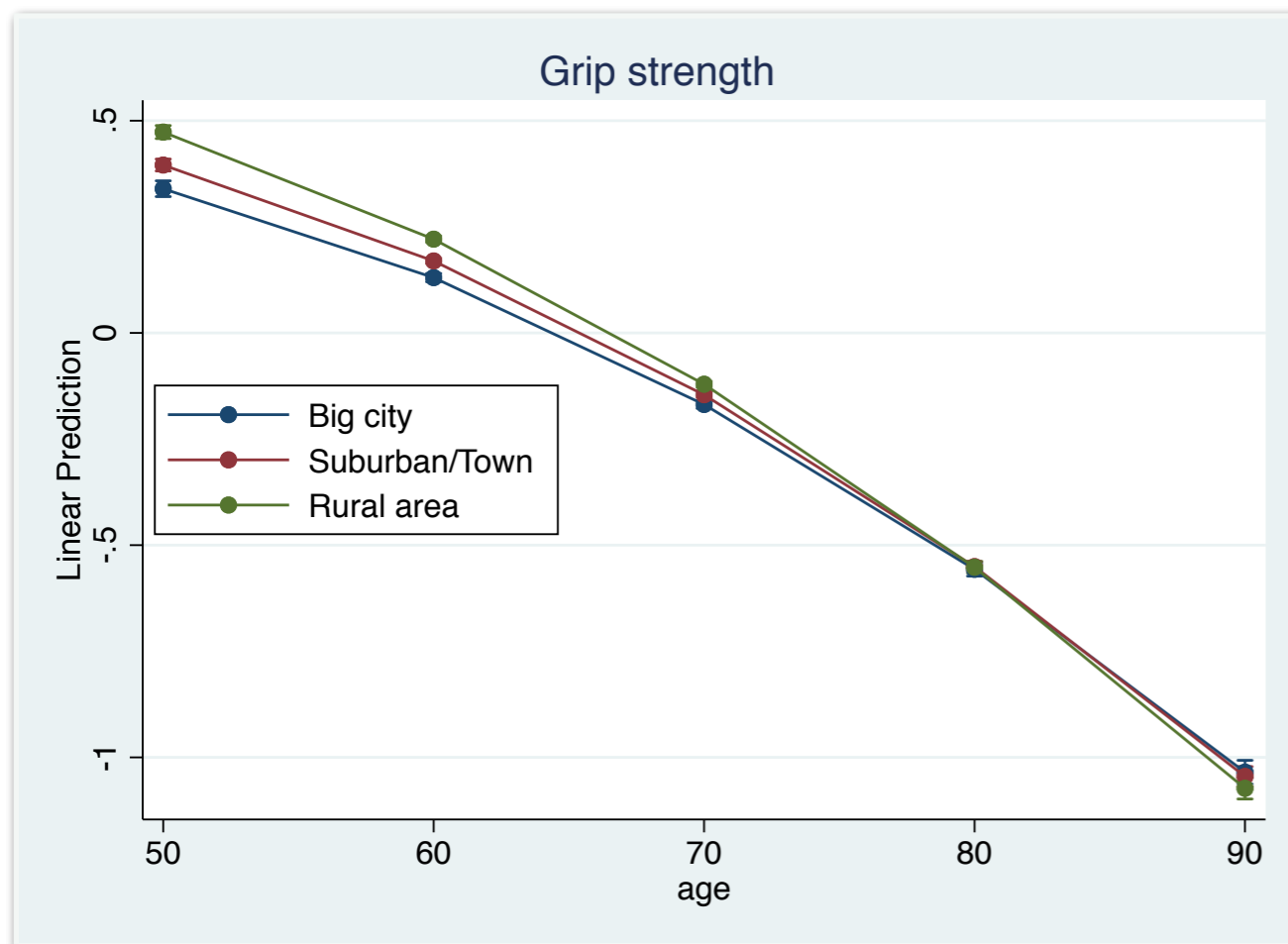
Social activity

Cross-sectional differences between “Rural area” (to the left) vs “Big city” (to the right)



Physical capability

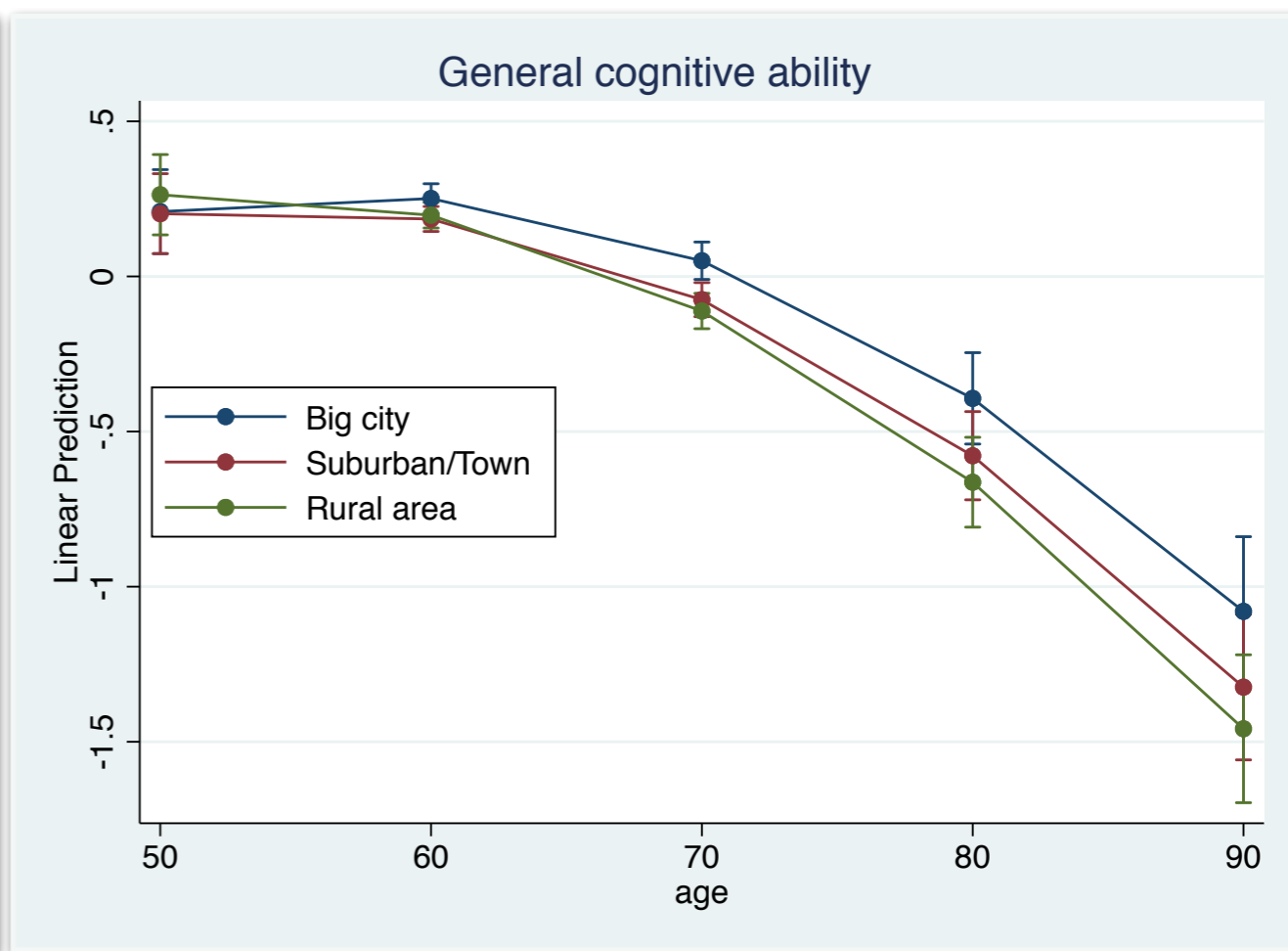
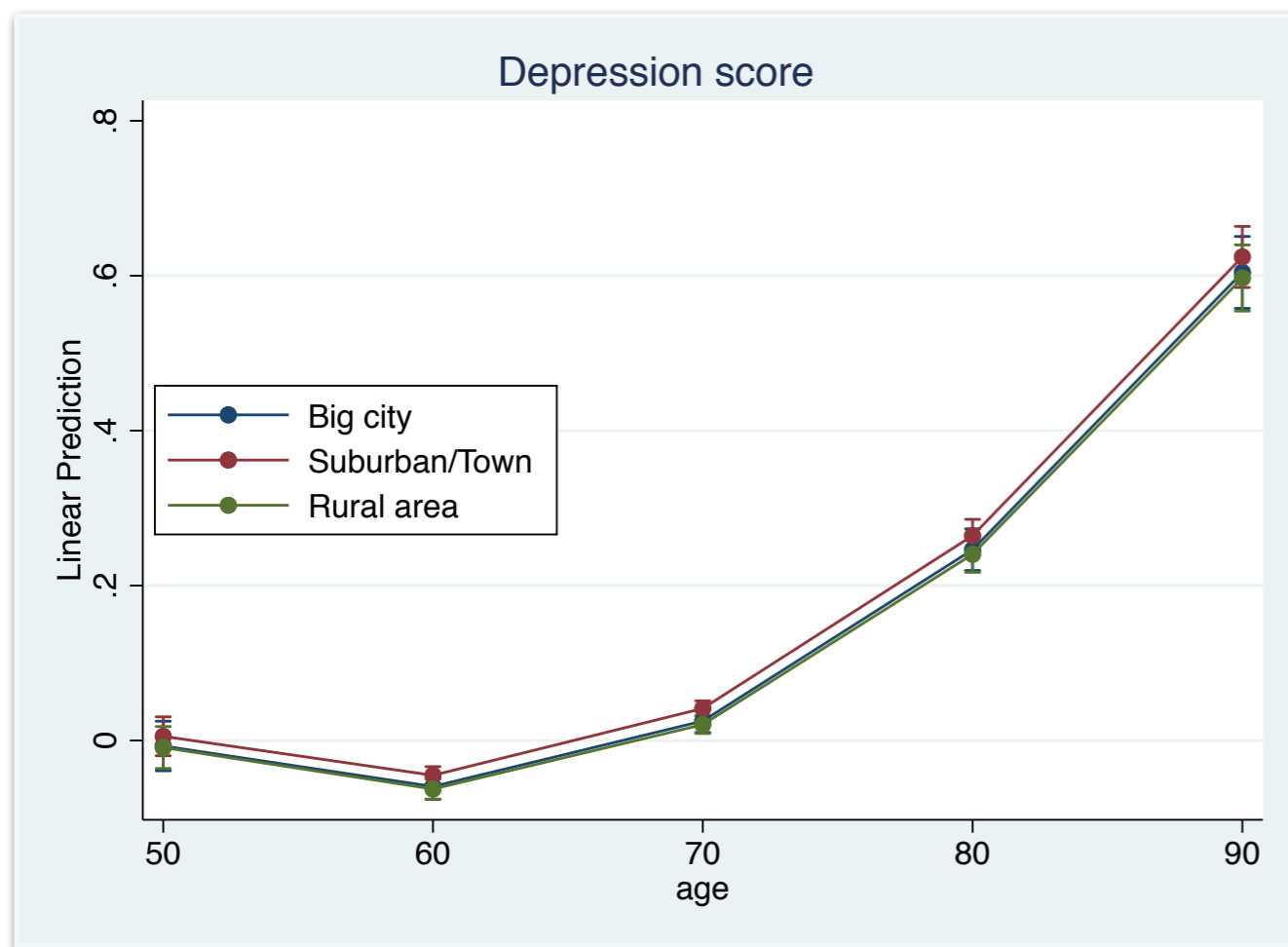
Longitudinal trajectories for Rural area, Suburban/town, and Big city





Psychological functioning

Longitudinal trajectories for Rural area, Suburban/town, and Big city

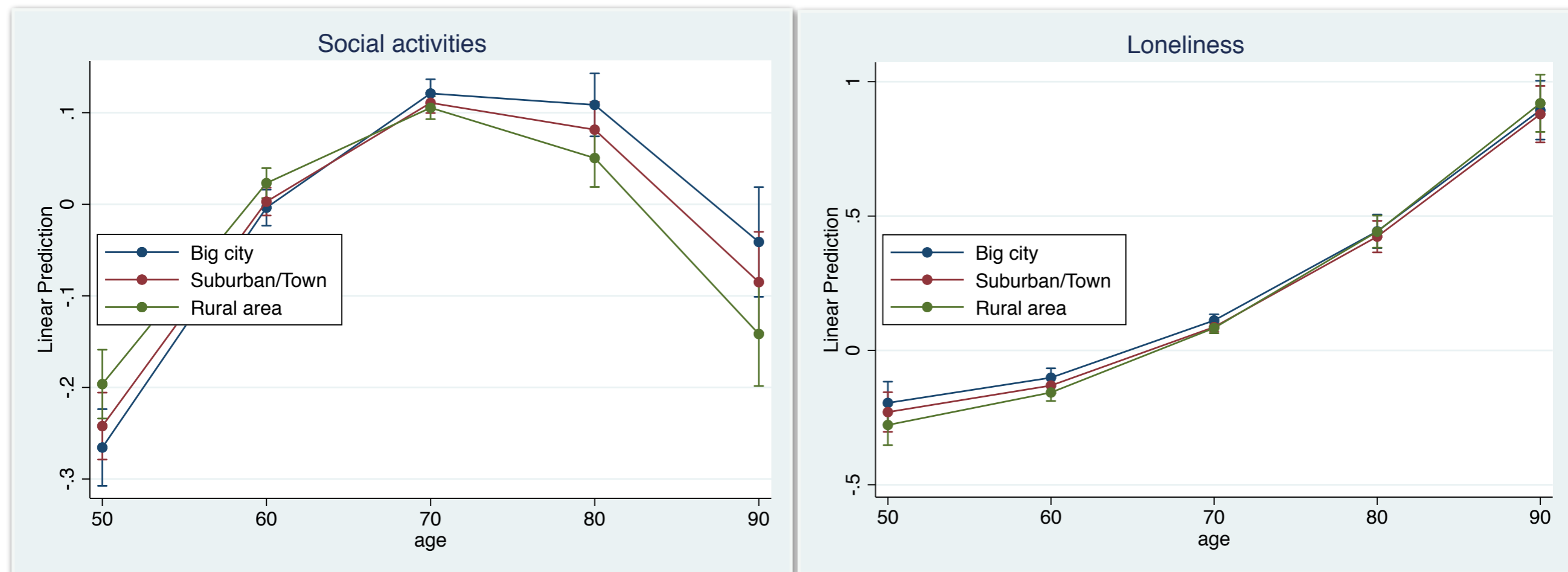


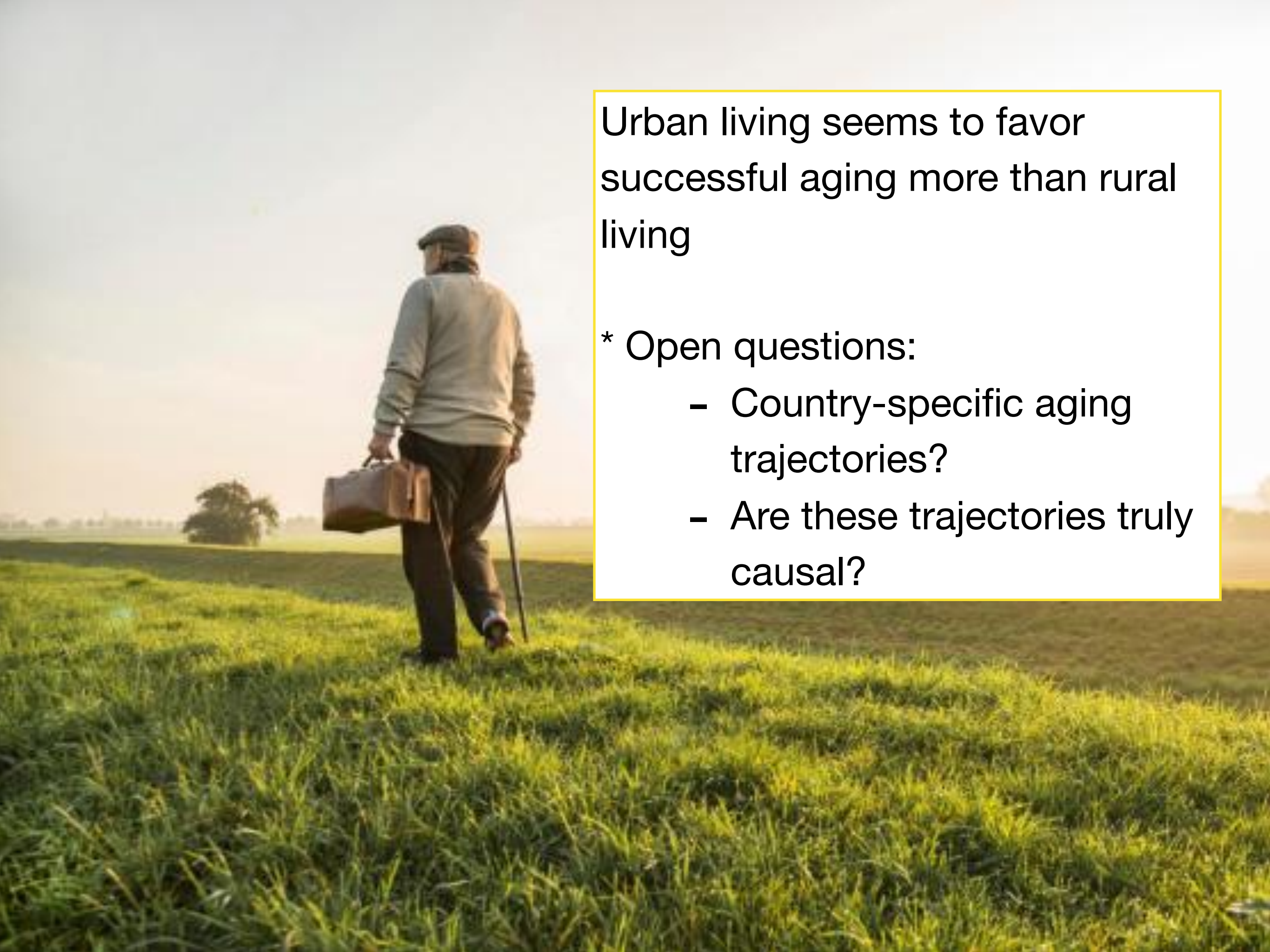
Interaction not stat significant



Social activity

Longitudinal trajectories for Rural area, Suburban/town, and Big city



A person wearing a cap and a light-colored jacket is walking away from the camera across a vast, green field. They are carrying a brown suitcase in their right hand and using a cane in their left hand. The background shows a hazy horizon with a few trees under a soft, overcast sky.

Urban living seems to favor
successful aging more than rural
living

* Open questions:

- Country-specific aging trajectories?
- Are these trajectories truly causal?