

The Spatial Configuration of Trust in Canadian Municipalities

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Urban Density and Social Trust

“community lost”

or “eyes on the street”?



Urban Community amid Crisis

- “Caremongering”
- Local parks, corner stores, community centres, libraries, among other “third spaces.”



built environment



social trust



Source: Allen McInnins, Montreal Gazette

Research Questions



Are there identifiable *spatial patterns* of trust?



How does trust relate to the distribution of *amenities* (e.g., libraries, parks, grocery stores, jobs, etc.) and to the *urban design* (pedestrian intersections)?



How do the *contextual elements* interact with *individual predictors* of trust (e.g., informal ties and voluntary associations)?

Hypotheses



Trust is *spatially concentrated*



Proximity to amenities and *pedestrian intersections* fosters informal *social ties*



Amenities create opportunities for community *participation*

Defining Trust

- Trust as a foundational **social orientation** between the **individual** and **others**: *rational* and a *relational*
- *Social conditions* of trust
 - **In-group / out-group** distinctions: *generalization* mechanism
 - Participation in **voluntary associations**
 - Informal **social ties** (extended networks)

} *Built Environment*

Data

General Social Survey (2008 & 2013)

- Toronto, Montreal, Vancouver, Ottawa-Gatineau, and Edmonton
- Respondents aged 18+
- Grouped at CT and CMA levels

Proximity Measures Database

- Dissemination Block level
- Based on gravity model

Variables

Outcome variables

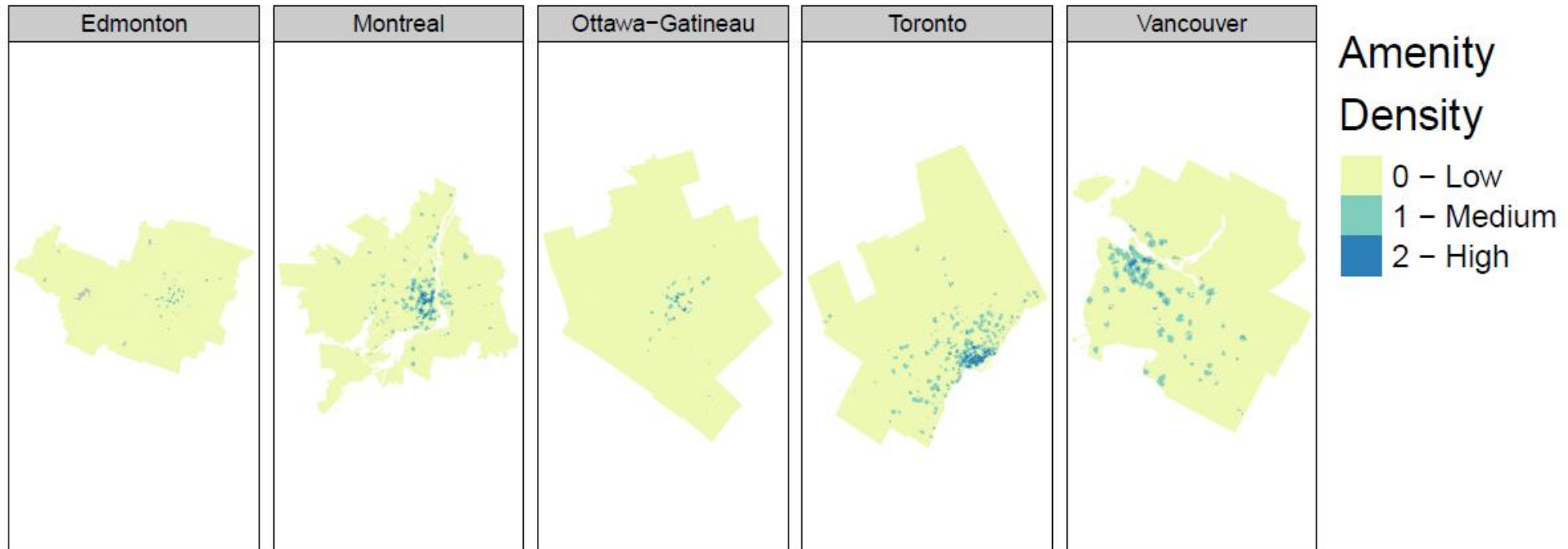
- Trust in *strangers* (**reported trust**)
- Likelihood of a stranger returning a *lost wallet* (**wallet vignette**)
- Trust in strangers *minus* trust in neighbours (**trust difference**)
- Likelihood of stranger *minus* likelihood of neighbour returning wallet (**wallet difference**)

Predictors (level of analysis)

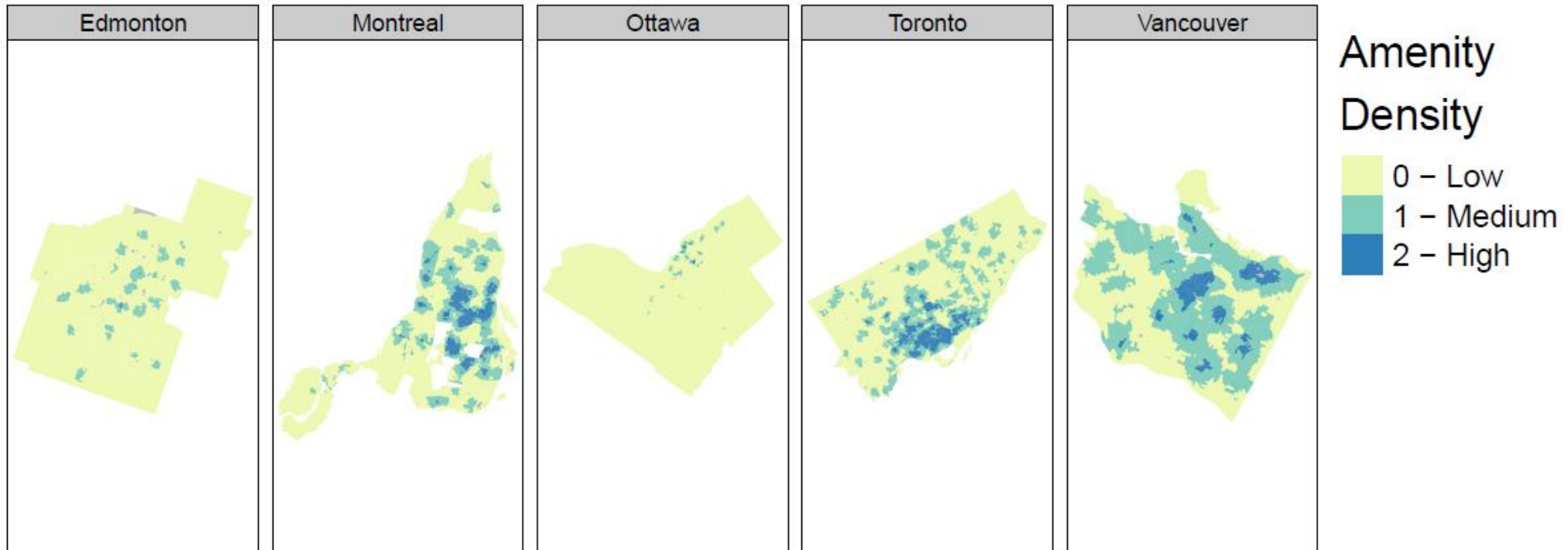
- Number of **acquaintances** (individual)
- Associational **membership** (individual)
- **Amenity density** (CT)
- Intersection density (CT)

Controls

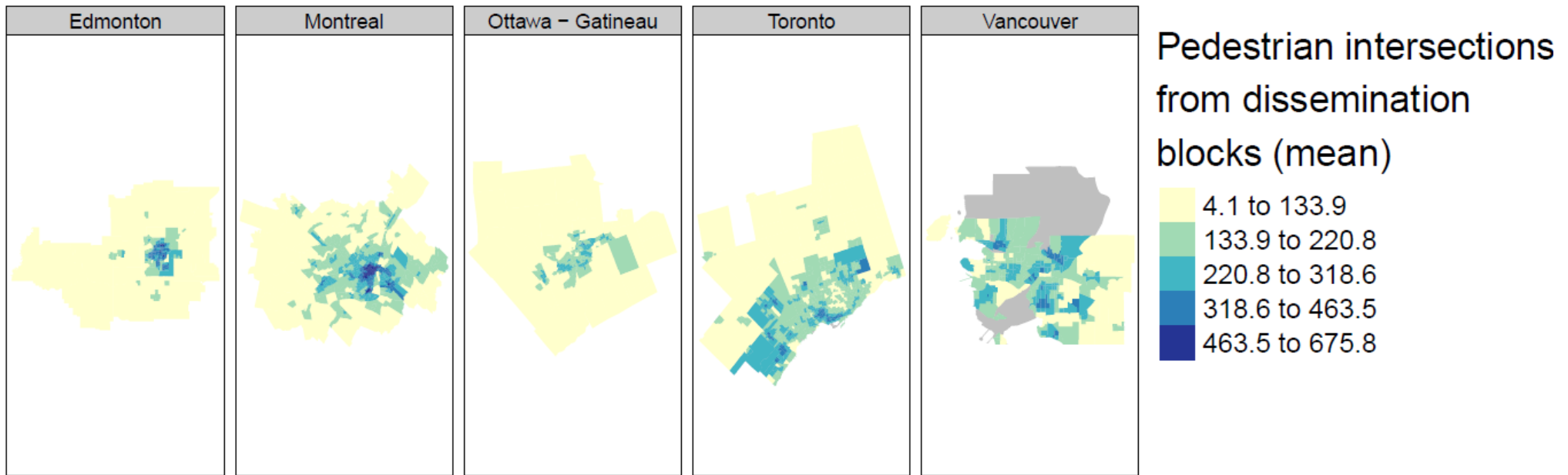
- Population density (CT), length of residence, visible minority, education level, age, and gender



Proximity to Amenities



Proximity to Amenities



Proximity to Pedestrian Intersections

Models

For each outcome (y):

$$y_{ij} = (\beta_1 + \zeta_j) + \beta_2 acq_{ij} + \beta_3 memb_{ij} + \beta_4 amen_j + \beta_4 dens_j + \beta_p x_{ij} + \epsilon_{ij},$$

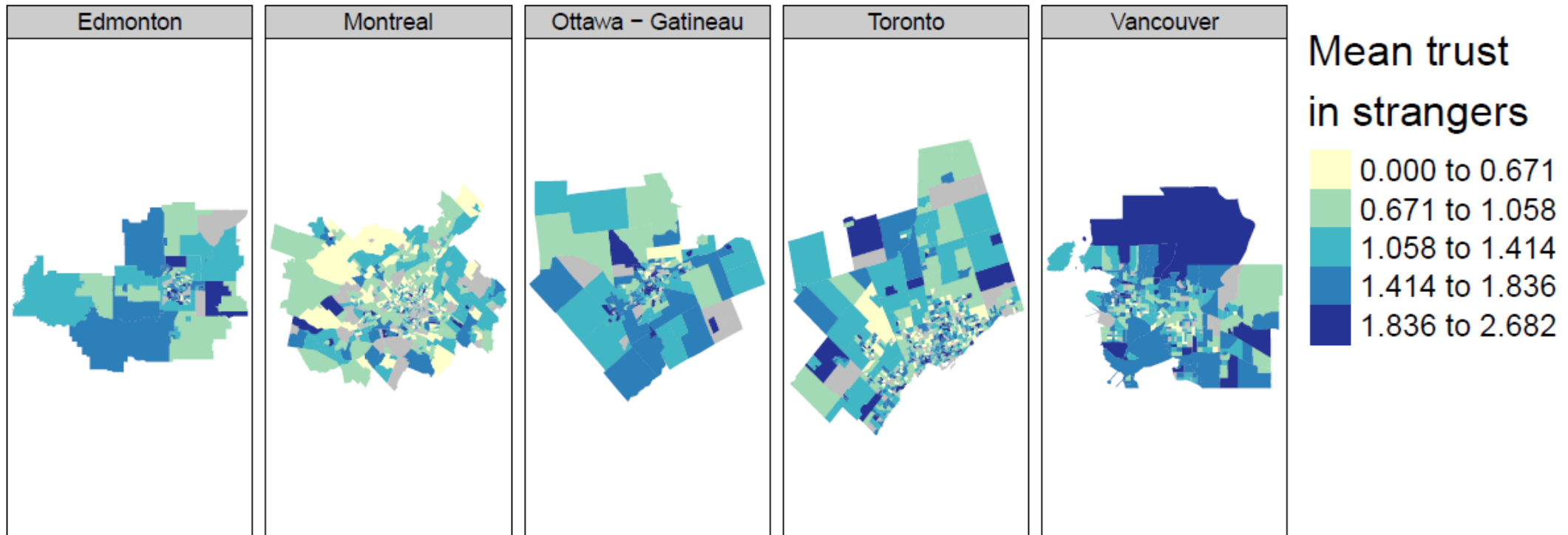
where i denotes individuals nested in a j census tract; $\beta_2 acq_{ij}$ through $\beta_p x_{ij}$ are covariates; $\beta_1 + \zeta_j$ is a CT-specific intercept; and ϵ_{ij} is a respondent-specific error component.

Note: Referential equation.

Findings

Spatial patterns of *trust*

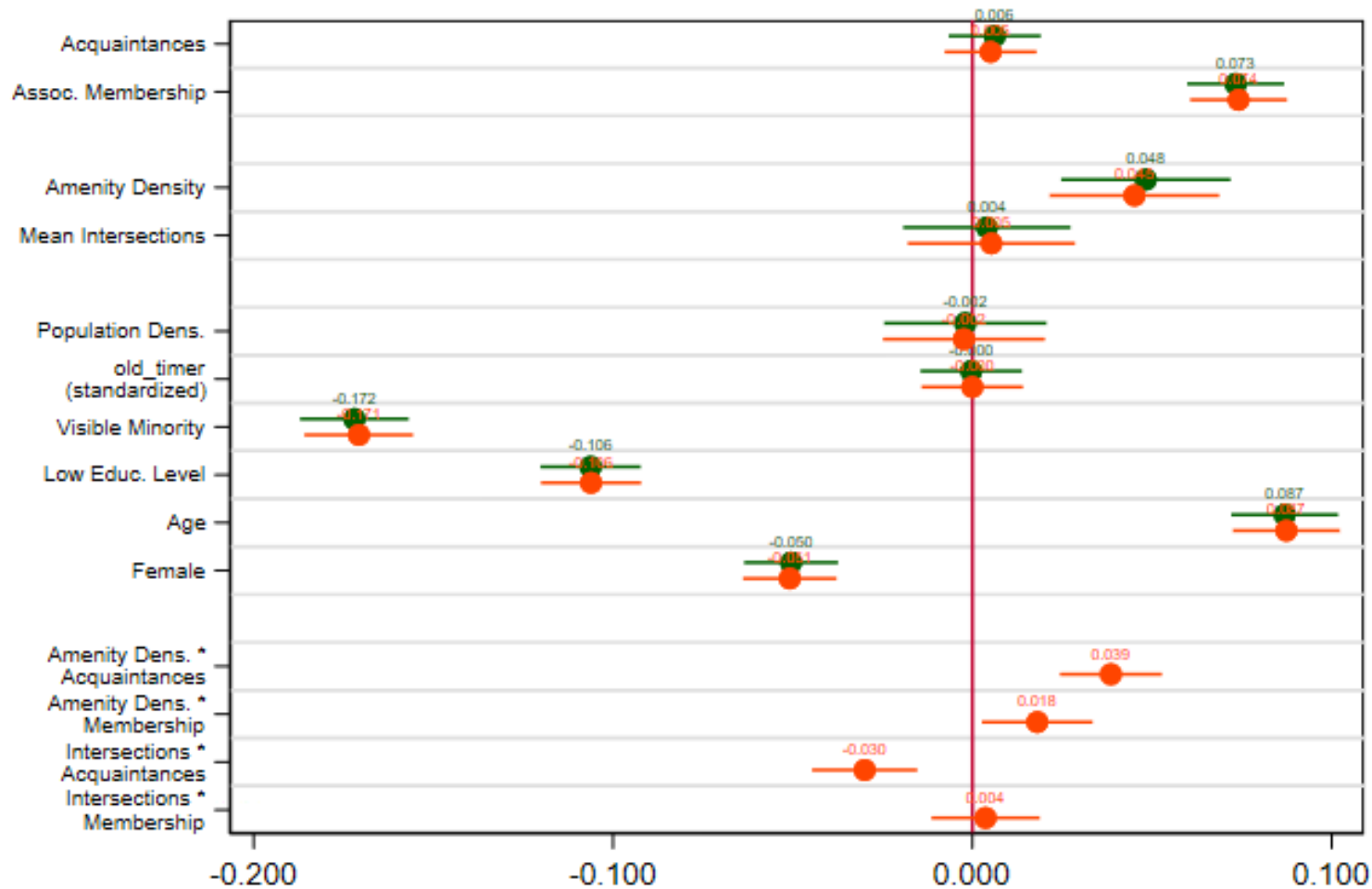
- *Reported trust* (map): fair spatial concentration (Moran's $I = 0.11$ [$p < 0.01$])
- All other outcome variables (Moran's $I \approx 0.10$ [$p < 0.01$])



CT Individual

Controls

Interactions



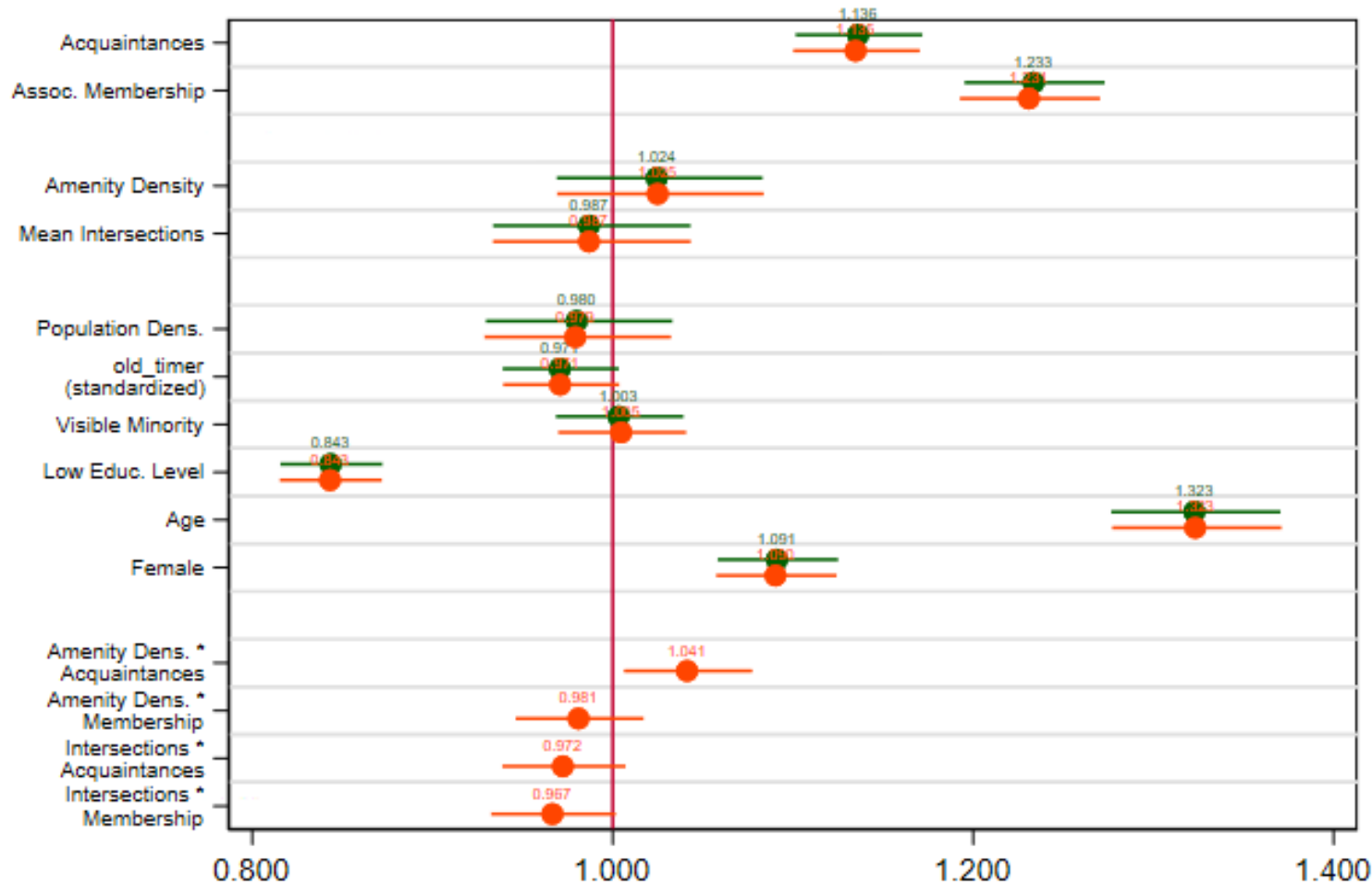
Reported Trust

- (+) associational membership
- (+) density of amenities
- (+) interaction terms including amenity density
- Controls: (+) age, (-) visible minority, (-) education, and (-) gender

CT Individual

Controls

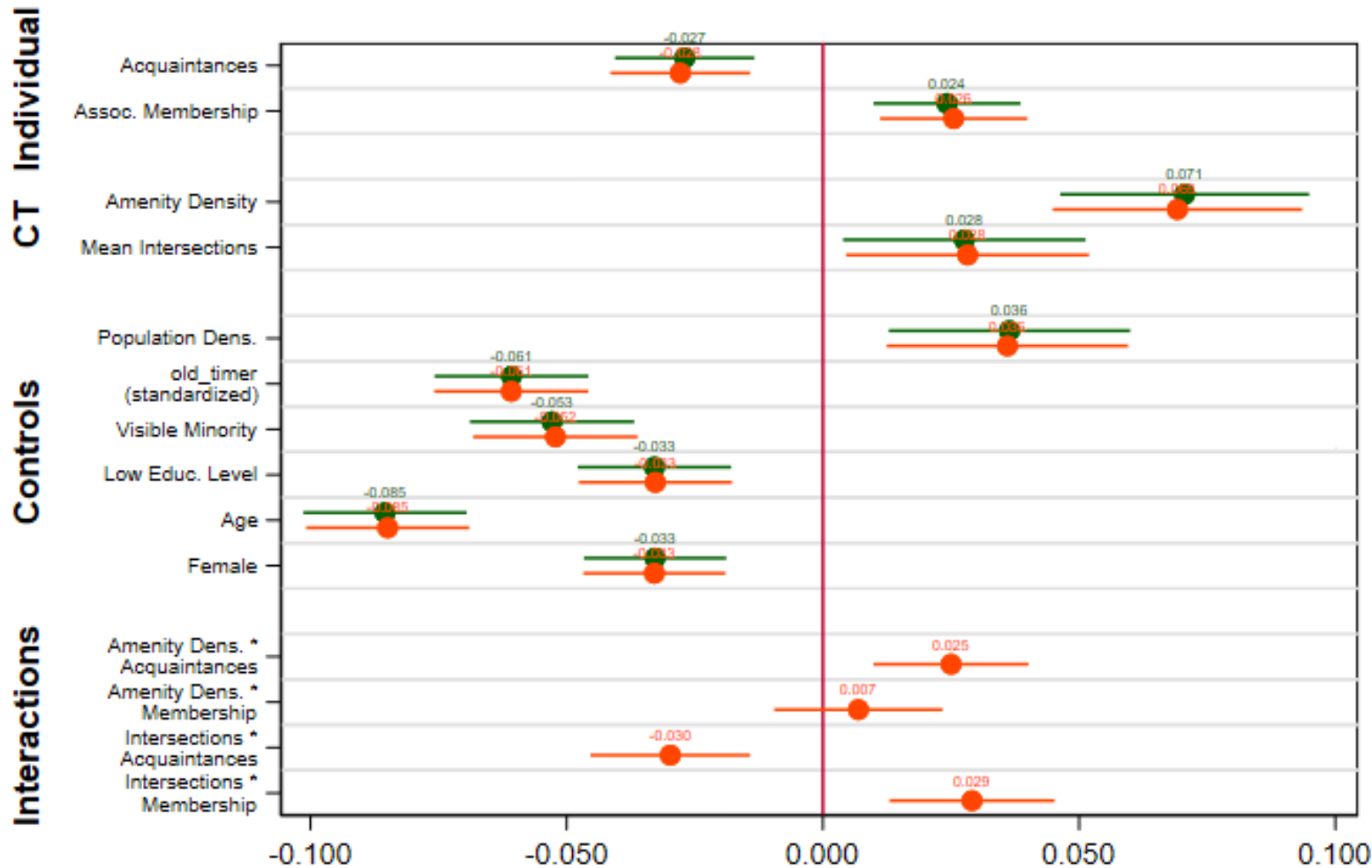
Interactions



Wallet Vignette

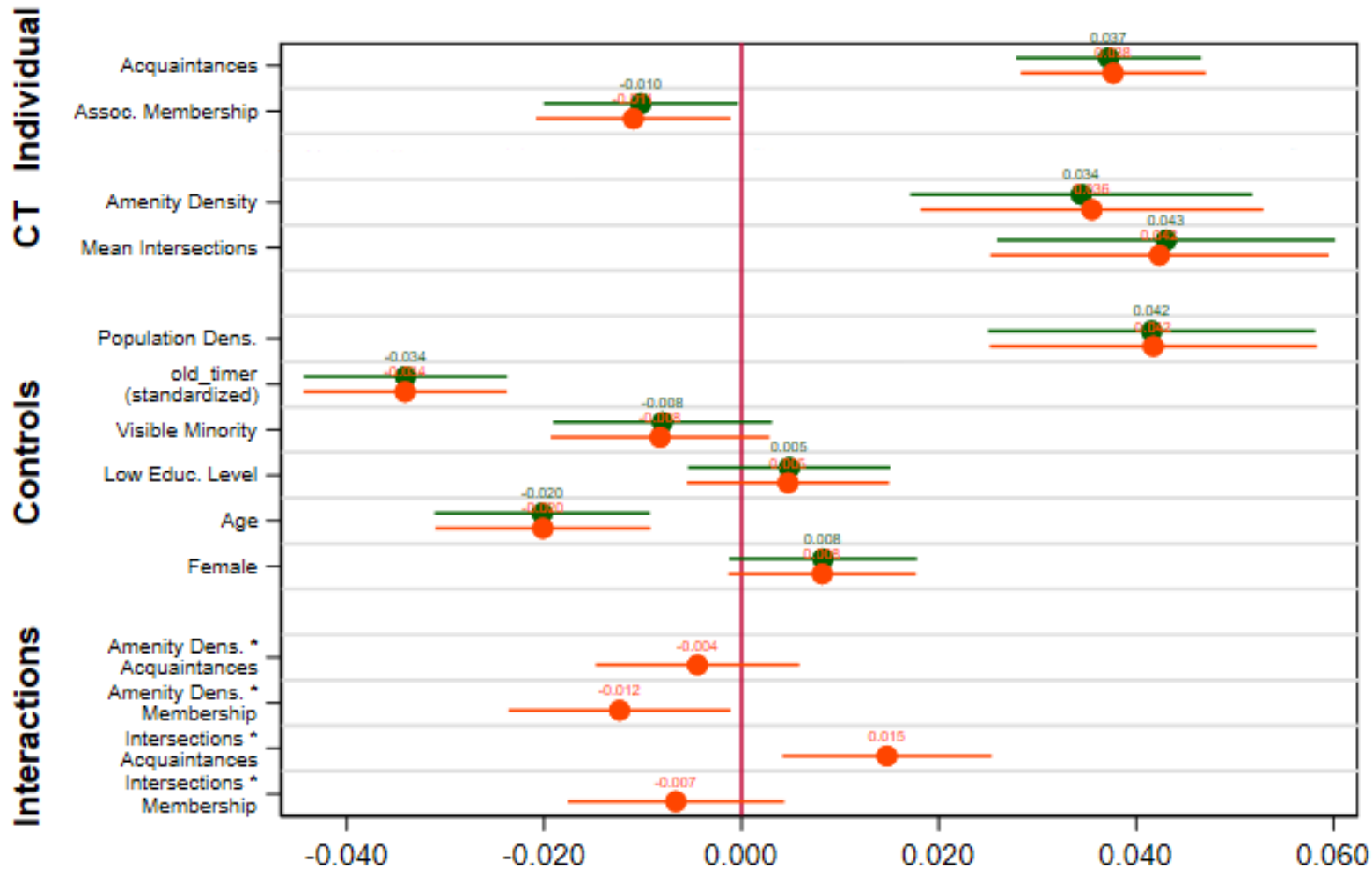
- (+) individual-level predictors
- (+) interaction term (acquaintances*amenities)
- Controls: (+) age, (-) visible minority, (-) education, and (-) gender

Radius of Reported Trust



- (-) acquaintances
- (+) associational membership
- (+) density of amenities and pedestrian intersections
- (+) interaction terms
- Controls: (-) age, (+) population density, (-) old timer, (-) visible minority, (-) education, and (-) gender

Radius of the Wallet Vignette



- (+) acquaintances
- (+) density of amenities and pedestrian intersections
- (-) interaction term: membership * density of amenities
- Controls: (+) population density, (-) old timer, and (-) age

Conclusion and Policy Implications



Trust is unevenly distributed in cities



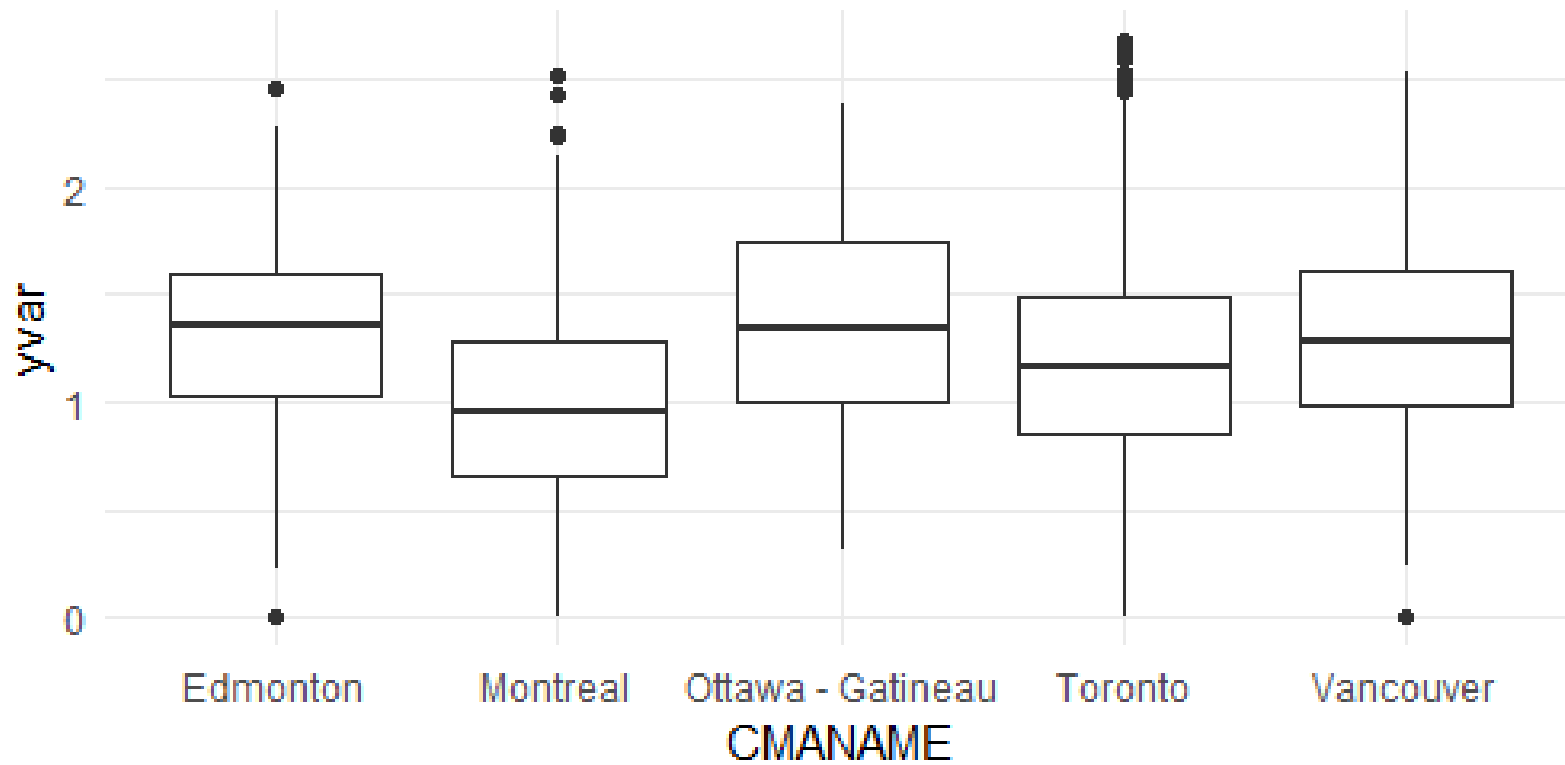
Access to amenities predicts higher levels of outward trust



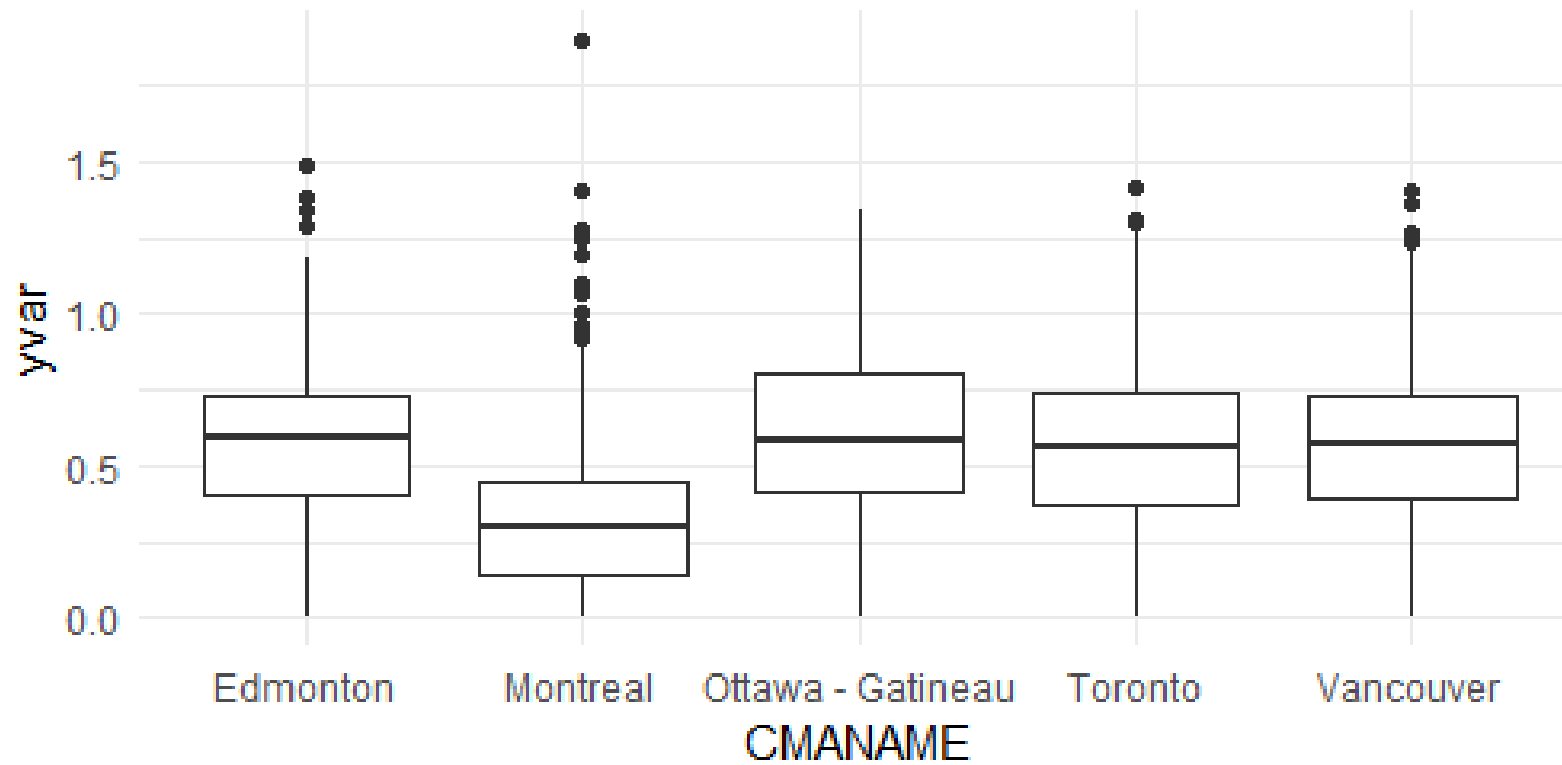
Cities and Provinces can foster amenities through policy (e.g., TSNS)

Thank you!

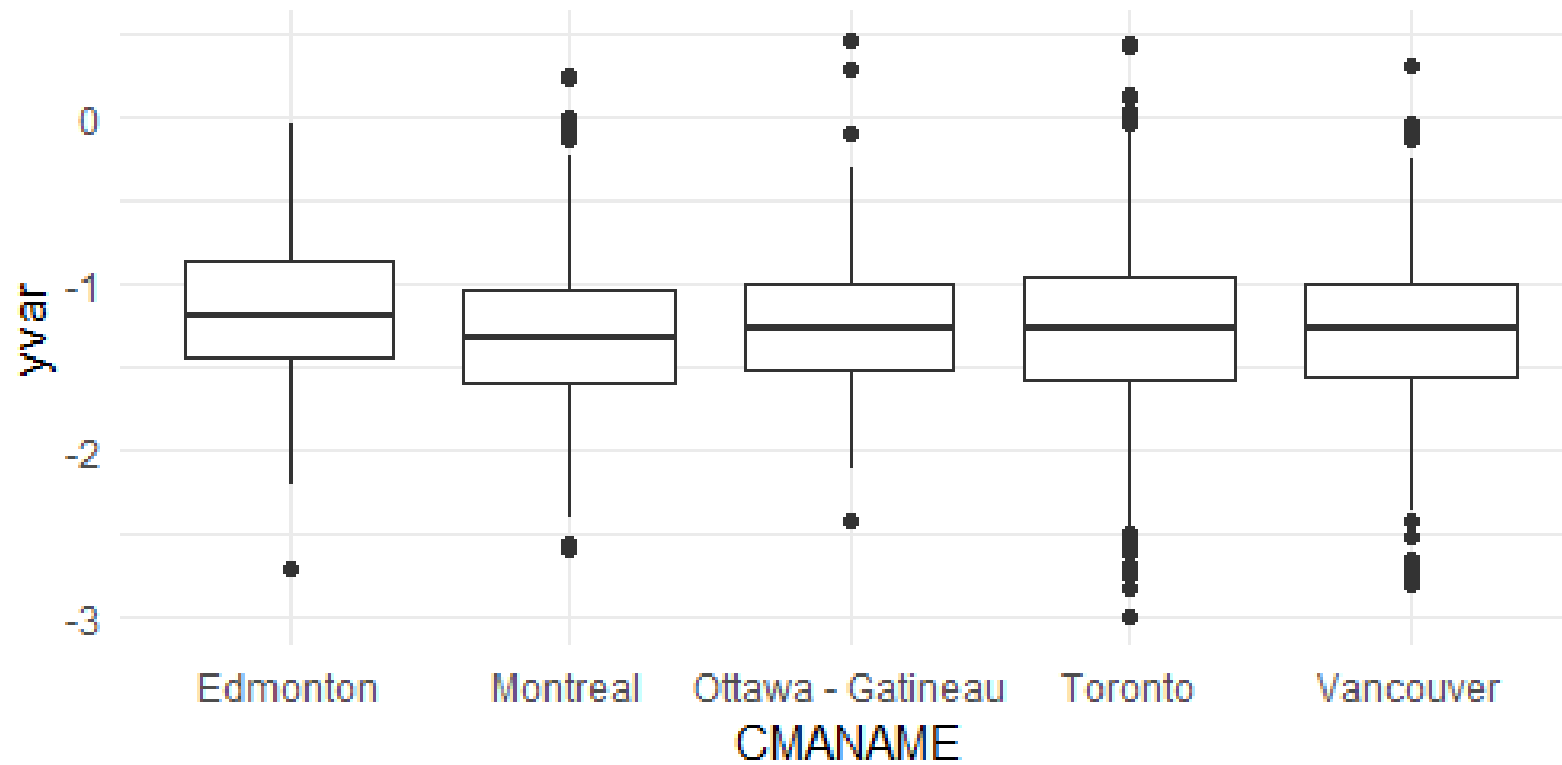
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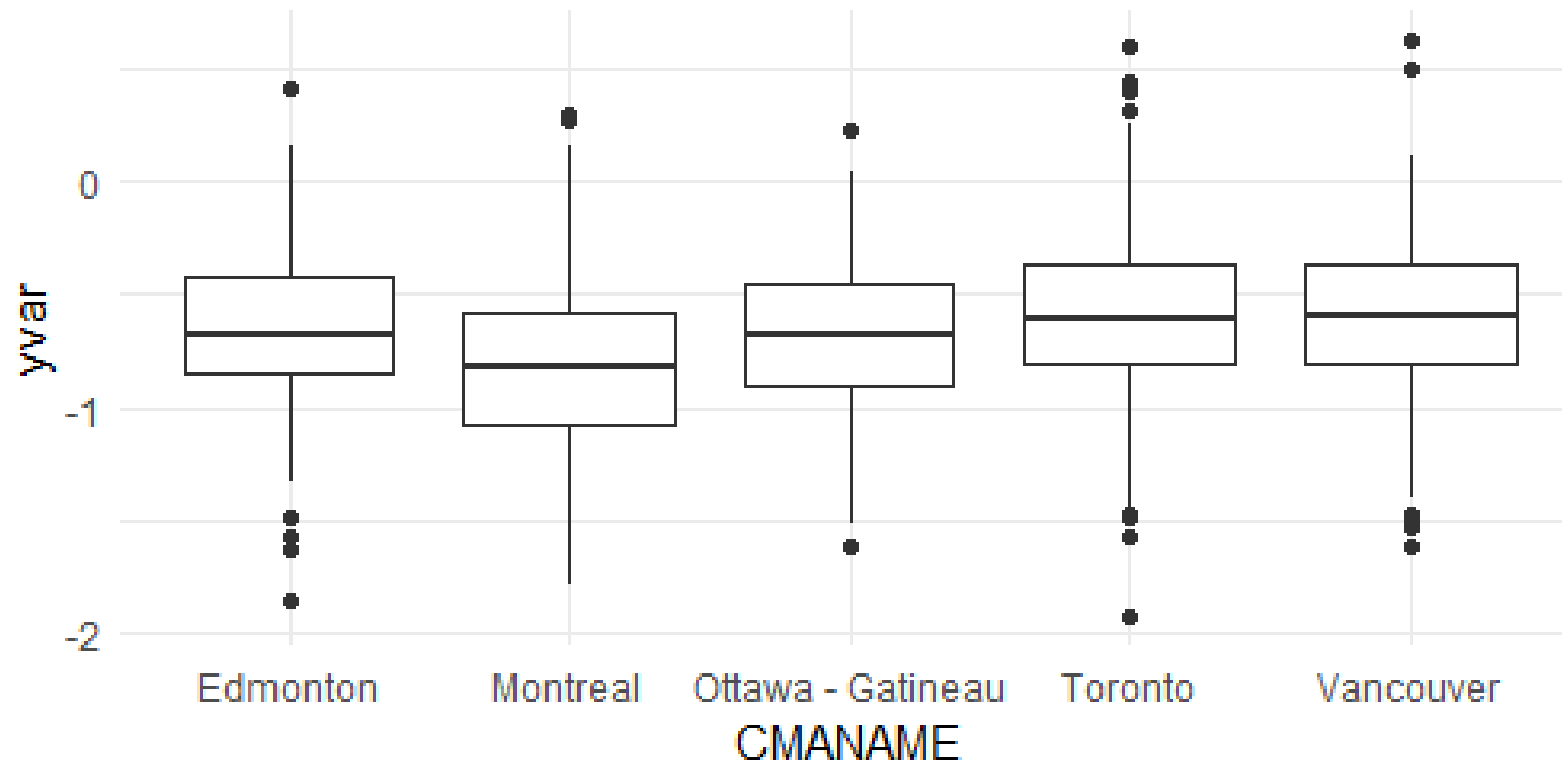
Reported Trust by Metro Area



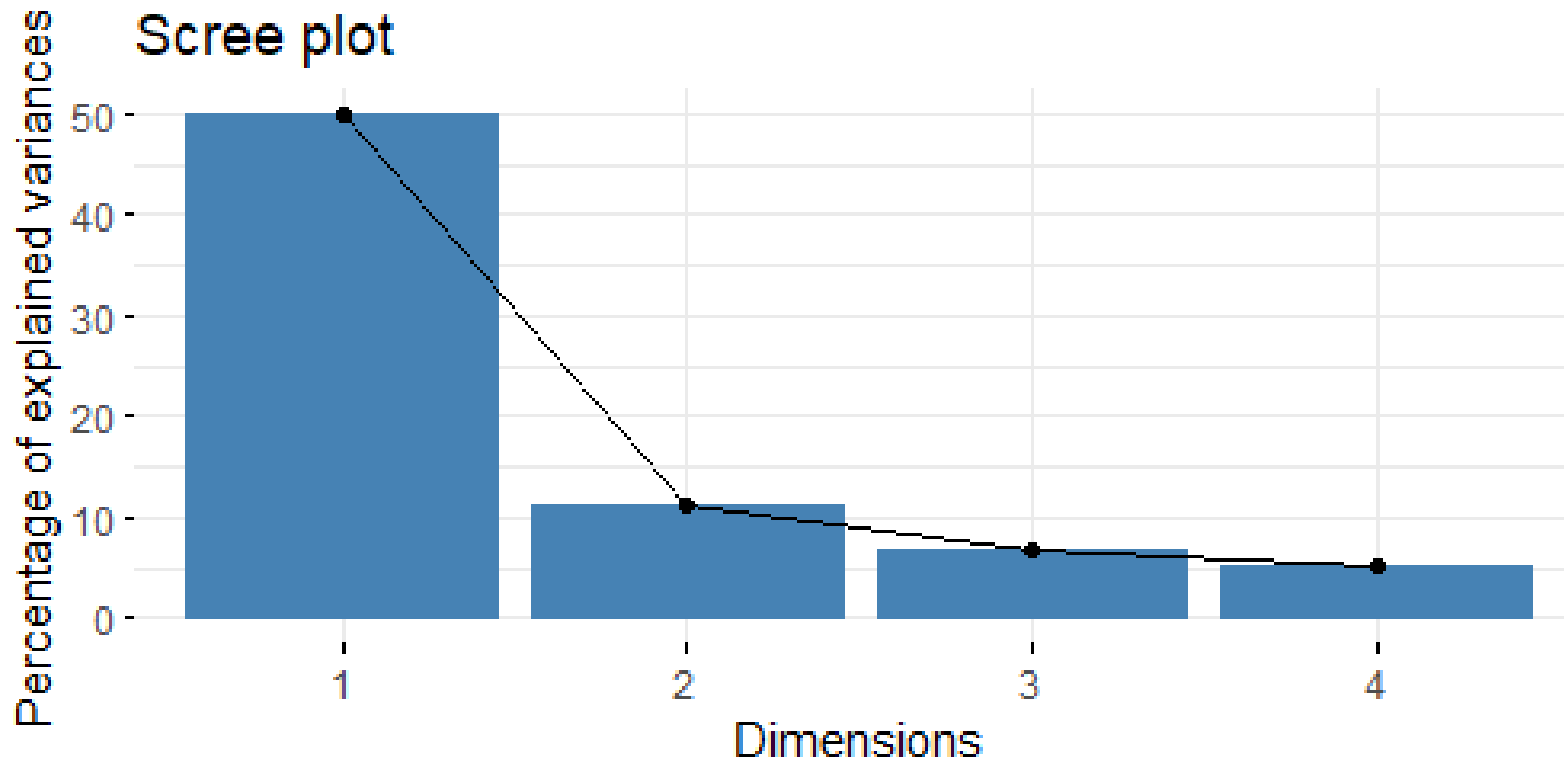
Wallet Vignette by Metro Area



Radius of Reported Trust by Metro Area



Radius of the Wallet Vignette by Metro Area



Multiple Correspondence Analysis of Proximity Measures