# Social interaction in the neighbourhood: a multilevel analysis

**Pauline van den Berg**
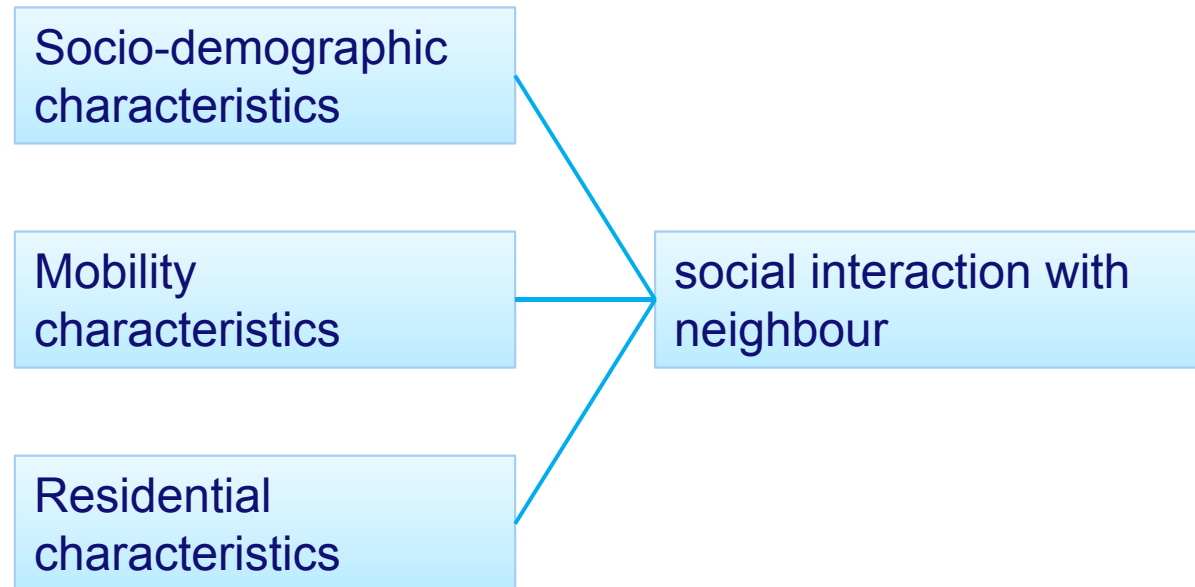
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**Where innovation starts**

# Introduction

- **Neighbourhood-based social contacts**

- **Social network literature:**

  declining role of neighbourhoods

- **Urban planning literature:**

  increasing attention (urban renewal, demographic changes)

- **Empirical findings are scarce and inconclusive**

# Introduction

# Data collection

- **January - June 2008**

- **Social interaction diary**
  - **face-to-face and ICT contacts**
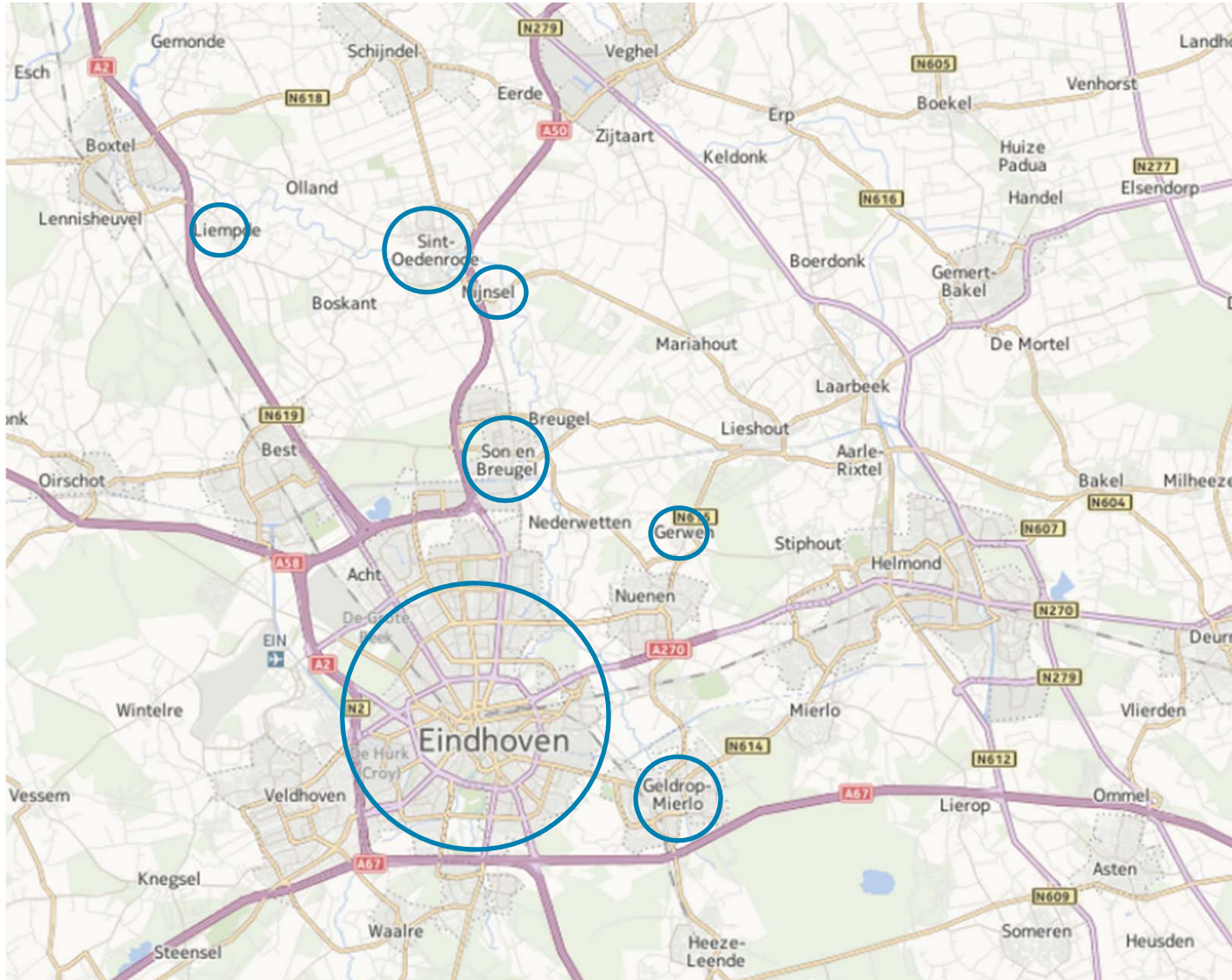  - **with whom**

- **Personal approach**

# Data collection

- **January - June 2008**

- **Social interaction diary**
  - **face-to-face and ICT contacts**
  - **with whom**

- **Personal approach**

- **Eindhoven region**

# Data collection

# Sample

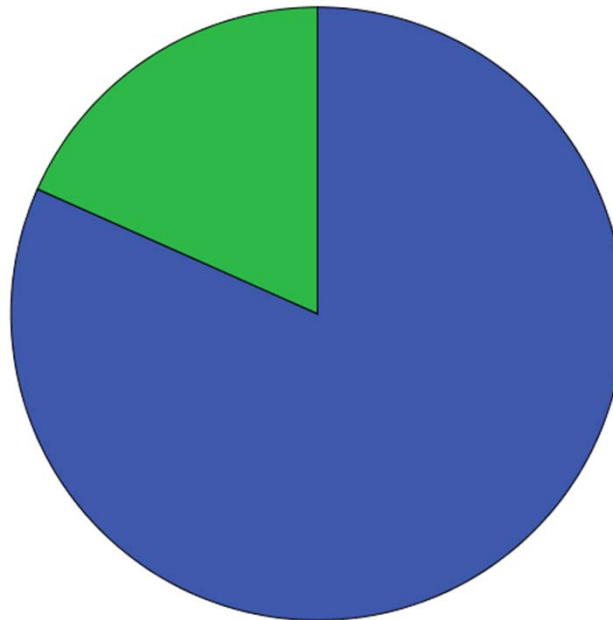- **8074 interactions**                 **747 respondents**
- **5371 interactions (with 1 person)**   **699 respondents**

# Interaction with neighbours

- **15% of interactions with neighbour**
- **Neighbour: lives within 1 km**

# Interaction with neighbours vs others

|  | Face-to-face | ICT | Total |
|---|---|---|---|
| **Neigbour** | 66% | 34% | 100% |
| **No neigbour** | 36% | 64% | 100% |

p = 0.000

# Interaction with neighbours vs others

|              | Weekend | Weekday | Total |
|--------------|---------|---------|-------|
| **Neigbour**     | 23%     | 77%     | 100%  |
| **No neigbour**  | 17%     | 83%     | 100%  |

p = 0.000

# Interaction with neighbours vs others

|            | Coincidental | Planned/routine | Total |
|------------|:------------:|:---------------:|:-----:|
| **Neigbour**    | 60%          | 40%             | 100%  |
| **No neigbour** | 57%          | 43%             | 100%  |

p = 0.128

# Interaction with neighbours vs others

|  | Duration |
|---|---|
| **Neigbour** | 33.77 min |
| **No neigbour** | 30.89 min |

p = 0.274

# Interaction with neighbours vs others

|  | Very strong | Somewhat | Not strong | Total |
|---|---|---|---|---|
| **Neigbour** | 21% | 37% | 42% | 100% |
| **No neigbour** | 37% | 27% | 37% | 100% |

p = 0.000

# Methods

- **2 level binomial logit model**

  - **Level 1: interactions**
    - **Intercept (with neighbour y/n)**

  - **Level 2: respondents**
    - **Socio-demographics**
    - **Mobility characteristics**
    - **Residential characteristics**

# Sample characteristics

|  | Mean | St. Dev. |
|---|---|---|
| Age | 46.53 | 15.36 |
| Male | 0.39 | 0.49 |
| Work hours per week | 19.93 | 18.69 |
| Household size | 2.89 | 1.31 |
| Primary education | 0.23 | 0.42 |
| High education | 0.46 | 0.50 |
| Low income | 0.28 | 0.45 |
| High income | 0.33 | 0.47 |
| Social network size | 22.14 | 20.70 |
| Physically challenged | 0.10 | 0.30 |

# Sample characteristics

| | Mean | St. Dev. |
|---|---|---|
| **Nr of cars** | 1.29 | 0.70 |
| **Public transport season ticket** | 0.27 | 0.44 |
| **Supermarket < 1 km** | 0.74 | 0.44 |
| **Primary school < 1 km** | 0.75 | 0.44 |
| **Outdoor sports facility < 1 km** | 0.34 | 0.48 |
| **Indoor sports facility < 1 km** | 0.32 | 0.47 |
| **Community center < 1 km** | 0.44 | 0.50 |
| **Cafe / bar < 1 km** | 0.27 | 0.44 |
| **Restaurant < 1 km** | 0.31 | 0.46 |
| **Bus / train stop < 1 km** | 0.89 | 0.32 |
| **Eindhoven** | 0.78 | 0.42 |

# Results

| | Coefficient | P-value |
|---|---|---|
| Intercept | -3.409 | <0.001 |
| Age | 0.025 | <0.001 |
| Male | -0.396 | 0.005 |
| Work hours per week | -0.011 | 0.010 |
| Household size | 0.214 | <0.001 |
| # cars in household | -0.251 | 0.010 |
| Public transport season ticket | -0.331 | 0.028 |
| Supermarket <1km | 0.497 | <0.001 |
| Outdoor sports <1km | 0.471 | <0.001 |
| Public transport <1km | 0.341 | 0.094 |
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# Conclusions

- **Contact with neighbours**

  - **differ from contact with others**

  - **more likely for people who spend more time at home**

  - **less likely for more mobile people**

  - **more likely if facilities are present in neighbourhood**

  - **more likely in smaller communities**

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