Physical activity locations

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Background

The built environment is seen as an important determinant of physical activity (PA). Adaptations of the built environment might evoke (higher levels of) PA. Therefore, municipalities are increasingly focusing on the design of PA-friendly cities. However, most studies so far, have focused on the residential neighborhood, ignoring the potential effect of other important environments (e.g. work environment) on PA behavior. In order to develop adequate policy and intervention on the design of PA-friendly cities, it is necessary to gain more detailed insight in the locations where adults are actually physically active, and where they are not.

Aim To investigate how PA is distributed across public open spaces (parks, squares, roads, etc.) and to examine what sociodemographic and environmental factors influence PA.

Methods

Target group

Adults aged 45 – 65 years

The Netherlands

Research area

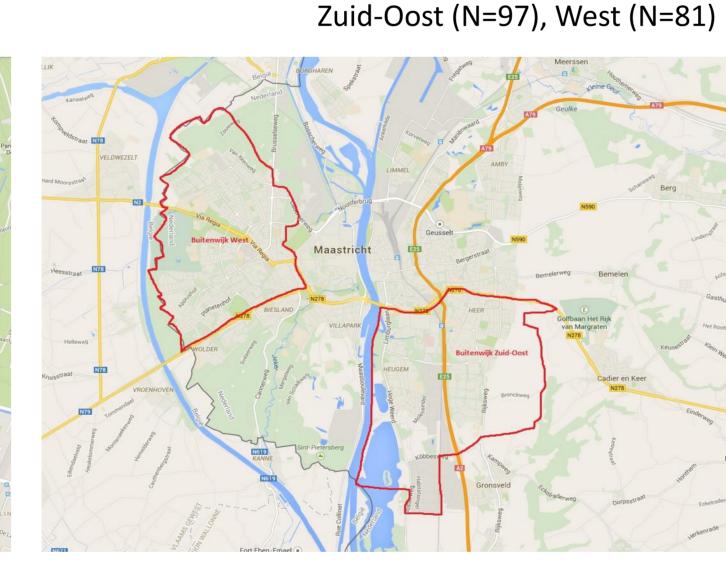




Maastricht

Rotterdam

Oude Noorden (N=48), Kralingen-West (N=62)



- Measures
- Questionnaire
- Accelerometers and GPS-devices



Results: study population

| | Rotterdam (N = 110) | | Maastricht (N = 178) | |
|------------------------|---------------------|------|----------------------|------|
| Age | | | | |
| Years (±SD) | 55,4 (±5,7) | | 57,1 (±6,3) | |
| | N | % | N | % |
| <u>Sex</u> | | | | |
| Male | 49 | 44,5 | 81 | 45,5 |
| Female | 61 | 55,5 | 97 | 54,5 |
| <u>BMI</u> | | | | |
| Normal weight | 68 | 61,8 | 87 | 48,9 |
| Overweight | 34 | 30,9 | 71 | 39,9 |
| Obesity | 8 | 7,3 | 20 | 11,2 |
| Ethnicity | | | | |
| Autochthonous | 89 | 80,9 | 155 | 87,1 |
| Western immigrants | 6 | 5,5 | 14 | 7,9 |
| Non-western immigrants | 14 | 12,7 | 6 | 3,4 |
| Missing | - | - | 2 | 1,1 |

Preliminary results Percentage of participants visiting a location ■ Rotterdam Note: Percentages represent participants that visited the location at least one day. Red squares represent significant differences. PA levels at various locations Home Other residential area Residential- and shopping area Shopping area City green Larger green Sports facilities Work places Other **Transport** ■ Sedentary behaviour ■ Light PA ■ Moderate PA ■ Vigorous PA Note: Percentages were calculated over the days on which participants visited the locations. Highlighted bars represent significant differences. **Moderate-to-vigorous PA at various locations** ■ Zuid-Oost, Maastricht Kralingen-West, Rotterdam ■ Oude Noorden, Rotterdam West, Maastricht Note: Percentages were calculated over the days on which participants visited the locations. Red squares represent significant differences.

Conclusions

- Inhabitants of Rotterdam spent significantly more time in MVPA in city green, and in VPA in larger green
- Inhabitants of (neighbourhoods within) Maastricht had significantly higher levels of PA during transport
- Inhabitants of (neighbourhoods within) Maastricht had significantly higher levels of PA in shopping areas

Follow-up

- Multilevel analyses to assess what socio-demographic and environmental factors influence (the use of) physical activity (locations)
- In depth analyses on specific physical activity locations
- Walk along / focus groups





