



HEAP: Health Promoting Environments for an Ageing Population

A register and GIS-study of associations between urban greenness and formal social services in Sweden

Sociodemographic variations in availability of urban greenness

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CONCLUSIONS

There may be environmental injustices in availability of urban greenness in Malmö, a large city with a sociodemographically heterogeneous population. However, in Kristianstad, a rural town with a more homogeneous population, this is not as evident.

BACKGROUND

The ongoing urbanization and densification of cities are intensifying the competition of space in urban areas. The resulting decrease in urban greenness may have negative health impacts on residents.

This study is a first step towards investigating urban greenness and independent living among older people.

AIM

To assess potential socio-demographic variations in the availability of urban greenness.

METHODS

This register-based study includes all residents aged 65+ years in two Swedish municipalities in 2010, 2015, and 2019.

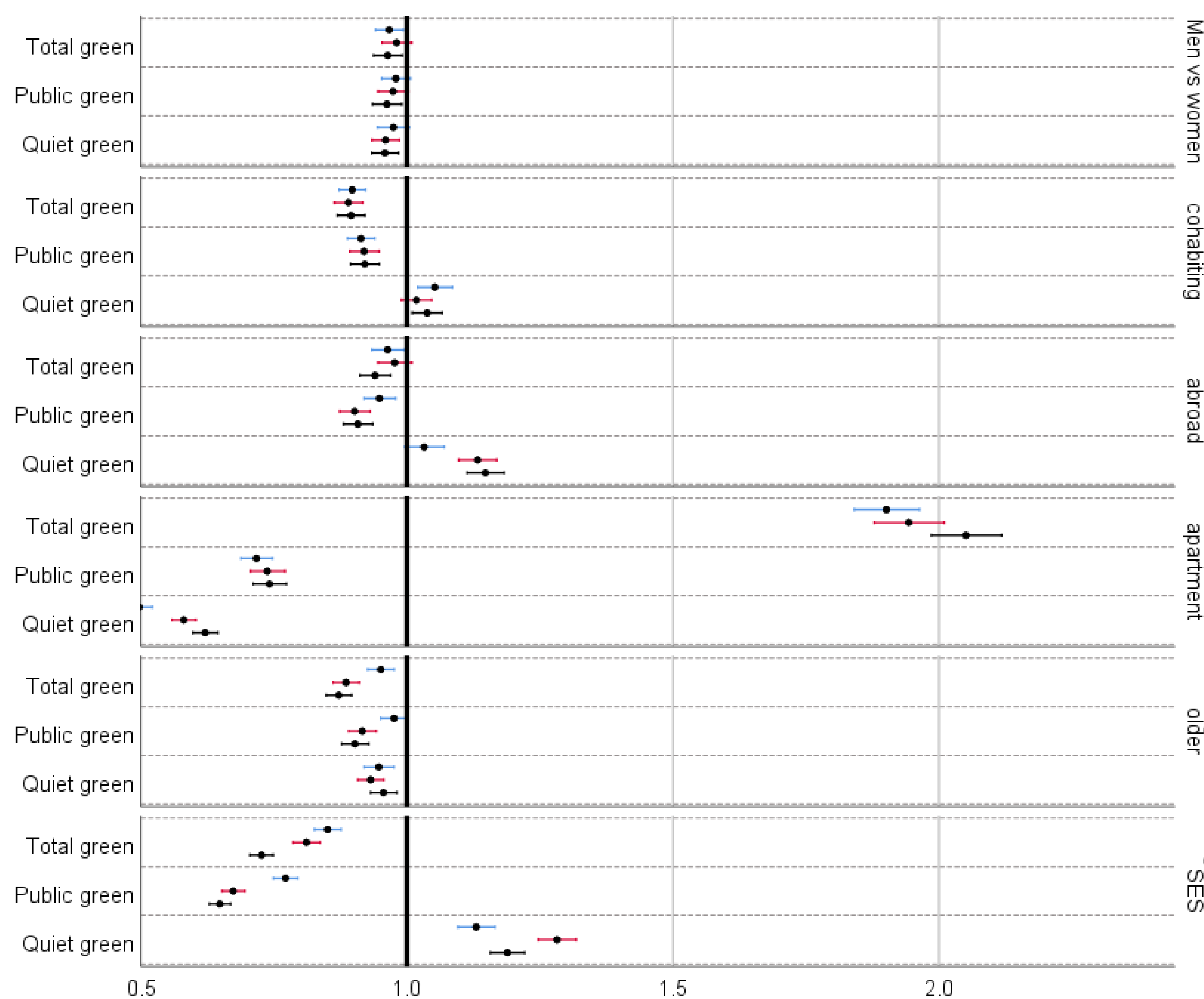
Urban greenness was assessed based on each person's residential coordinates, using Geographical Information Systems (GIS), and dichotomized at the median.

STUDY AREA

Malmö: Third largest city in Sweden (~300 000 inhabitants) with a high population density (2 193 inh/km²). In the study population, about 25% is born abroad and the same number lives in single-family houses.

Kristianstad: Smaller (~80 000 inhabitants) and less densely populated (69 inh/km²). In the study population, less than 10% is born abroad and about two thirds live in single-family houses.

Malmö



Kristianstad

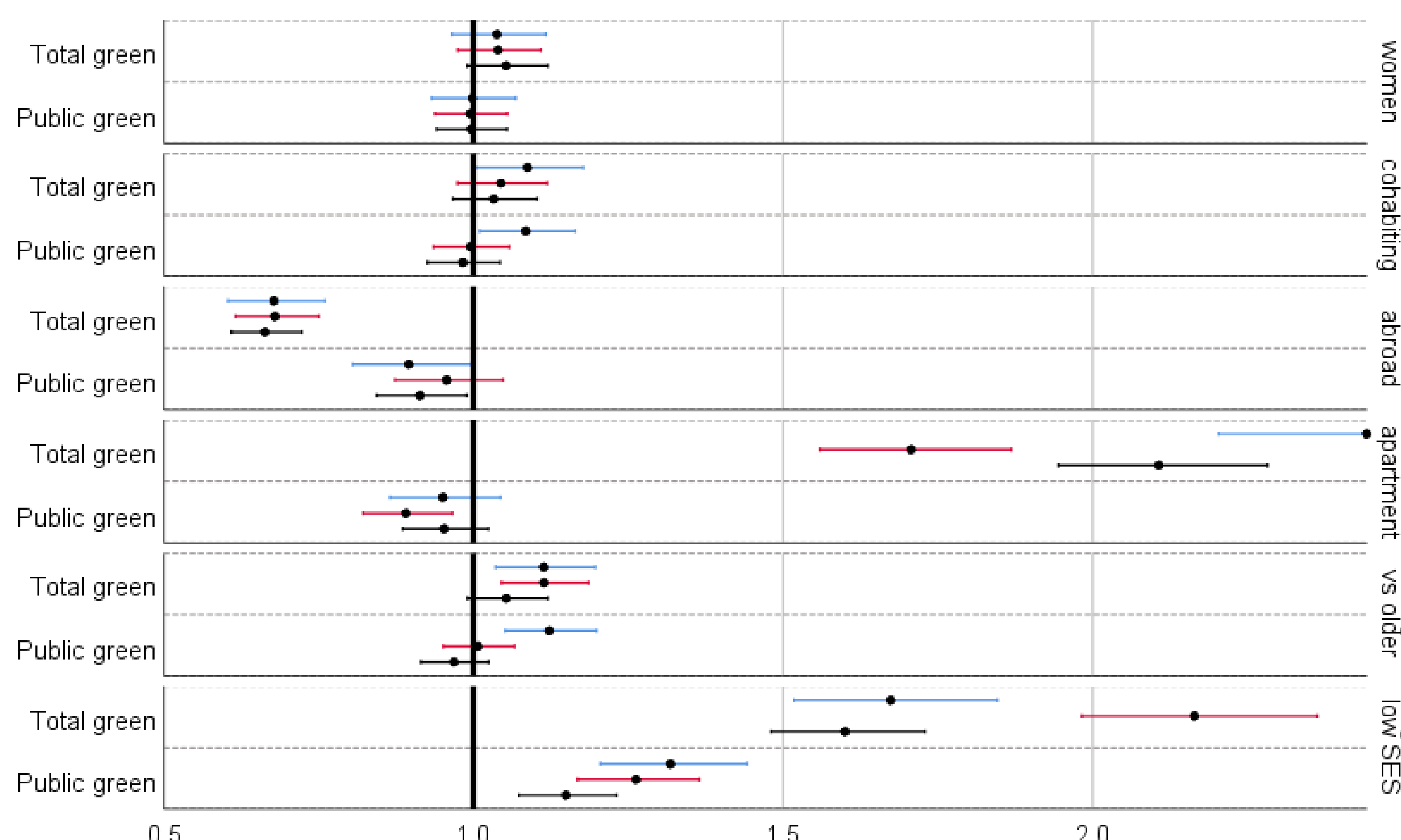


Figure Adjusted risk ratios (dots) with 95% confidence intervals (lines; blue = 2010, red = 2015, black = 2019) for being above the median (i.e., having greater availability) of urban greenness within 300m of residential address.

MEASURES OF SOCIODEMOGRAPHY

Sex: Men vs women

Living status: Alone vs cohabiting

Place of birth: Sweden vs abroad

Residence: House vs apartment

Age: Younger (65-74 years) vs older (74+ years)

Area SES: High vs low SES (socioeconomic status)

MEASURES OF URBAN GREENNESS

Total green: The total area within 300m from the residence covered by green elements

Public green: The part of total green that is publicly available, with consideration paid to ownership of the land

Quiet green: The part of public green with noise levels below 45 dB(A) LAeq24

RESULTS

- Sociodemographic variations in availability of urban greenness were found in Malmö but were not as evident in Kristianstad.
- The results were consistent over the time interval studied (i.e., 2010-2019).
- In Malmö, greater availability of...
 - ... **total green** was found for women, as well as those cohabiting, born abroad, living in houses, in the older age group, and living in low SES areas.
 - ... **public green** was found for women, as well as those cohabiting, born abroad, living in apartments, in the older age group, and living in low SES areas.
 - ... **quiet green** was found for women, as well as those living alone, born in Sweden, living in apartments, in the older age group, and living in high SES areas.
- In Kristianstad, greater availability of...
 - ... **total green** was found for those living in houses, born abroad, in the younger age group, and living in high SES areas.
 - ... **public green** was found for those living in high SES areas.

