

GREEN SPACE AND PHYSICAL ACTIVITY: RELATIONSHIPS IN SCOTLAND

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Background and Aims: Epidemiological studies suggest that levels of green space in a neighbourhood are negatively associated with residents' mortality and morbidity rates. One mechanism proposed for this association is that green space is a venue for, and therefore encourages, physical activity. Few studies, however, have examined whether neighbourhood levels of green space are associated with physical activity actually in green space. New data have become available in Scotland, which permit this analysis.

Methods: A cross sectional study of 4167 adults (16+) living within an urban setting in Scotland. Logistic regression analysis established the association between respondents' green space exposure and their use of green space for physical activity (hereafter, green physical activity), controlling for relevant confounders, including age, sex, economic activity status and area level socio-economic deprivation. Green space was modelled as a categorical variable, with sensitivity analysis determining the impact of categorisation.

Results: Respondents with high levels of green space in their area of residence were 2.39 (95% CI, 1.11-5.11) times more likely to participate in green physical activity than those with very low levels of green space in their area. However, there was no evidence of a dose-response effect and results were highly sensitive to the definition of 'very low levels' of green space. Relatively high levels of green space in a neighbourhood held no real advantage over modest levels, for participation in green physical activity. The relationship between green space exposure and green physical activity did not differ by area level socio-economic deprivation.

Conclusion: Whilst green physical activity rates are very low among those who live in neighbourhoods where levels of green space are low, there is little difference in green physical activity rates between those residents' in areas with modest or high levels of green space.