

Trends and Inequalities in Distance to and Use of Nearest Natural Space in the Context of the 20-Minute Neighbourhood: A 4-Wave National Repeat Crosssectional Study, 2013 to 2019

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Abstract : The 20-minute neighborhood is a policy priority for governments worldwide and a key feature of this policy is providing access to natural space within 800 meters of home. The study aims were to (1) examine the association between distance to nearest natural space and frequent use over time and (2) examine whether frequent use and changes in use were patterned by income and housing tenure over time. Bi-annual Scottish Household Survey data were obtained for 2013 to 2019 (n:42128 aged 16+). Adults were asked the walking distance to their nearest natural space, the frequency of visits to this space and their housing tenure, as well as age, sex and income. We examined the association between distance from home of nearest natural space, housing tenure, and the likelihood of frequent natural space use (visited once a week or more). Two-way interaction terms were further applied to explore variation in the association between tenure and frequent natural space use over time. We found that 87% of respondents lived within 10 minute walk of a natural space, meeting the policy specification for a 20-minute neighbourhood. Greater proximity to natural space was associated with increased use; individuals living a 6 to 10 minute walk and over 10 minute walk were respectively 53% and 78% less likely to report frequent natural space use than those living within a 5 minute walk. Housing tenure was an important predictor of frequent natural space use; private renters and homeowners were more likely to report frequent natural space use than social renters. Our findings provide evidence that proximity to natural space is a strong predictor of frequent use. Our study provides important evidence that time-based access measures alone do not consider deep-rooted socioeconomic variation in use of Natural space. Policy makers should ensure a nuanced lens is applied to operationalising and monitoring the 20-minute neighbourhood to safeguard against exacerbating existing inequalities.

Keywords : natural space, housing, inequalities, 20-minute neighbourhood, urban design

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