## Sustainability | Individual communication

# IC - (20805) - NATURAL ENVIRONMENTS AND GOOD HEALTH: COMPARISONS OF EXPOSURES AND MECHANISMS ACROSS 18 COUNTRIES

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#### **Background and objectives**

Various frameworks exist which depict mechanistic pathways by which neighbourhood exposure to nature impacts general health such as environmental, social, physical activity-related, and psychological. All might rely to differing extents on direct recreational contact with nature. Studies testing these pathways are limited by heterogeneous exposure and outcome measures, the inability to assess recreational contact and distinct environment types, focus on specific geographies, and suboptimal conducting of mediation.

#### Process and methods (for empirical research)

We used data from an 18-country survey to test pathways proposed by a well-known framework (Hartig et al., 2014) within one structural equation model. Our outcome measure was self-reported general health, our exposure variables were greenspace, freshwater, and coastal water within 1km of residence, and our mediators consisted of: (a) frequency of recreational visits to greenspaces, freshwater, and the coast, (b) air pollution concentrations at the residence, (c) self-reported physical activity, (d) self-reported social contact, and (e) psychological wellbeing.

#### Main results (or main arguments in the case of critical reviews)

Greenspace linked to health through greenspace visits and in turn, physical activity, social contact, and psychological wellbeing. Freshwater linked to health through freshwater visits and in turn, social contact. Coastal proximity linked to health through coastal visits and in turn, both social contact and psychological wellbeing. Coastal proximity also linked to health through physical activity and mental health in the absence of recreational visits. Mental health pathways typically explained larger proportions of the total effect.

### Implications for research and practice/policy | Importance and originality of the contribution

The results underline the importance of neighbourhood nature in supporting outdoor recreation which in turn benefits health through different pathways depending on the environment type. They support the need for research into not just greenpace provision, but promotion i.e. how to support people to use greenspace in health-enhancing ways. Furthermore, the fact that social contact was consistently a significant mediating pathway regardless of environment type partially lends support to contemporary theories of relational and/or collective restoration.

Palavras-chave: greenspace, bluespace, mental health, physical activity, air pollution, social, recreation