## Sustainability | Individual communication

# IC - (20798) - THE DEVELOPMENT OF AN ASSESSMENT TOOL THAT SUPPORTS THE DESIGN AND EVALUATION OF HEALTHY, BIODIVERSE AND CLIMATE-RESILIENT GREEN SCHOOLYARDS

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#### **Background and objectives**

To support healthy child development, biodiversity and climate resilience, primary schools are increasingly greening their schoolyard. However, little attention has been paid to how the design of green schoolyards can accommodate these benefits. This study aimed to create a green schoolyard assessment tool (GSAT) that supports the design and evaluation of green schoolyards.

## Process and methods (for empirical research)

Based on the available literature, we created a first draft of the GSAT. The GSAT was further developed in an online tworound Delphi study for which academic, practice, and policy experts were invited to participate. In Round 1, 40 experts (response rate 37%) and in Round 2 32 experts (response rate 63%) participated in a survey about the relevance, clarity, applicability, and comprehensibility of the proposed GSAT items. After the Delphi study, the newly developed GSAT was pilot tested at 19 green schoolyards to evaluate its interrater reliability and usability.

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

In Round 1, the panel considered 82% of the proposed GSAT items relevant, but there was little consensus about the clarity, comprehensibility, and applicability. Based on panellist's comments, rigorous changes were made to the formulation of the items and measurement scales. In Round 2, the panel was satisfied with 79% of the proposed items. Items for which there was no consensus were modified or deleted based on panellists' comments. Findings of the pilot test showed good interrater reliability (ICC = 0.82, 95% CI = 0.80 - 0.97) and provided input for some additional minor changes to improve usability.

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

The GSAT is an agreement-based tool that provides insight into critical design aspects of green schoolyards for healthy child development, biodiversity, and climate resilience. It can support schools, designers, and other stakeholders with designing green schoolyards and it can be used by researchers to assess the design of green schoolyards, which may improve the generalizability of future studies.

Palavras-chave : Child development, Child health and wellbeing, Play, Environmental assessment, Delphi study