

Use and avoidance of public green spaces and implications for inclusive urban planning

Claudia Romelli ⁽¹⁾ - Carl C. Anderson ⁽²⁾ - Nora Fagerholm ⁽³⁾ - Christian Albert ⁽²⁾

- ⁽¹⁾ Politecnico Di Milano, Milano, Italy - ⁽²⁾ Leibniz Universität Hannover, Institute For Environmental Planning, Hannover, Germany - ⁽³⁾ University Of Turku, Department Of Geography And Geology, Turku, Finland

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Abstract Public green spaces (PGS) are critical components of urban resilience strategies, supporting climate adaptation, public health, and social well-being. However, ensuring that all residents can equitably access and benefit from these spaces remains a persistent challenge. Understanding how different groups use—or avoid—PGS is essential to shaping inclusive, just, and responsive urban environments. Public participation methods offer valuable insights into the diverse and nuanced ways residents experience PGS, and they can reveal dynamics that conventional planning metrics overlook.

This contribution is based on a 2022 public participation GIS (PPGIS) survey conducted in Bochum, Germany (n=807), and provides a detailed analysis of how people engage with PGS in their city. Findings show that, regardless of sociodemographic background or specific profiles of PGS—whether frequently visited, avoided, or used in both ways—the most consistent drivers of both visitation and avoidance relate to universal factors such as availability, accessibility, connectivity, and maintenance. These insights underscore the need for urban planning approaches that address not only physical provision, but also the lived and perceived quality of urban green and blue infrastructure. Building on this work, future research will investigate how spatial configuration and the perceived quality of PGS relate to patterns of satisfaction and dissatisfaction among residents.

Our research offers clear implications for urban planning and policy. Enhancing universal qualities can reduce barriers to use, while targeted interventions can address the needs of specific communities. Systemic design and management factors are essential for achieving equitable access, and call for cross-sectoral collaboration to create multifunctional, inclusive PGS that advance public health, social cohesion, and climate resilience.