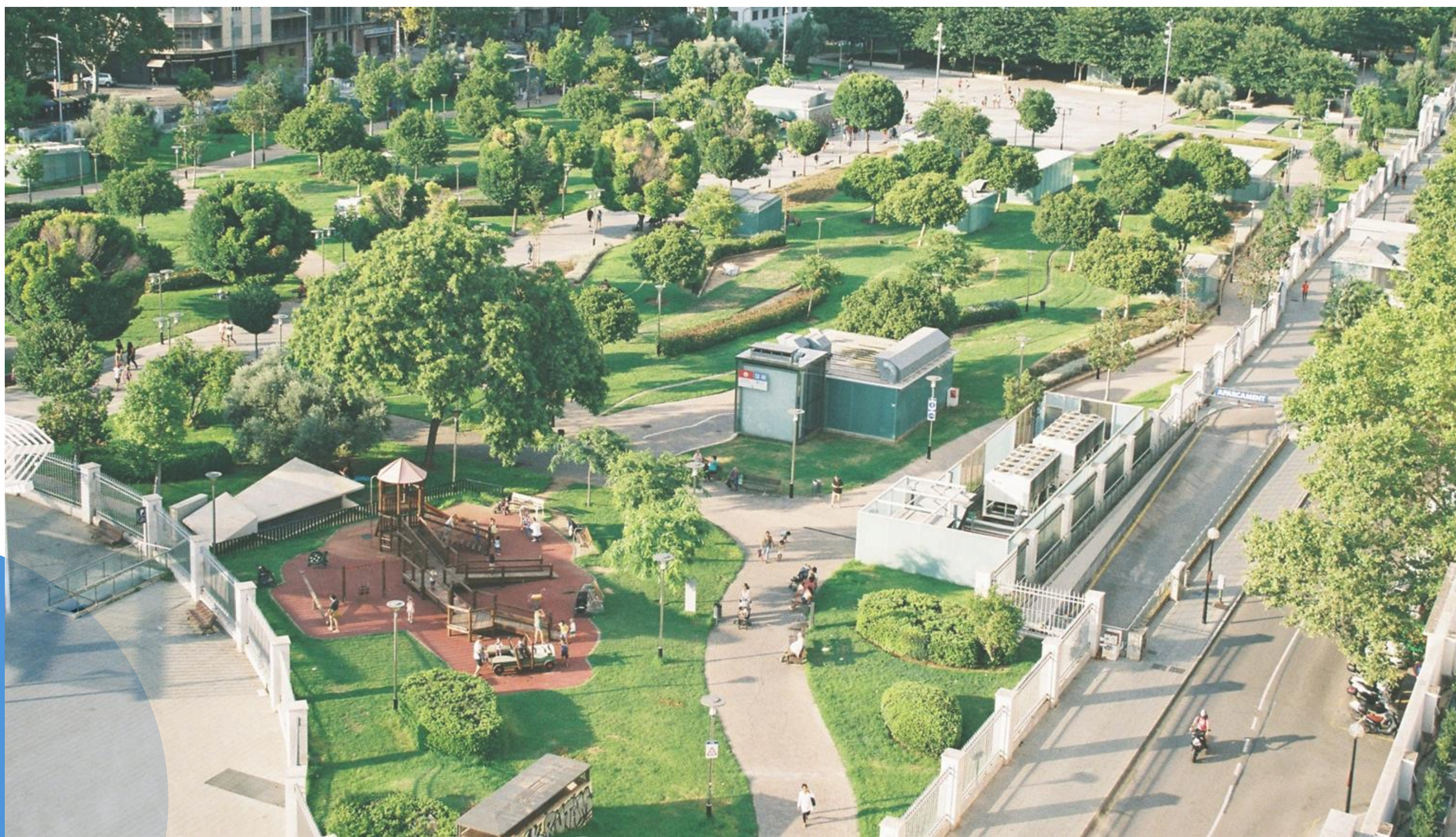


## STUDENT RESEARCH

# Rethinking green benefits in the post-COVID era: Considering green space planning from a social perspective

### SYNOPSIS

This research introduces an innovative model to evaluate the multifaceted social benefits of urban green spaces (UGS) using Geographic Information System (GIS) and Multi-Criteria Analysis (MCA). Bridging the post-pandemic need for equitable access, the model assesses health, social entertainment, and cultural values, drawing on global datasets, including open street maps and satellite imagery. Topic modelling on social media captures the cultural dynamics within these spaces, further refined through MCA. This universally applicable framework offers cities worldwide the tools for sustainable and inclusive planning, ensuring UGS contribute effectively to urban resilience and global well-being.



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### OBJECTIVE

To establish a scalable urban green space evaluation model that incorporates social benefits, enhancing global urban planning and community well-being.



### METHODOLOGY

Employ GIS technology and MCA frameworks to quantify green space values and refine models using Delphi-based expert interviews for urban planning recommendations.



### ESTIMATED RESEARCH LENGTH

3.5-year project, from initial model development and testing through to validation and discussion of findings in academic and planning communities.

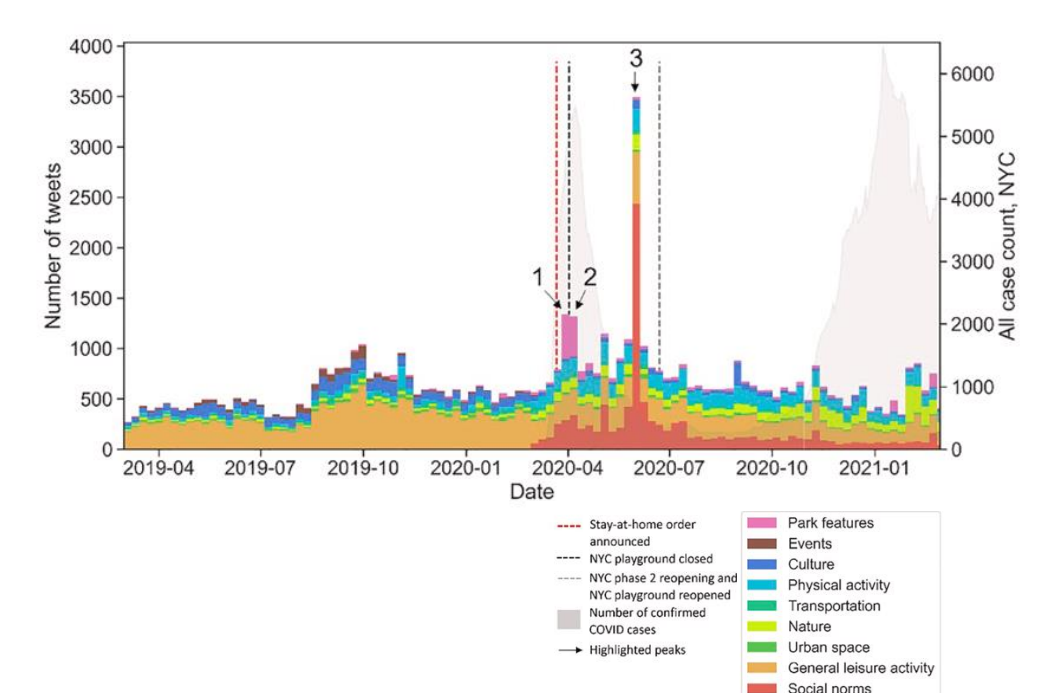
### REFERENCES

- Yu, R., et al. (2018). "Is Neighborhood Green Space Associated With Less Frailty? Evidence From the Mr. and Ms. Os (Hong Kong) Study."
- Tian, Y., et al. (2022). "Effects of Self-Rated Health Status on Residents' Social-Benefit Perceptions of Urban Green Space."
- Zhou, X., & Rana, M. M. P. (2012). "Social benefits of urban green space: A conceptual framework of valuation and accessibility measurements."

### BACKGROUND

Urban green spaces significantly affect ecological and social health, a fact underscored during the COVID-19 crisis. Current research often focuses narrowly on environmental or health impacts without integrating the broader social implications, such as equity of access and cultural significance. This study expands upon foundational work by Yu et al. (2018) and Tian et al. (2022), utilising advanced spatial analysis to holistically evaluate green spaces. By synthesising data across diverse global contexts and incorporating expert insights, the research aims to address the critical gap in inclusive urban planning. It responds to growing demands for methodologies that prioritise social justice within urban green space management, aiming to mitigate access disparities and promote a healthier, more integrated urban fabric.

### TOPIC MODELLING



### EXPECTED RESEARCH CONTRIBUTION

This research develops a cutting-edge model for urban green space evaluation that strategically prioritises equity and inclusivity, catering to post-pandemic urban development needs. By integrating health, social, and cultural dimensions, the model offers a comprehensive framework that not only enhances global urban living standards but also promotes equitable access to green spaces. This scalable and adaptable tool is designed to revolutionise urban planning processes, ensuring optimal green space distribution and fostering resilient, sustainable urban environments. The model's global applicability and open access to its methodologies encourage widespread adoption and international collaboration, it will serve as a vital resource for city planners and policymakers worldwide, facilitating the creation of more cohesive, environmentally sustainable communities. This research is poised to significantly impact the urban planning discourse, redefining how cities integrate green spaces to meet contemporary and future sustainability goals.

### ASSUMED OUTPUTS

