Supporting Information for

Literature Review Reveals a Global Access Inequity to Urban Green Spaces

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Quantitative models adopted to estimate the accessibility of urban green spaces developed from only measuring the "quantity" (the number or area of urban parks within a neighborhood) to "proximity" indicated by models calculating the distance to the nearest urban parks. In the context of proximity, researchers have made great efforts to improve the quantitative models. To address the issue that residents in a neighborhood might not go to the closest green space, researchers used travel friction in the gravity model, which could include all of the UGS, and quantifying the distance between each urban green space to this neighborhood. Accordingly, the two-step floating catchment area (2SFCA) model, Gaussian-based 2SFCA, and the comprehensive floating catchment area (CFCA) model have been widely used after 2010. The publication number on the topics of "quantity" and "proximity" kept grew in the recent decade (Figure S1). For "quality", the publication number has been substantially less than that of "quantity" or "proximity".

This file includes:

- Figure S1
- Table S1
- Table S2–S6

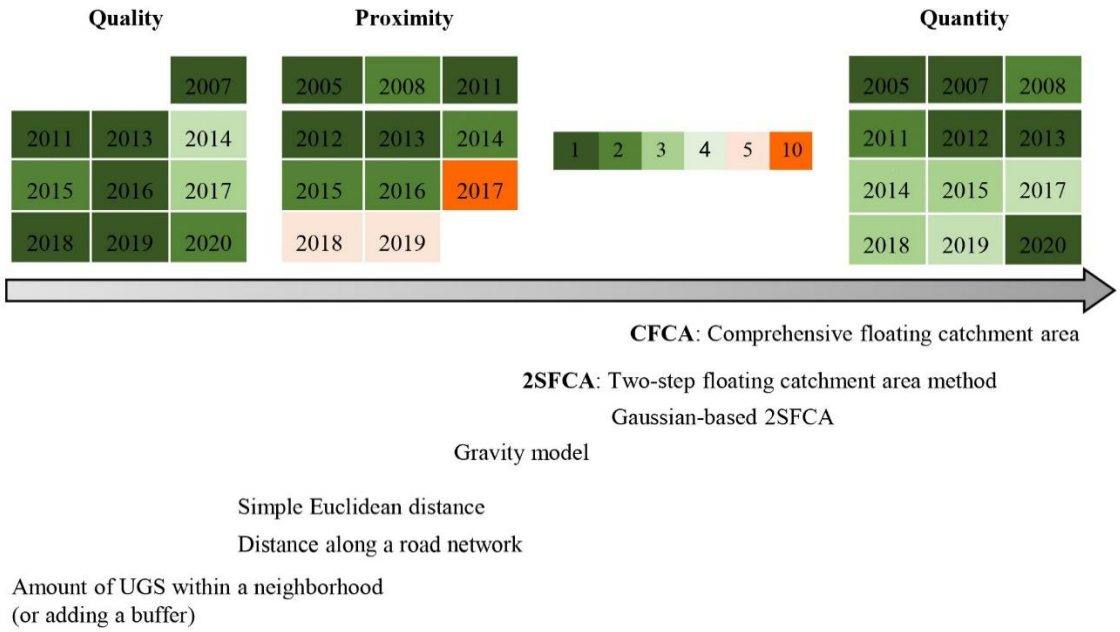


Figure S1. The time axis of quantitative models adopted for accessibility study and the number (in color) of publications for three typical aspects of access (quantity, proximity, and quality).

The 2SFCA model is developed using a spatially explicit catchment to measure the population demands and UGS supplies and their interactions. The Gaussian-based 2SFCA model is developed based on the 2SFCA to effectively delineate the deprived areas of accessibility. The CFCA model considers the UGS supplies with different weighting schemes based on the transportation modes and park types.

Table S1. The inertia and contribution of individual dimensions.

Dimension	Inertia	Proportion of inertia	
		Accounted for	Cumulative
Dim.1	0.019	24.01%	24.01%
Dim.2	0.015	19.31%	43.32%
Dim.3	0.013	15.97%	59.30%
Dim.4	0.008	10.59%	69.88%
Dim.5	0.008	9.82%	79.71%

Table S2. The statistics of variables for the correspondence analysis in Figure 3.

Features	**Dimension 1**		**Dimension 2**	
	Contribution (%)	**Coordinate**	**Contribution (%)**	**Coordinate**
Proximity	24.838	0.203	16.700	-0.149
Quality	31.950	-0.254	3.996	-0.080
Quantity	21.314	-0.192	8.103	0.106
Multiple_Measures_SES	3.541	-0.073	3.709	-0.067
Inequity	0.014	0.005	9.296	-0.106
City_scale	9.315	0.130	25.666	0.194
Cities_LMICs_Countries	1.230	0.050	31.061	0.224
Longitudinal_Analyses	0.009	0.005	0.572	-0.034
Multiple_Spatial_Scales	0.035	0.009	0.033	-0.008
Without_Interventions_Analyses	7.753	0.132	0.864	-0.040

Table S3. Number of observational studies per different measure of access to urban green space.

Urban green space access measures	Number of urban green space access measures	
	One measure of urban green space	Multiple measures of urban green space
Proximity	15	14
Quality	4	12
Quantity	9	18
Total	28	44

Table S4. Number of observational studies per different measure of SES.

Urban green space access measures	One aspect of SES			Multiple aspects of SES		
	Proximity	Quality	Quantity	Proximity	Quality	Quantity
One	5	0	2	10	4	7
Multiple	2	2	2	13	10	16
Total	7	2	4	23	14	23

Table S5. Number of observational studies that included intervention analysis per different measure of exposure to urban green space.

Number of urban green space exposure measures	Did not include intervention analysis			Performed intervention analysis		
	Proximity	Quality	Quantity	Proximity	Quality	Quantity
One	10	4	7	5	0	2
Multiple	12	12	16	2	0	2
Total	22	16	23	7	0	4

Table S6. Number of observational studies for each category of country level per different measure of urban green space access.

Number of urban green space access measures	High-income countries			Middle/Low-income countries		
	Proximity	Quality	Quantity	Proximity	Quality	Quantity
One	7	4	6	8	0	3
Multiple	8	6	10	6	6	8
Total	15	10	16	14	6	11

Table S7. Number of observational studies for each category of temporal scale assessment per different measure of exposure to urban green space.

Number of urban green space exposure measures	Cross-sectional analysis			Longitudinal analysis		
	Proximity	Quality	Quantity	Proximity	Quality	Quantity
One	14	4	8	1	0	1
Multiple	14	12	18	0	0	0
Total	28	16	26	1	0	1

Table S8. Number of observational studies for each category of spatial scale assessment per different measure of exposure to urban green space.

Number of urban green space exposure measures	Analysis at a single spatial scale			Analysis at multiple spatial scales		
	Proximity	Quality	Quantity	Proximity	Quality	Quantity
One	14	4	7	1	0	2
Multiple	14	12	18	0	0	0
Total	28	16	25	1	0	2