Assessing Urban Park Quality: A Systematic Literature Review of Metrics, Methods, and Equity Implications

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1. Introduction

1.1 Background

Parks are a unique form of managed public space that provide a variety of ecological, social, economic, and health benefits across diverse communities. Inspired by these benefits, a growing body of research has focused on measuring the quantity and distribution of parks across urban and urban-proximate landscapes. Studies focused on park quantity have generally found that a greater number of parks and a larger total park area are associated with improved physical and mental health, increased opportunities for physical activity (Bancroft et al., 2015; Edwards et al., 2023; Sturm & Cohen, 2014), and stronger social cohesion (Jennings et al., 2024). At the same time, park quantity studies also highlight persistent inequities in park provision, with marginalized communities often residing in areas with fewer parks (Wolch et al., 2005). These findings have established an empirical foundation for environmental justice literature by addressing the question of who has access to how much park space, a perspective grounded in distributive justice.

But research also suggests that another attribute of parks, park quality, might be an even more important predictor of usage and subsequent benefits (Cohen et al., 2013). A park's quality, including a diverse set of amenities, a safe environment, and programming aligned with community needs, shapes users' decisions to visit or not to visit (Lachowycz & Jones, 2013). Additionally, while park quantity studies typically address equity concerns through a single perspective (i.e., distributive justice), studies that account for park quality may integrate other dimensions of environmental justice such as procedural justice and recognition justice (Powers et al., 2024). For example, a community may have parks on a map, but those parks often lack amenities or programs that serve residents' needs and cultural values (Rigolon et al., 2018). Ultimately, examining park quality reframes equity from "how much" park space is allocated to better capturing the potential of how well parks are designed and programmed to meet the needs of diverse communities.

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Despite its significance, research on park quality remains relatively underdeveloped compared to studies of park quantity. This gap stems partly from the challenge of measuring park quality, a multidimensional construct shaped by diverse disciplinary priorities (e.g., biodiversity conservation in ecology, aesthetic and functional design in landscape architecture, and physical activity promotion in public health). Unlike quantity, which is often defined by straightforward metrics like park count or acreage, quality encompasses biodiversity, ecosystem services (e.g., air purification, carbon sequestration), amenities, safety, access, maintenance, and community programs (Corley et al., 2018; Knobel et al., 2019; Nguyen et al., 2021). This complexity creates methodological hurdles for researchers and contributes to the scarcity of comprehensive literature reviews in this area.

1.2 Research objectives

To address these research gaps, our systematic literature review tackles the challenge of defining and measuring park quality by investigating its multidimensionality and equity implications through an environmental justice framework. Specifically, our review has three main objectives:

1) Examine variations in how park quality is defined and conceptualized (across disciplines, geographical context, etc.)
2) Describe the ways in which various dimensions of park quality (biodiversity, safety, amenities, etc.) are measured at different spatial scales (such as individual parks, broader park system, etc.)
3) Analyze how park quality dimensions align with dimensions of environmental justice (not just distributive justice, but also procedural and recognitional justice).

This protocol outlines the objectives, eligibility criteria, and methodological procedures we will follow for the systematic review of urban park quality.

2. Article collection

2.1 Initial search criteria

We will include (a) peer-reviewed articles, (b) published in English, and (c) addressing at least one of our three objectives: defining and conceptualizing park quality, measuring its dimensions, or analyzing park quality in relation to environmental justice. Our focus is on studies that explicitly used the term park, but we will not exclude studies solely because they used the term greenspace. When greenspace is used to describe vegetated public spaces that are functionally equivalent to parks–that is, spaces primarily intended for human use and recreation—we will include those studies as well. This is particularly important for international studies, especially in non-U.S. contexts, where the term greenspace is often used in place of park. To capture the breadth of existing research on park quality, we will retain all article types at the screening stages, including empirical, methodological, theoretical, and literature review studies. At the data extraction stage, however, the scope of extraction varies depending on article type (see section 4.1 and Table 3 for details).

2.2 Search strategy

Search terms were developed in consultation with a librarian specializing in systematic reviews (Table 1). We will query the Web of Science and Scopus databases, which are also used in previous greenspace literature reviews (Knobel et al., 2019). The search will be restricted to records containing “park”, “greenspace”, and “quality” in the title or abstract, while the NOT operator excludes irrelevant topics such as “business park” and “sleep quality”. The search results will be exported as RIS files and imported into Covidence, a software widely used in systematic reviews to facilitate article screening and review management.

Table 1. Search terms

Database	**Search Term**
Scopus	TITLE-ABS (("park" OR "parks" OR "green space*" OR "greenspace*") AND (quality OR qualities)) AND NOT TITLE-ABS ("national park*" OR "parking" OR "business park*" OR "science park*" OR "industrial park*" OR "innovation park*" OR "park and ride" OR "park-and-ride" OR "e-park*" OR "theme park*" OR "car park*" OR "quality of life" OR "sleep quality" OR "quality of care") AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re")) AND (LIMIT-TO (LANGUAGE , "English"))
Web of Science	("park" OR "parks" OR "green space*" OR "greenspace*") AND (quality OR qualities) NOT ("national park*" OR "parking" OR "business park*" OR "science park*" OR "industrial park*" OR "innovation park*" OR "park and ride" OR "park-and-ride" OR "e-park*" OR "theme park*" OR "car park*" OR "quality of life" OR "sleep quality" OR "quality of care")

3. Stepwise screening process

We will organize the screening process into three stages: title, abstract, and full text. Given the large number of articles that will be collected, this stepwise approach will efficiently reduce the pool by filtering out irrelevant studies at the title and abstract stages, leaving a manageable set for the more time-intensive full-text review. We will apply criteria based on the level of detailed information available at each stage.

3.1 Title screening

At the title stage, we will filter out studies clearly outside our scope, focusing on two main criteria from Table 2: whether the article addresses appropriate types of parks and whether the term quality refers specifically to parks rather than unrelated subjects. For the purposes of this review, we define urban parks as publicly accessible green spaces located within urbanized areas. This definition encompasses municipal and community parks, neighborhood and pocket parks, as well as state parks when situated within urban boundaries. Articles will be excluded if their titles indicated:

- **Non-urban or special-purpose parks**: national park, marine park, archaeological park, geological park, agricultural park
- **Commercial, fee-based, or access-restricted spaces**: golf course, zoological park, water park, dinosaur park, night park, sky garden, botanical garden
- **Non-vegetated or industrial spaces**: vacant lot, solar park, wind park, chemical park, fuel park, power park, wave-energy park
- **Predominantly blue spaces**: lake, blue space, basin
- **Other irrelevant spaces or concepts**: residential environment, mobile home park, nature-based tourism

Additionally, an article will be excluded if the term "quality" clearly referred to a subject other than parks (e.g., "quality of life", "sleep quality"). Conversely, articles will be advanced to the abstract screening stage if the term "quality" is absent or its relevance to parks is ambiguous and a specific relationship to quality could not be discerned from the title alone.

The lead author will conduct the title screening based on the above criteria. To enhance consistent application of these criteria, the lead author and one co-author will screen an initial set of 100 articles separately, then discuss results to establish a high level of agreement. Given that this title screening is a straightforward process, involving checking the presence or absence of specific keywords in the title, this initial calibration is deemed sufficient for ensuring reliability throughout the process. The entire process will be managed using Covidence, with its built-in term-highlighting feature providing a visual aid that facilitates this task.

3.2 Abstract screening

At the abstract stage, our goal is to apply the remaining eligibility criteria from Table 2 that could not be reliably assessed from titles alone. While title screening effectively excluded many irrelevant studies, certain screening decisions require additional context provided in abstracts. Specifically, we will assess whether the term quality is explicitly used to describe parks (Descriptor of "Quality"), whether the study examines parks in Europe, North America, or Australia (Geographic Scope), whether the parks are primarily intended for human use and recreation (Intended Use), whether the dimensions of park quality include a link to human use (Quality Dimension), and whether park quality is a central focus of the study rather than mentioned only tangentially (Focus on Park Quality).

Accordingly, we will exclude studies that used related but distinct concepts such as "satisfaction" or "attractiveness" in place of the explicit term "quality". We will also exclude studies that focused solely on ecological or environmental quality unless they explicitly connected these qualities to human use. To ensure that included studies have a clear focus on park quality, we only will retain those in which park quality was directly measured or analyzed in the abstract. Studies where park quality is mentioned only tangentially (for example, in the introduction or as an implication for future research) will be excluded. We will also restrict the geographic scope to

parks in Europe, North America, and Australia to ensure a coherent focus on Western contexts, where urban planning traditions and cultural understandings of greenspace are broadly comparable. By doing so, we avoid the heterogeneity that can arise in non-Western contexts where greenspaces carry different social, ecological, or functional meanings (Özgüner, 2011; Wheeler, 2013).

To manage the large volume of abstracts, we will employ a Large Language Model (LLM), a tool of growing use in systematic literature reviews for its ability to accelerate the labor-intensive screening process (Fabiano et al., 2024; Ge et al., 2024). Our use of the LLM will follow the "human-in-the-loop" framework for LLM-assisted review proposed by Li et al. (2025). The process begins with a calibration phase conducted on a randomly selected set of 50 abstracts. In this phase, the LLM (Google's Gemini 2.5 Pro, accessed via Google AI Studio) applies the predefined eligibility criteria, while the lead author independently screens the same abstracts to identify disagreements. The specific reasons for any discrepancies will be systematically recorded and used to iteratively refine the prompts. This cycle will be repeated until the LLM and the human reviewer achieve a high level of inter-rater reliability on the final inclusion/exclusion decisions (Cohen's Kappa > 0.6). Once this threshold is met, the finalized prompt will be applied to the remaining abstracts.

3.3 Full text screening

When abstracts do not provide sufficient information to confirm eligibility (for example, the study's location or the specific way quality is measured), the final decision will be deferred to full-text review – the next stage in the review process. At this stage, we will apply the remaining criteria from Table 2 that require complete information, including geographic scope, intended use, dimensions of park quality, and whether park quality is the central focus of the study. Full-text screening will be conducted using the same LLM-assisted review process as at the abstract stage. The finalized prompt, once it achieves high inter-coder reliability with the human reviewer (Cohen's Kappa > 0.6), will be applied to full texts.

Table 2. Eligibility criteria across screening stages

Category	Inclusion	Exclusion	Title	Abstract	Full Text
Park Type	Urban parks or publicly accessible urban greenspaces	Non-urban, special-purpose, commercial/fee-based, industrial, or blue spaces	✓	✓	
Descriptor of "Quality"	Term "quality" refers to parks or their features	Term "quality" does not refer to parks (e.g., quality of life, data quality) or refers to related but distinct concepts (e.g., usability, satisfaction)	✓	✓	
Geographic Scope	Parks in Europe, North America, or Australia; parks located in urban areas	Studies examining parks in other regions; parks located in rural settings		✓	✓

Intended Use	Parks and greenspaces primarily intended for human use and recreation	Conservation-oriented greenspaces (e.g., forests, wetlands, protected areas) where human use and recreation are secondary		✓	✓
Quality Dimension	Studies addressing any dimension of park quality, including ecological/environmental quality if explicitly linked to human use	Studies focusing solely on environmental/ecological quality (e.g., biodiversity, vegetation, soil, water, air quality, soundscape) without an explicit link to human use		✓	✓
Focus on Park Quality	(a) Empirical or methodological studies where park quality is explicitly measured (typically in the Method section) (b) Non-empirical studies (e.g., literature reviews, theoretical papers) where park quality itself is the main subject of analysis or conceptualization	Studies where park quality is neither measured nor analyzed, but only mentioned tangentially (e.g., in the introduction or as a suggestion for future research).		✓	✓

4. Data extraction

After completing the three-stage screening process, the next step of the review will be data extraction from the set of studies that passed full-text screening. Guided by the coverage outlined in Table 3, this stage will focus on capturing both general study characteristics and specific variables related to park quality and its connections to environmental justice.

4.1 Scope of data extraction by article type

The scope of data extraction varies depending on the type of article. The variables are grouped into five categories (Sections A-E), as defined in Table 4. Basic attributes (Section A) and research design information (Section B) will be extracted from all articles in the first step. These variables will then be used to classify each study as empirical, methodological, theoretical, or literature review. Based on this classification, additional coding proceeded sequentially. Quality dimensions (Section C) will be coded only for empirical, methodological, and theoretical studies, which provide conceptual development or empirical evidence related to park quality. Quality dimensions will not be coded for literature reviews because they primarily synthesize existing evidence rather than generating new empirical findings. Outcomes (Section D) and equity variables (Section E) will be coded for empirical and methodological studies, as these are the types that report evidence on park quality outcomes and their distributional implications. The mapping of article types to extraction sections is summarized in Table 3.

Table 3. Data extraction coverage by article type

Article type	A. Basic Attributes	B. Research Design	C. Quality Dimensions	D. Outcomes	E. Equity
Empirical	✓	✓	✓	✓	✓
Methodological	✓	✓	✓	✓	✓
Theoretical	✓	✓	✓		
Literature Review	✓	✓			

Similar to the abstract and full-text screening, data extraction will also be conducted using an LLM-assisted process. An LLM will perform the first-pass extraction with a structured prompt based on the variables in Table 4, and its outputs will be validated against a human-coded sample and iteratively refined to ensure reliability, using the same intercoder agreement threshold (Cohen's Kappa > 0.6).

Table 4. Information to be collected from full text review

Variable	**Description**
A. Basic Attributes	
1. Title	Title of the study
2. Lead Author	First author of the study
3. Year	Year that the study was published
4. Journal	Name of the journal where the study was published
5. County	Country or countries where parks/greenspaces are located. If there are multiple countries, separate them with semicolons.
6. City	City or cities where parks are located. If there are multiple cities, separate them with semicolons.
7. Spatial Scale of Analysis	Spatial scope at which park/greenspace quality is examined. Choose one of the following categories: • Single greenspace/park • Multiple greenspaces/parks (two or more parks within a defined area such as a neighborhood or city) • Entire network or system (e.g., all greenspaces/parks across a metropolitan area)
8. Number of Parks	How many distinct park/greenspace units were included in the study's analysis? Enter a numeric value; NA if not appliable.
B. Research Design	
9. Article Type	Categorize each study based on its primary objective or research question. Choose ALL that apply: • *Empirical*: Studies that apply established tools or methods to evaluate specific parks, greenspaces, or contexts, often to test validity or generate empirical findings.

	• *Methodological:* Studies that develop new instruments, metrics, or indices for evaluating park or greenspace quality. • *Literature Review*: Studies that synthesizes existing research to identify trends and offer new perspectives. • *Theoretical*: Studies that develop new theories, models, or conceptual frameworks • *Other* (please specify: _____)
10. Data Collection Method	Categorize each study based on its data collection method. Choose ALL that apply: • On-site audit or observation • Questionnaire surveys • Interviews and/or focus groups • Geospatial data and/or remote sensing • Ecological measurement • Citizen science and/or user-generated data • Literature and document review • Research through design (often implemented in design studios) • Other (please specify: _____)
11. Data Analysis Method	Categorize each study based on its data analysis method. Choose ALL that apply: • *Quantitative Statistical Modeling*: Focuses on quantifying statistical relationships between variables (e.g., correlation, regression) or testing for significant differences between groups. The primary goal is to explore and explain associations within the data. • *Qualitative Content & Thematic Analysis*: Involves interpreting textual data (from interviews, focus groups, open-ended surveys, etc.) to identify and analyze underlying themes, patterns, and meanings. The goal is to understand the deep context, perceptions, and narratives embedded in the qualitative data. • *Spatial Analysis*: Utilizes geographic location data as a core component to analyze spatial patterns. This includes examining geographic distribution, density, accessibility, clustering, and spatial autocorrelation. • *Causal Inference & Experimental Design*: Focuses on inferring the causal effect of a specific intervention or change in conditions on an outcome. The goal is to rigorously evaluate this effect, often by establishing treatment and control (or comparison) groups. • *Computational & AI-based Analysis*: Employs computational algorithms, such as machine learning and natural language processing, to learn from and identify patterns within large-scale, often unstructured, data (e.g., text, images). This approach aims to predict outcomes or automatically classify complex information. • Other (please specify: _____)
C. Quality Dimensions	
12. Ecological/ Environmental Dimensions	Which aspects of ecological/environmental quality of parks do the study's finding address? Choose ALL that apply. • Biodiversity and/or habitat • Vegetation and/or flora • Soil quality

	• Water quality and/or hydrology • Air quality and/or microclimate • Acoustic environment & soundscape • Other
12-1. Other Eco/Env Dim	If "Other" is selected, please specify the ecological/environmental aspect addressed: _____
13. Physical/ Functional Dimensions	Which aspects of physical/functional quality of parks do the study's findings address? Choose ALL that apply. • Facilities and/or amenities • Maintenance and/or cleanliness • Safety and/or security • Design and/or aesthetics • Size and/or acreage • Internal accessibility: how easily people can move around inside the park, including ADA and disability access, pathways, signage, and internal connectivity • External accessibility: how easily people can reach and recognize the park from outside. This includes physical access (e.g., proximity to transit stops, pedestrian/cycling routes, parking availability) as well as visual access (e.g., the visibility of entrances, signage, and whether the park is noticeable or hidden from surrounding areas). • Other
13-1. Other Phy/Fun Dim	If "Other" is selected, please specify the physical/functional aspect addressed: _____
14. Social/ Experiential Dimensions	Which aspects of social/experiential quality of parks do the study's findings address? Choose All that apply. • Perceived quality • Recreation and/or leisure opportunities/programming • Social interactions and/or community-building • Cultural and/or educational features (events, information sharing, etc.) • Stewardship behavior (individuals investing time or money through volunteering or personal commitment to park maintenance and care) • Other
14-1. Other Soc/Exp Dim	If "Other" is selected, please specify the social/experiential aspect addressed: _____
15. Management/ Governance Dimension	Which aspects of management/governance quality of parks do the study's findings address? Choose All that apply. • Planning and/or policy (formal strategies, official goals, and regulatory rules that guide the greenspace's creation and ongoing operation) • Citizen participation and/or collaboration (institutionalized processes for involving residents and stakeholders in the planning, design, and management decisions for the greenspace) • Funding and/or resource allocation (financial investments, budgeting, and distribution of staff and materials necessary to build and sustain the greenspace) • Other

	Management/governance quality refers to institutional capacity and operational excellence that ensure a park provides its benefits.
15-1. Other Man/Gov Dim	If "Other" is selected, please specify the management/governance aspect addressed: _____
D. Outcome **Definitions of ecosystem service categories are adapted from the Millennium Ecosystem Assessment (2005)*	
16. Regulating Ecosystem Services	Which regulating ecosystem service (RES) outcomes do the study's findings address? Choose ALL that apply. RES is defined as benefits obtained from the regulation of ecosystem processes. • Climate regulation • Flood regulation/stormwater management • Disease regulation • Water purification • Air purification • Habitat provision • Other
16-1. Other RES	If "Other" is selected, please specify the regulating ecosystem service outcomes addressed: _____
17. Cultural Ecosystem Services	Which cultural ecosystem service (CES) outcomes do the study's findings address? Choose ALL that apply. • *Aesthetic*: beauty or aesthetic appreciation people find in various aspects of ecosystems, as reflected in the support for parks, scenic drives, and the selection of housing locations. • *Spiritual*: spiritual and religious values to ecosystems or their natural components, providing profound significance and meaning • *Educational*: components and processes providing the basis for both formal and informal education, offering learning opportunities • *Recreational*: benefits people derive from ecosystems when choosing natural or cultivated landscapes for leisure activities and ecotourism • Other CES is defined as nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences.
17-1. Other CES	If "Other" is selected, please specify the cultural ecosystem service outcomes addressed: _____
18. Provisioning Ecosystem Services	Which provisioning ecosystem service (PES) outcomes do the study's findings address? Choose ALL that apply. • Food • Fresh water • Wood and fiber • Fuel • Other PES is defined as products obtained from ecosystems.
18-1. Other PES	If "Other" is selected, please specify the provisioning ecosystem service outcomes addressed: _____

19. Health and Well-being	Which health and well-being outcomes do the study's findings address? Choose ALL that apply. • Physiological health (e.g., cardiovascular outcomes, obesity rates, biomarkers, physical activity–related health effects) • Psychological health (e.g., affect, stress, cognition, subjective well-being)
20. Social & Community Outcomes	Which social & community outcomes do the study's findings address? Choose ALL that apply. • Use, engagement, recreation • Social interaction, cohesion • Equity, environmental justice • Stewardship, education • Other Use, engagement, recreation refers to *direct* outcomes stemming from individuals' own use of parks. The other three categories represent *indirect* outcomes, emerging at the community or societal level and mediated through parks as spaces that facilitate broader social processes.
20-1. Other soc & com outcome	If "Other" is selected, please specify the social & community outcomes addressed: _____
21. Economic Outcomes	Which economic outcomes do the study's findings address? Choose ALL that apply. • Property value growth/capitalization • Economic impacts of recreation & tourism • Healthcare & societal cost savings • Economic benefits to individuals (e.g., financial wellbeing) • Return on investment (ROI): comprehensive evaluation of overall benefits relative to costs) • Other
21-1. Other economic outcome	If "Other" is selected, please specify the economic outcomes addressed: _____
E. Equity	
22. Target User Groups	Which user or population group do the study's findings address? Choose ALL that apply. • None (general public / unspecified users) • Age (e.g., youth, elderly) • Race/ethnicity • Income • Gender • Health condition (e.g., individuals with obesity, people with disability or neurodivergence) • Specific activity (e.g., mountain bikers, soccer players, dog walkers) • Housing status (e.g., single family home, apartment dweller, unhoused) • Other
22-1. Other target user group	If "Other" is selected, please specify the target user group addressed: _____

23. Distributive Justice	Which quality dimensions do the study's findings show are unevenly distributed across different population groups or geographic areas? Choose ALL that apply. *(Refer back to Section C, Quality Dimensions [Q12–15] for examples of each category.)* • Ecological/Environmental • Physical/Functional • Social/Experiential • Management/Governance
23-1. DJ detail	For each quality dimension you checked above, please elaborate on the specific quality aspects the finding addresses. *(Refer back to the subcategories listed under Section C: Quality Dimensions — Q12 Ecological/Environmental, Q13 Physical/Functional, Q14 Social/Experiential, and Q15 Management/Governance — for guidance on relevant aspects.)*
24. Procedural Justice	Which quality dimensions does the study's findings examine from a procedural justice perspective by involving diverse stakeholders in decision-making processes? Choose ALL that apply. *(Refer back to Section C, Quality Dimensions [Q12–15] for examples of each category.)* • Ecological/Environmental • Physical/Functional • Social/Experiential • Management/Governance
24-1. PJ detail	For each quality dimension you checked above, please elaborate on the specific quality aspects the finding addresses. *(Refer back to the subcategories listed under Section C: Quality Dimensions — Q12 Ecological/Environmental, Q13 Physical/Functional, Q14 Social/Experiential, and Q15 Management/Governance — for guidance on relevant aspects.)*
24-2. Participation Level	Indicate the citizen participation levels reflected in the study's findings, regardless of the specific quality dimension. In other words, if a participation level is mentioned in relation to any quality dimension, record it at the overall study level rather than coding separately for each dimension in Section C. Choose ALL that apply. The six levels are broadly grouped into "Tokenism" and "Citizen Power" rungs of Sherry Arnstein (1969)'s Ladder of Citizen Participation. **Procedural Participation (Tokenism)**: Opportunities for participation are provided, but little to no real power is transferred to citizens; can take one of the following forms (rungs in Arnstein's term): • *(Level 1) Informing*: A one-way flow of information from officials to citizens with no channel for feedback or negotiation. • *(Level 2) Consultation*: Public opinion is invited through surveys or hearings, but there is no assurance it will be taken into account. • *(Level 3) Placation*: A few citizens are placed on advisory boards but can be easily outvoted and overruled by powerholders. **Substantive Participation (Citizen Power)**: Citizens have genuine negotiating power and can substantively influence the decision-making process and its outcomes; can take one of the following forms (rungs in Arnstein's term):

	• *(Level 4) Partnership*: Power is redistributed through negotiation, allowing citizens and powerholders to share decision-making responsibilities. • *(Level 5) Delegated Power*: Citizens achieve dominant decision-making authority over a particular plan or program. • *(Level 6) Citizen Control*: Citizens govern a program or institution entirely, holding full managerial power over funds and policy.
24-3. Participation Outcome	If the study examines participatory processes, does it assess whether they produce tangible improvements in park quality across any quality dimension listed in Section C? In other words, record whether the study links participation to actual improvements in any aspect of park quality, rather than focusing only on process outcomes such as participant satisfaction. If no participation level is reported in 24-2, enter NA. (Yes/No)
25. Recognitional Justice	Which of the following quality dimensions does the study address in terms of recognizing (or misrecognizing) different groups and their cultural identities, values, and perspectives? Choose ALL that apply. *(Refer back to Section C, Quality Dimensions [Q12–15] for examples of each category.)* • Ecological/Environmental • Physical/Functional • Social/Experiential • Management/Governance *Recognition*: Examines how park features reflect or affirm a group's cultural identities, values, or perspectives. *Misrecognition*: Examines how park features ignore, exclude, or devalue a group's cultural identities, values, or perspectives.
25-1. RJ detail	For each quality dimension you checked above, please elaborate on the specific quality aspects the finding addresses. *(Refer back to the subcategories listed under Section C: Quality Dimensions — Q12 Ecological/Environmental, Q13 Physical/Functional, Q14 Social/Experiential, and Q15 Management/Governance — for guidance on relevant aspects.)*

Once data extraction is complete, our analysis should reveal the various ways that park quality is defined and measured, highlighting opportunities to advance environmental justice and inform the ways that parks are designed and programmed to meet the needs of diverse communities.

5. Project Timeline (expected)

- August to mid-September 2025: Revise the protocol based on co-author feedback and submit
- Mid-September to mid-October 2025: Conduct the full-text review
- Mid-October to mid-November 2025: Prepare the manuscript draft
- Mid-November to mid-December 2025: Revise and refine manuscript
- Late December 2025: Submit the manuscript to a journal

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