Peer review process documentation

of the article

Perceived Safety and Urban Green Space Attendance: A Narrative Review

by

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Review Round 1

Comments by Reviewer A

Reviewer Comments

For author and editor

Brief summary and general evaluation

The manuscript under review is a narrative review of studies investigating the relationship between (perceived) safety and attendance of urban green spaces (UGS). The topic is timely and relevant for environmental psychology, as safety perceptions are often cited as a relevant variable impacting green space use. The manuscript makes a useful contribution by synthesizing 18 studies across different contexts and methodologies. However, the manuscript requires substantial revision. In particular, the methods and results sections need to be more transparent and systematic, and the limitations of the review should be discussed more thouroughly. Open science practices are insuffiently supported. English language and style should also be revised for clarity.

Major Issues

Methods:

- The methods section lacks sufficient detail for replication. Please report the full search query, including keywords and Boolean operators, or further applied restrictions. The date(s) of the literature search should be stated explicitly.
- The process of study selection is not sufficiently described: Who conducted the screening? Were multiple reviewers involved to minimize bias? How were disagreements resolved?
- It is unclear whether any quality appraisal of included studies was conducted. At minimum, please discuss the absence of such an appraisal as a limitation.
- A preregistration is mentioned in the manuscript "Open science statement", but not mentioned in the methods section. Unfortunately, I could not find a corresponding, accessible record on OSF. Please provide a correct link, or clarify if the review was not preregistered.

Results:

- Section 3.1 could be strengthened by summarizing findings from the table also in the text, such as study contexts and study types (qualitative vs. quantitative). Further, there appear to be some contradictions between the synthesis table and the narrative text. For example, the table provides information on how safety was measured, whereas the text states that most studies provided little or no detail. Please align the narrative synthesis more with the evidence presented in the table.
- In some places (lines 287–295), results are mixed with interpretations. Please ensure that interpretation is reserved for the discussion section.
- Section 3.2 primarily restates study findings. Please provide stronger synthesis: What common themes emerge across studies? Are there consistent patterns or do they diverge by context, measure, or study design? Stating the number of studies out of the 18 synthesized studies which present specific evidence

would add clarity. This result - "In the qualitative studies, safety consistently emerged as a key theme." - may be misleading, as including the variable safety was an inclusion criterion

Discussion:

- Some conclusions are dificult to follow, particularly regarding the measurement of safety. The statement that it is "impractical to develop a single scale capturing all safety concerns" Line 377-379) could be nuanced—multidimensional scales can capture a broad construct.
- Please add relevant references (e.g., lines 328–330, "To enhance comparability, it is advisable to focus on the most commonly studied UGS characteristics, such as size, accessibility, and quality").
- Limitations should be expanded to include methodological weaknesses of included studies and the lack of quality appraisal.

Open Science:

- Currently, open science practices are insufficiently reported. Please explicitly state in the text whether the review was preregistered (with accessible link). If available, provide supplementary materials (e.g., complete synthesis table, search strings, list of excluded studies, etc.), and what measures were taken to ensure transparency and reproducibility. Without this, the manuscript is unlikely to meet the journal's standards.

Minor Issues

Introduction*:*

- In line 99, said evidence should be cited (g., recent reviews on UGS and health)
- The section on the definition of "green space" (lines 110–122) should be clarified and revised with reference to much cited sources (e.g., WHO).
- Research question 2 (line 166) could be clarified: is the aim to synthesize all study findings or only those regarding associations between safety perception and UGS attendance?

Methods:

- The synthesis approach should be made more explicit (e.g., narrative synthesis) and a description should be added.

Results:

- Results section (lines 201–204) should present detail on attendance measures as part of addressing Research Question 1a.

For editor only

The review manuscript addresses a relevant topic and could become publishable after substantial revision. However, especially the methodological reporting is currently too vague, particularly regarding search strategy, study selection, and synthesis and does not adhere to best-practice-guidelines regarding review articles. The open science practices are not adequately addressed: preregistration not mentioned in the main text, not accessible, and

no supplementary materials are provided. I would recommend major revisions with a clear requirement that open science standards (search strings, excluded studies, preregistration) be met in the revision.

Reactions to Reviewer A

Reviewer A:

Brief summary and general evaluation

The manuscript under review is a narrative review of studies investigating the relationship between (perceived) safety and attendance of urban green spaces (UGS). The topic is timely and relevant for environmental psychology, as safety perceptions are often cited as a relevant variable impacting green space use. The manuscript makes a useful contribution by synthesizing 18 studies across different contexts and methodologies. However, the manuscript requires substantial revision. In particular, the methods and results sections need to be more transparent and systematic, and the limitations of the review should be discussed more thouroughly. Open science practices are insuffiently supported. English language and style should also be revised for clarity.

Thank you for the time you devoted to review this manuscript, your remark and suggestions. We have addressed each comment point by point and hope that our revisions satisfactorily respond to all issues raised. All changes are highlighted in blue in the revised manuscript.

OSF link : https://osf.io/32876/overview?view_only=fd082904a86f4af9a83546cf18c54bd4

Major Issues

Methods:

- The methods section lacks sufficient detail for replication. Please report the full search query, including keywords and Boolean operators, or further applied restrictions. The date(s) of the literature search should be stated explicitly.
- The process of study selection is not sufficiently described: Who conducted the screening? Were multiple reviewers involved to minimize bias? How were disagreements resolved?
- It is unclear whether any quality appraisal of included studies was conducted. At minimum, please discuss the absence of such an appraisal as a limitation.
- A preregistration is mentioned in the manuscript "Open science statement", but not mentioned in the methods section. Unfortunately, I could not find a corresponding, accessible record on OSF. Please provide a correct link, or clarify if the review was not preregistered.

Thank you for these comments. This paper was intentionally designed as a narrative review, rather than as a systematic or scoping review. Our initial decision not to report the Methods section in a highly standardized or exhaustive manner was motivated by the concern of not misleading readers regarding the intended scope and level of systematicity. In response to this comment, we have now explicitly clarified the rationale for choosing a narrative review format (see the end of the Introduction section, p. 4).

That said, we agree that transparency regarding the methodological process remains valuable. Accordingly, we have substantially increased the level of detail provided in the Methods section and, to further enhance methodological transparency, made additional materials openly available on OSF, including the search strategies for both databases, the detailed inclusion and exclusion criteria, and the complete list of studies excluded at the full-text screening stage together with their corresponding reasons for exclusion. Should the journal prefer, these materials could also be included as supplementary appendices to the manuscript instead of, or in addition to, being hosted on OSF.

We also explicitly state that the screening process was conducted by a single author. This decision is consistent with common practice in narrative reviews, where dual screening is not systematically required, and was also influenced by practical constraints. However, we fully acknowledge that single-reviewer screening increases the risk of selection bias compared to systematic reviews, and this limitation is now discussed in the Limitations section.
Similarly, no formal quality appraisal of the included studies was conducted. Given the narrative scope of the review and the substantial heterogeneity in study designs, contexts, and outcome measures, the application of a single standardized quality appraisal tool was not considered appropriate. Nonetheless, we agree that the absence of a formal quality assessment constitutes a limitation, even within a narrative review, and this point is now also explicitly acknowledged and discussed in the Limitations section.

Finally, this review was not preregistered. Because narrative reviews rely on an iterative and interpretative analytic process, preregistration of a fixed protocol is not well suited to this type of review. Transparency and rigor were therefore ensured through explicit methodological clarification within the manuscript and by making the search strategy and related materials openly available on OSF.

Taken together, we hope that these clarifications and revisions improve the transparency and clarity of the methodological approach, while remaining fully consistent with the narrative nature and intended scope of the review.

Results:

- Section 3.1 could be strengthened by summarizing findings from the table also in the text, such as study contexts and study types (qualitative vs. quantitative). Further, there appear to be some contradictions between the synthesis table and the narrative text. For example, the table provides information on how safety was measured, whereas the text states that most studies provided little or no detail. Please align the narrative synthesis more with the evidence presented in the table.

We have substantially revised the Results section and added two additional subsections: one focusing on the study selection process (Section 3.1) and another describing the characteristics of the included studies (Section 3.2). These additions allow for a clearer contextualization of the review findings and ensure closer alignment between the narrative text and the information presented in Table 1.

In addition, we revised the description of how perceived safety was measured in order to resolve the apparent inconsistencies between Table 1 and the narrative text (see Section 3.1.1 – "Indicators used to assess UGS' perceived safety"). More generally, the Results section was thoroughly reviewed to improve consistency and correspondence between the table and the textual description of the findings.

- In some places (lines 287–295), results are mixed with interpretations. Please ensure that interpretation is reserved for the discussion section.

We carefully revised the entire Results section to ensure a clearer separation between the reporting of findings and their interpretation. The Results section now focuses strictly on describing the main findings reported in the included studies, while interpretative, evaluative, or methodological considerations have been relocated to the Discussion where appropriate. Thank you for highlighting it.

- Section 3.2 primarily restates study findings. Please provide stronger synthesis: What common themes emerge across studies? Are there consistent patterns or do they diverge by context, measure, or study design? Stating the number of studies out of the 18 synthesized studies which present specific evidence would add clarity. This result - "In the qualitative studies, safety consistently emerged as a key theme." - may be misleading, as including the variable safety was an inclusion criterion

Thank you for this comment. We revised the Section (now numbered 3.3. "Review findings") to strengthen the synthesis across studies and to move beyond a study-by-study description. We also clarified the presentation of qualitative findings to avoid any misleading implication that safety "emerged" independently, given that perceived safety was part of the inclusion criteria. Instead, the revised text emphasizes how perceived safety is described as a central, rather than secondary, factor shaping UGS use.

Regarding the synthesis of quantitative findings, we addressed this comment by shifting the focus from counting studies to examining tested relationships between perceived safety and UGS attendance. While reporting the number of studies supporting specific findings may appear informative, this approach is complicated by the fact that several studies test multiple outcomes, subgroups, and models, sometimes yielding mixed results within the same study. To address this complexity in a transparent way, we created a detailed Excel file summarizing all quantitative studies included in the review, in which each tested relationship is treated as the unit of analysis.

For each relationship, the file documents the study design, the type of attendance measure (self-reported vs observational, and visit frequency vs duration of stay), the population subgroup examined (when applicable), and the statistical significance of the association. This structure allowed us to systematically assess whether consistent patterns could be identified across studies. The revised Section reflects these observations and shows that, beyond the consistent absence of significant associations in studies relying on direct observational attendance measures, quantitative findings are largely heterogeneous and do not converge toward stable patterns across contexts, measures, or study designs.

Finally, this file is intended not only to support our own synthesis, but also to enable readers to further explore the evidence base. By making this dataset openly available as supplementary material on OSF, readers can reclassify results according to alternative criteria, examine subsets of relationships, and assess for themselves whether additional patterns emerge under different analytical groupings. The Excel file will be made openly available on OSF upon publication.

The excel File can be found here: https://osf.io/32876/overview?view_only=fd082904a86f4af9a83546cf18c54bd4

Discussion:

- Some conclusions are dificult to follow, particularly regarding the measurement of safety. The statement that it is "impractical to develop a single scale capturing all safety concerns" Line 377-379) could be nuanced—multidimensional scales can capture a broad construct.

Regarding the safety measurement, we agree that our original wording was too categorical and have revised this section and clarified that while multidimensional scales can capture broad safety constructs, developing a single measure that comprehensively reflects the diversity of safety concerns across contexts and populations remains challenging (see lines 463-467). We also carefully revised the Discussion to improve the clarity of the argumentative flow, and hope that the conclusions are now easier to follow.

- Please add relevant references (e.g., lines 328–330, "To enhance comparability, it is advisable to focus on the most commonly studied UGS characteristics, such as size, accessibility, and quality").

We revised this sentence to clarify and refine the set of UGS characteristics referred to (see lines 410-412). In the revised manuscript, we now cite facilities, size, and neighborhood characteristics, which were the most frequently examined characteristics across the studies included in this review.

- Limitations should be expanded to include methodological weaknesses of included studies and the lack of quality appraisal.

We expanded the limitations section to more explicitly address both the absence of a formal quality appraisal and the recurring methodological weaknesses of the included studies. The revised text now highlights that this absence should be considered when interpreting the findings.

Open Science:

Currently, open science practices are insufficiently reported. Please explicitly state in the text whether the review was preregistered (with accessible link). If available, provide supplementary materials (e.g., complete synthesis table, search strings, list of excluded studies, etc.), and what measures were taken to ensure transparency and reproducibility. Without this, the manuscript is unlikely to meet the journal's standards.

Thank you for this comment. We agree that open science practices required clearer and more explicit reporting. This review was not preregistered. As explained earlier, because narrative reviews rely on an iterative and interpretative analytic process, preregistration of a fixed protocol was not considered appropriate. Transparency and rigor were therefore ensured through explicit methodological clarification within the manuscript and by making the search strategy and related materials openly available on OSF. We hope this now aligns with the journal's standards.

Minor Issues

Introduction:

- In line 99, said evidence should be cited (g., recent reviews on UGS and health)

After re-reading the paragraph, we assumed that this comment referred to the first part of the sentence in line 114, namely: "As awareness of the importance of UGS grows, definitions and implementation practices still vary

significantly, with the only consistent elements being their urban setting and the presence of vegetation."
We have added references to recent systematic reviews and meta-analyses documenting the relationship between urban green spaces and health outcomes (see lines 114-116). These references have also been added to the following paragraph (lines 120-122) to ensure consistency.

- The section on the definition of "green space" (lines 110–122) should be clarified and revised with reference to much cited sources (e.g., WHO).

We have revised the section on the definition of urban green space to explicitly incorporate widely cited WHO reports (see references WHO, 2016 and WHO, 2017).

- Research question 2 (line 166) could be clarified: is the aim to synthesize all study findings or only those regarding associations between safety perception and UGS attendance?

We have clarified the research question 2 to explicitly state that the synthesis focuses on findings regarding the relationship between perceived safety and UGS attendance.

Methods:

- The synthesis approach should be made more explicit (e.g., narrative synthesis) and a description should be added.

We have developed the Method section and hope that the approach we used is now more transparent.

Results:

- Results section (lines 201–204) should present detail on attendance measures as part of addressing Research Question 1a.

Thank you for this comment. We may not have fully understood this point, as the description of attendance measures is already addressed in the Results section in relation to the research question 1b focusing on how UGS attendance is evaluated. We would be happy to clarify or expand this section further if needed.

Recommendation: Revisions Required

Comments by Reviewer B

Reviewer Comments

For author and editor

First of all: Well done!

There is not really much more to say, which is quite unusual for me – but I like the paper as it is.

I only have a few notions/ suggestions, which the authors might consider if they feel that the paper will thus improve.

1) Figure 1:

I was wondering why books or thesis have been excluded. I understand the exclusion of opinion texts or reviews, but not that of books or theses. Especially doctoral thesis might provide further insights, but only in case that the thesis has not already been published as 1 to x journal articles. Perhaps the authors could add a short statement on the rational of excluding books and thesis.

2) The line breaks in table 1 are not ideal. I first thought that the last line on page 47, where the item wording for Türkseven et al. was give, was amiss, but then realized that it was continued on the next page. No big deal, juts a cosmetic correction.

3) From the table it becomes evident that no studies from Europe or South America are included, which puzzled me a little, especially because there are lots of studies on UGS and diverse health outcomes conducted in European countries, and I think there are also studies from Mexico or Brasil (though I am not sure if they met the inclusion criteria). However, the author state that there might be a regional bias in the studies included ans also mention that the concept of safety might be different in Asia compared to Europe, the US or other parts/ cultures of the world. From my perspective, the authors might expand on this notion a little, in the sense that it has to be ensured that the safety concept itself is comparable (equal) between populations. Anyway, the authors included this thought already, but I would like to suggest to emphasize this a little bit more.

4) On line 308 there is a double "in" before intervention. Please delete.

5) Conclusion, Line 465:

Here the author conclude that tailored, context-sensitive interventions should be developed. I absolutely second this statement. However, I am not sure if the statement is really derived from the analysis, as the review mostly concerns the operationalization of UGS and safety measure (and the relationship between these). I see how the call for more tailored and specific interventions relates to the overall topic, but I miss a clear line of arguments here that ties the need for interventions to the research questions/ results. Perhaps the authors could expand a little bit more on how they derived the intervention statement from their analysis/ results? Or perhaps they already did and I just missed that while reading?

Overall, I really like the article and think that it makes an important contribution to the studies of UGS and health. Please understand the above mentioned points as suggestions. Really well done!

For editor only

Sorry for being late with the review.

It was one of the very rare papers where I have no significant criticism. I think the authors really did a great job, and m remarks above are only suggestions/ very minor points.

Reactions to Reviewer B

Reviewer B:

Thank you for the time you devoted to review this manuscript, your remark and suggestions, and for the positive overall evaluation of the paper. We have addressed each comment point by point and hope that our revisions satisfactorily respond to all issues raised. All changes are highlighted in blue in the revised manuscript.

OSF link : https://osf.io/32876/overview?view_only=fd082904a86f4af9a83546cf18c54bd4

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Figure 1: I was wondering why books or thesis have been excluded. I understand the exclusion of opinion texts or reviews, but not that of books or theses. Especially doctoral thesis might provide further insights, but only in case that the thesis has not already been published as 1 to x journal articles. Perhaps the authors could add a short statement on the rational of excluding books and thesis.

We agree that books and doctoral theses can also provide valuable insights. In the present review, they were primarily excluded to maintain a clear focus on peer-reviewed primary research articles. Regarding theses specifically, as you suggest, they often overlap with subsequently published journal articles. Restricting inclusion to peer-reviewed journal articles therefore ensured that all included studies had undergone a formal peer-review process, which is not always the case for thesis manuscripts, as some chapters may be under review or not yet submitted for publication. We have now added a brief statement in the manuscript clarifying the rationale for excluding books and theses and this focus on peer-reviewed research.

2) The line breaks in table 1 are not ideal. I first thought that the last line on page 47, where the item wording for Türkseven et al. was give, was amiss, but then realized that it was continued on the next page. No big deal, juts a cosmetic correction.

We missed it, thank you for pointing this out! We have adjusted the formatting to avoid splitting across pages.

3) From the table it becomes evident that no studies from Europe or South America are included, which puzzled me a little, especially because there are lots of studies on UGS and diverse health outcomes conducted in European countries, and I think there are also studies from Mexico or Brasil (though I am not sure if they met the inclusion criteria). However, the author state that there might be a regional bias in the studies included ans also mention that the concept of safety might be different in Asia compared to Europe, the US or other parts/ cultures of the world.

From my perspective, the authors might expand on this notion a little, in the sense that it has to be ensured that the safety concept itself is comparable (equal) between populations. Anyway, the authors included this thought already, but I would like to suggest to emphasize this a little bit more.

We agree that the absence of studies conducted in South America, and maybe even more surprisingly in Europe, can raise questions, given the extensive literature on UGS and health outcomes in these regions. It's worth noting that while many other papers explore the relationship between safety and greenspaces, they were not included in this narrative review because they didn't meet the inclusion criterai, most often regarding the measurement of safety. For instance, numerous studies don't measure subjective feelings of safety but instead focus on objective measures intended to reduce crime or enhance safety (e.g., the number of security cameras, lighting presence, or security patrol frequency; see for example Medina et al., 2022). Some of the studies we choose to include also discuss such aspects (e.g. lighting, see Groshong et al, 2020), but it should be noted that these aspects are always part of a broader scope, also addressing subjective feelings in some form (e.g., characterized by terms such as "feeling," "perception," "emotion," "impression"). Other objective measures of safety are related to police-recorded crime incidence (e.g., Vaughan et al., 2018) or indicators of incivility (e.g., litter, physical deterioration; e.g., Richardson et al., 2020) rather than subjective feelings of safety that might be associated. It is also more common than one might expect for studies to measure neighborhood characteristics to explain UGS attendance or avoidance, such as the neighborhood's overall crime rate, as in Huang et al. (2020) in their paper on children's use of greenspaces, or Weiss et al. (2011). Some studies also focus on safe access to the park rather than perceived safety within the park itself (e.g., Schultz et al., 2022).

Also, we fully agree that cultural comparability represents an important issue. In response to this comment, we added dedicated sections on the characteristics of the included studies in both the Results and Discussion sections (see 3.1. and 4.1.). These sections now explicitly address the geographically limited scope of the available evidence, highlight the strong geographical concentration of the included studies, and emphasize that perceptions of safety are inherently context- and culture-dependent. Given the word count constraints, these points are necessarily addressed in a concise manner; however, we hope that these additions sufficiently underline the importance of interpreting the findings within their specific cultural and social contexts.

4) On line 308 there is a double "in" before intervention. Please delete.

It's been corrected, thank you.

5) Conclusion, Line 465:

Here the author conclude that tailored, context-sensitive interventions should be developed. I absolutely second this statement. However, I am not sure if the statement is really derived from the analysis, as the review mostly concerns the operationalization of UGS and safety measure (and the relationship between these). I see how the call for more tailored and specific interventions relates to the overall topic, but I miss a clear line of arguments here that ties the need for interventions to the research questions/ results. Perhaps the authors could expand a little bit more on how they derived the intervention statement from their analysis/ results? Or perhaps they already did and I just missed that while reading?

We agree that this conclusion may have gone somewhat beyond what could be directly inferred from the empirical findings of the review. We have therefore slightly reduced and revised this part and hope that the revised version now reads more smoothly!

Overall, I really like the article and think that it makes an important contribution to the studies of UGS and health. Please understand the above mentioned points as suggestions. Really well done!

Recommendation: Accept Submission

Comments by Reviewer C

Reviewer Comments

For author and editor

First of all, I would like to note that this review is an important addition to the existing literature. It is methodologically sound and rigorously presented. Unfortunately, however, this review also has some fundamental limitations, which the authors themselves acknowledge, so the overall impression is quite mixed. On the one hand, the review should be made available to the community, but on the other hand, the limitations could actually be remedied.

Major Issues

1. I would strongly recommend involving a second rater for the screening.
2. I would also consider to include additional databases; the selection is too limited.

Minor Issues

General layout: The text repeatedly uses “&” instead of “and” to link authors within the body text; please change this.

Additional material: Maybe the authors could include an figure that visually presents the key findings (corresponding paths between site characteristics, subjective perception, and attendance).

Chapter 2. “Literature Search”: Please list the criteria you used to select the studies in detail.

Chapter 3. "Table 1": Please insert a initial column for counting the studies (1, 2, 3 ...).

- Study 1: Please write out the abbreviation “PA” in “Objective.”

- Study 12: “Investigating ... through the TPB” sounds a bit weird. Perhaps simply replace it with “applying the TPB” or “using the TPB”?

- Study 13: The punctuation in the “Objective” column is incorrect. Please check and revise.

- Study 17: Why is “Kansas City” listed under ‘Objective’ but Minnesota under “Location”?

Chapter 3.2 “Main Findings”: In line 308, “in” is written twice, please delete.

Chapter 4.2 “Main Findings”: I wonder whether the research gaps listed in the last section would also be claimed if more studies (based on other databases) had been identified - so how valid is the identification of these gaps?

Chapter 4.3 “Limitations”: Please conduct the screening process with another person.

Chapter 5 “Conclusion”: Please list some of the “key challenges and gaps in UGS perception research” (for example, as a list in parentheses).

Chapter 6 “Open Science Statement”: There is a lost “1.” under the paragraph - is this a mistake or is there any information missing?

Reference List: Some references from Cohen et al. contain superfluous space characters .

Reference List: Please add the missing information to the reference WHO (1998).

For editor only

Reactions to Reviewer C

Reviewer C:

First of all, I would like to note that this review is an important addition to the existing literature. It is methodologically sound and rigorously presented. Unfortunately, however, this review also has some fundamental limitations, which the authors themselves acknowledge, so the overall impression is quite mixed. On the one hand, the review should be made available to the community, but on the other hand, the limitations could actually be remedied.

Thank you for the time you devoted to review this manuscript, your remark and suggestions. We have addressed each comment point by point and hope that our revisions satisfactorily respond to all issues raised. All changes are highlighted in blue in the revised manuscript.

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Major Issues

- I would strongly recommend involving a second rater for the screening.
- I would also consider to include additional databases; the selection is too limited.

We agree that involving a second reviewer and including additional databases represent best practice and would strengthen the screening process. We carefully considered these recommendations. However, due to time and practical constraints, it will not be feasible to re-run the full screening with an additional reviewer or to extend the search to additional databases. We would also like to emphasize that such practices are particularly important in the context of systematic reviews, whereas this work was intentionally designed as a narrative review. This choice was motivated by substantial conceptual heterogeneity in the literature, which made a systematic review methodologically inappropriate, as well as by practical constraints.

We are fully aware of the limitations inherent to a narrative review. For this reason, we made a concerted effort to enhance transparency and reproducibility wherever possible, and further strengthened these aspects after this first feedback by revising the Methods section for greater clarity and by expanding the materials made available on OSF. These now include not only the full search strategy for both databases, but also a complete list of inclusion/exclusion criteria and a full list of full-text articles excluded during screening, together with the corresponding reasons for exclusion.

We believe that these additions provide readers with information to critically appraise the review process, while remaining consistent with the narrative scope of the review.

Minor Issues

- General layout: The text repeatedly uses "&" instead of "and" to link authors within the body text; please change this.

Thank you for pointing this out. We have corrected the use of "&" in the body text and replaced it with "and", in line with APA guidelines.

- Additional material: Maybe the authors could include an figure that visually presents the key findings (corresponding paths between site characteristics, subjective perception, and attendance).

Following your suggestion, we explored several ways of visually summarizing the findings. However, given the number of relationships examined and the heterogeneity of the results, the figure quickly became cluttered and difficult to interpret. We therefore decided not to include such a figure in the manuscript. However, we have added an Excel file to OSF summarizing the main quantitative relationships identified across studies. This allows readers to explore and sort the findings according to different criteria if desired, and offers also a way to better vitalize some of the results.

- Chapter 2. "Literature Search": Please list the criteria you used to select the studies in detail.

A list of inclusion and exclusion criteria was established during the review process. However, it was deliberately not included in the manuscript in order to avoid misleading readers into interpreting this work as a more systematic review than intended. This list has now been made available in the supplementary materials on OSF, and its availability is explicitly mentioned in the manuscript.

- Chapter 3. "Table 1": Please insert a initial column for counting the studies (1, 2, 3 ...).

We have added an initial column to Table 1 numbering the included studies (1-18).

- Study 1: Please write out the abbreviation "PA" in "Objective."

We have written out "physical activity" in Study 1.

- Study 12: "Investigating ... through the TPB" sounds a bit weird. Perhaps simply replace it with "applying the TPB" or "using the TPB"?

Indeed! We revised the wording and used "using the TPB".

- Study 13: The punctuation in the "Objective" column is incorrect. Please check and revise.

We corrected it, thank you for pointing it out.

- Study 17: Why is "Kansas City" listed under 'Objective' but Minnesota under "Location"?

Kansas City refers to the specific study site, whereas Missouri – MO (and not Minnesota - MN) refers to the broader geographic location.

- Chapter 3.2 "Main Findings": In line 308, "in" is written twice, please delete.

It's been corrected, thank you.

- Chapter 4.2 "Main Findings": I wonder whether the research gaps listed in the last section would also be claimed if more studies (based on other databases) had been identified - so how valid is the identification of these gaps?

Thank you for this comment. We agree that the identification of research gaps is necessarily contingent on the specific scope of the literature reviewed. At the same time, as highlighted in the Introduction, difficulties related to the conceptualization of UGS and the comparability of perceived safety measures appear to be recurrent issues across the broader UGS literature, suggesting that these challenges may extend beyond the particular corpus examined here. Similar concerns likely apply to attendance measures. Nevertheless, we agree that the paragraph benefited from additional nuance. We have therefore revised this section to clarify that the identified gaps should be interpreted in relation to the specific body of studies included in this review, while acknowledging that their robustness would need to be examined in broader and more diverse literatures.

- Chapter 4.3 "Limitations": Please conduct the screening process with another person.

See comment in "major issues".

- Chapter 5 "Conclusion": Please list some of the "key challenges and gaps in UGS perception research" (for example, as a list in parentheses).

We have added a brief parenthetical list in the Conclusion highlighting key challenges and gaps identified in the review.

- Chapter 6 "Open Science Statement": There is a lost "1." under the paragraph - is this a mistake or is there any information missing?

This is an error. We have corrected it and adapted the Open Science Statement to reflect the additions made on OSF.

- Reference List: Some references from Cohen et al. contain superfluous space characters .

Thanks for the feedback, we have reviewed the entire bibliography.

- Reference List: Please add the missing information to the reference WHO (1998).

Thanks for the feedback, we have reviewed the entire bibliography.

Recommendation: Resubmit for Review