

Review of: "Deconstruction of Gender Dynamics and Its Implications for Gendered Inclusive Design: Application of Urban Big Data and Interpretable Machine Learning Method in India"

Dr. Raju Sarkar¹

1 Maulana Abul Kalam Azad Institute of Asian Studies

Potential competing interests: No potential competing interests to declare.

The paper titled "Deconstruction of Gender Dynamics and Its Implications for Gendered Inclusive Design:

Application of Urban Big Data and Interpretable Machine Learning Method in India" explores an important and timely topic related to gender dynamics in urban spaces and its implications for inclusive urban design. Here's a review and commentary on various sections of the paper:

- 1. The title effectively conveys the paper's focus, which is crucial for potential readers to understand the research's scope. The abstract provides a comprehensive overview of the paper, highlighting the importance of addressing gender dynamics, safety, and inclusivity in urban design. It sets clear expectations for the paper's content.
- 2. The relevance section effectively emphasizes the importance of the research, especially in the context of gender, safety, and urban planning. It correctly identifies the potential impact of the study's findings on policymakers and urban planners. However, it could benefit from a brief discussion of the broader societal and human rights implications of addressing gender inequalities in urban spaces.
- 3. The choice of keywords is appropriate and aligns well with the paper's content. These keywords are essential for discoverability and indexing in academic databases.
- 4. The methodology section outlines the research process, study area, and data collection and analysis methods. The use of urban big data and machine learning techniques is commendable, as it allows for a data-driven approach to understanding gender dynamics in urban spaces. However, there are a few areas that could be further clarified or expanded:
- The rationale for selecting Delhi, India, as the study area could be explained. Is it representative of broader urban challenges in India or other similar contexts?
- Ethical considerations related to data collection and privacy should be mentioned, especially when using urban data that may contain sensitive information.
- The machine learning techniques used should be briefly described to help readers understand the technical aspects of



the research.

- 5. The discussion section provides valuable insights into the gender aspects of urban design, fear of crime, and emotional perception. It correctly identifies the societal biases and violence against women that contribute to fear in urban spaces. However, a few points could be addressed:
- The paper mentions "reported incidents" but does not delve into the sources or methodology of gathering such data. A brief explanation of data sources for reported incidents of violence would strengthen the paper's credibility.
- The link between urban development and emotions is an intriguing aspect, but it would benefit from more concrete examples or case studies illustrating how urban design can impact emotional well-being.
- While the paper discusses the importance of a positive urban atmosphere, it could explore specific design elements or interventions that contribute to such atmospheres.
- 6. The conclusion effectively summarizes the key findings and recommendations. It underscores the need for gendersensitive urban planning and inclusivity in urban design. The list of recommendations is comprehensive and provides practical guidance for urban planners and policymakers.

Overall Evaluation

- The paper addresses a significant and relevant topic.
- The methodology, particularly the use of urban big data and machine learning, is commendable for its potential to provide data-driven insights.
- The paper's structure is clear and well-organized.
- Ethical considerations and data sources could be elaborated upon.
- The discussion section could provide more concrete examples to illustrate key points.

In summary, this paper holds promise in contributing to the understanding of gender dynamics in urban spaces and the potential for inclusive urban design. Addressing the minor points mentioned above could further enhance the paper's quality and impact.