

# 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"

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Potential competing interests: No potential competing interests to declare.

The topic addressed by the paper is essential and pertinent. Besides, the study context provides a very interesting perspective of the condition in which women evolve in urban spaces in countries of the global south, particularly in India. I appreciated the motivation and critical style of the paper that allowed the author to exhibit the challenges in deconstructing gender dynamics and their impact on urban spaces. This type of study, I believe, requires going beyond the quantitative approach that can be done by a data-driven analysis using machine learning models. Given the social dimension of the problem that touches on gender issues observed in a very diverse and complex country, it calls for qualitative methods that can exhibit and argue about the hypothesis adopted to delimit the perimeter of the study. An intersectional approach in the analytics process can be performed as a guiding methodology and then have the quantitative approach with ML as a tool that can provide some elements but cannot bring conclusive results of the problem.

Concerning the quantitative study using machine learning, the author must adopt a precise method where the choice of ML models and the criteria used for collecting and cleaning/engineering the data can be justified concerning the context they chose to observe. Similarly, applying different models and producing plots is not a matter. The models' choice, calibration, and assessment criteria adopted to assess the results must be justified. The part of the paper with a sequence of plots does not provide insight into the study addressed. We do not learn insight about gender dynamics in Indian urban spaces (which ones?) nor the impact of the possible strategies to perform gendered urban design. The numerical results and how they are presented are deceiving for the reader, who expects a critical discussion of the addressed research question using numerical results as facts that support a more critical interpretation of gendered urban design.