

Review of: "Examining the Comparative Effect of the Built Environment on Crime Prevention in Plotted Development, Especially for Women's Safety at Both Hot and Cold Spots"

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The authors proceed in a colloquial style emphasizing the need to increase the application of CPTED principles, the crime prevention according to environmental design (such as activity enhancement, maintenance and line of sight of environments, see: Widya Putra, D., Salim, W.A., and Indradjati P.N. [2023]) and to investigate the effect of the built environment on crime prevention in the Indian context. From there, the authors analyze the impact of buildings on women's safety, particularly in public spaces. The authors collected addresses of places already qualified by the CPTED foundations as "hot spots". They also used secondary data on criminal and demographic records from India's National Crime Record Bureau (NCRB). In particular, the 2011 census and the F.I.R. (first information report) regarding the department of Uttar Pradesh. In addition, they made a comparison with the interest generated by these subjects by the I.P.C. (Indian Penal Code) of Gomti Nagar, an area of the Indian city of Lucknow in Uttar Pradesh. A study by Kana Ram Godha (2023) showed that Gomti Nagar "on the banks of the Gomti River, which flows through Lucknow, [...]" It is one of the largest and most promising areas of Lucknow (p. 3). Studies from the United States, Australia and Uganda are briefly reviewed. From these studies, the authors draw the conclusion that user perception surveys as well as an assessment of the built environment are the most important variables for the purposes of their study. 404 surveys were then carried out near Gomti Nagar.

The women interviewed were between 15 and 65 years old. On page 5, they highlight 394 hot and cold spots, of which 318 can be considered cold spots and 76 can be considered hot spots. A map in Figure 4 provides colors that will indicate, as the authors' conclusions show, that this characterization is insufficient without a proper assessment of the built environment. During the assessment of the built environment, 72 locations were identified as hot spots, while 318 were classified as cold spots. The assessment used a nominal scale, assigning a score of 1 if a specific parameter was present and 0 otherwise. After this first assessment, a comparison was made between hot spots and cold spots based on different physical indicators. To further analyze the quality of the built environment at specific points, 119 points were examined, and their scores were totaled. These total scores ranged from 20 to 90 out of 119. The results were then mapped onto a base map of Gomti Nagar. In the hotspots, the highest score achieved was 74 out of 119, while the lowest was 24. The scores were divided into five color ranges: blue and purple for the lowest scores (20-34 and 35-44), pink for the lowest average scores (45-54), and orange and yellow for the highest scores (55-64 and 65-74). For cold spots, the entire area was divided into a 200m x 200m grid and scores ranged from 14 to 84 out of 119. The same color coding as for hot spots

was used, with the addition of cyan and of green to represent the lowest (14-24) and highest scores (74-84), respectively. The authors of the study consider surveillance and lighting to be the two most important factors influencing the safety of women in public spaces [see another recent study on the subject by R. Fucà, Review of: "The Impact of Urban Design in minimizing Women's Fear of Crime"].

To investigate this, they conducted a perception survey among women to analyze how specific aspects of the built environment affect women's safety. The survey used a Likert scale ranging from 1 to 5 to assess women's agreement on the impact of various parameters of the built environment on their safety in different areas. The sample size for the survey was determined using the following formula: $\text{Sample size} = ((z^2 \times p(1-p))/e^2) / (1 + ((z^2 \times p(1-p))/(e^2 N)))$. The perception survey was carried out in three distinct types of areas: planned residential neighborhoods, urban villages and city-wide public spaces. The sample size was assigned based on the percentage distribution of the area in each setting. From a total sample of 381 people, 49 perception surveys were conducted in urban villages and 70 in public spaces. The other surveys were carried out in residential neighborhoods. The survey found that the age distribution of respondents was as follows: 20% were aged 13 to 20 years, 31% were aged 21 to 30 years, and 52% were aged 31 to 45 years. In terms of education, 59% of respondents had an undergraduate degree and 21% had a postgraduate degree. Regarding marital status, 38% of women reported being single or unmarried, while 62% were married. In terms of annual income, 25% of women earned less than 1 lakh per annum, 8% earned less than or equal to 3.5 lakhs per annum, 19% earned 5 lakhs or more per annum and 34% of women did not provide no information on their income.

Recommendation to authors:

When assessing how much weight should be given to women's education and income on their "perception of safety in public spaces" in Gomti Nagar, it is important to take into account local customs and communities, as these Factors can significantly influence people's perceptions and experiences of safety.

Here is a suggested approach for administering this survey:

- Form a diverse research team: Since local customs and communities play a crucial role, ensure that your research team is diverse and includes people familiar with the cultural nuances and social dynamics of Gomti Nagar.
- Conduct Focus Group Discussions (FGDs): Conduct focus groups with women of different age groups and socio-economic backgrounds in Gomti Nagar. Structure discussions around the themes of education, income and safety in public spaces. Encourage open dialogue and exploration of how education and income levels affect women's sense of security.
- Weighting variables: Analyze survey data to understand the correlation between education and income levels and perceptions of safety. You can use statistical techniques such as regression analysis to determine the relative importance of these factors. Assign weights based on statistical significance and strength of the relationship. For example, if it turns out that income has a greater impact on the perception of security, it can be given a higher weight.

By following these steps and considering local customs and community ideas, you can gather valuable data on the impact of education and income on women's perceptions of safety in public spaces in Gomti Nagar and make informed policy

recommendations or community interventions based on your findings.

Furthermore, there may be significant differences in the perception of safety among people living in different areas of Gomti Nagar, such as planned residential neighborhoods, urban villages and city-level public spaces. Combining all data without recognizing these differences could lead to misleading or unrepresentative results.

Here is a more reasonable approach to presenting your data:

- **Segmented analysis:** Perform a segmented analysis in which you present data separately for each of three distinct areas. This allows you to highlight variations in perceptions and experiences of safety within Gomti Nagar.
- **Benchmarking:** After presenting the data for each domain individually, conduct a comparative analysis to identify key differences and similarities in perceptions of these domains. Look for trends or patterns that emerge. Visualizations: Use tables, charts, and maps to visually represent data. You can create separate visuals for each area and then create comparative visualizations to illustrate differences and trends. Visualizations are often more accessible and can help convey complex information effectively.
- **Narrative Context:** Provide narrative context for each domain. Explain the unique characteristics, cultural factors, or community dynamics that might influence perceptions of safety in each location. This context can help readers to understand why the differences exist.
- **Qualitative information:** If you have qualitative data from perception surveys or focus group discussions, use quotes or anecdotes to add depth and richness to your analysis. Qualitative information can provide a more nuanced understanding of perceptions. Explain how data can inform decision-making and safety initiatives in different parts of Gomti Nagar.

By presenting data in this segmented and contextualized manner, you can provide a more accurate and meaningful representation of how safety perceptions vary across different areas of Gomti Nagar while highlighting overall trends and implications for the safety of women.

References:

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