

REVIEWER'S REPORT

Manuscript No.: IJAR-54204

Date: 07/10/2025

Title: Thermal Comfort and Energy Resilience of Urban Households Facing Climate Change: A Case Study in Dakar.

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision ✓

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality	✓			
Techn. Quality		✓		
Clarity	✓			
Significance		✓		

Reviewer Name: Dr. Umeshkumar Hiralal Chavan

Date: 07/10/2025

Detailed Reviewer's Report:

The submitted manuscript investigates the thermal comfort and energy resilience of urban households in Dakar under the influence of climate change. It presents an empirical study based on a structured quantitative survey involving 354 residents across the five departments of Dakar. The paper addresses an important and contemporary issue by linking household-level adaptation practices with broader questions of sustainability, urbanization, and energy policy in sub-Saharan Africa. The topic is highly relevant to both energy management and climate adaptation research, offering useful insights into how socioeconomic conditions and housing infrastructure influence thermal comfort and energy behavior.

The paper's originality lies in its focus on a developing urban context that is often underrepresented in global thermal comfort studies. The research demonstrates good methodological rigor through stratified sampling and the use of multivariate analysis, providing a sound empirical foundation. The discussion successfully connects local findings to international comparative contexts, highlighting similarities and differences with other African and Asian cities. The results, which show that most households rely on natural ventilation methods such as opening windows and using fans, reveal the economic and infrastructural limitations that shape household adaptation choices. The conclusions and policy recommendations—emphasizing improved building standards, use of insulating materials, and awareness of sustainable practices—are relevant and actionable.

However, a few minor revisions are recommended before publication. The manuscript would benefit from clearer labeling and higher resolution for figures and tables, particularly Figures 4–8. Some portions of the text contain minor grammatical inconsistencies that can be refined during copyediting. The discussion section could be expanded slightly to compare the findings with more recent regional studies and to emphasize the implications for long-term urban planning and energy policy. Additionally, including a brief section on study limitations would enhance transparency and strengthen the academic rigor of the work.

Recommendation: Accept with minor revisions