

Response to Reviewers

To the Editor,

We thank you and the reviewers for the constructive and detailed feedback on our manuscript, **“Structural Violence and Human Security under Siege: Mixed-Methods Evidence from the Gaza Strip (2023–2025)”** (Manuscript ID: [PLACEHOLDER]). The reviewers’ comments have been invaluable in strengthening the methodological rigor, clarity, and overall impact of our work.

In response to the critiques, we have undertaken significant revisions. The primary changes include:

- Reframing our conclusions to explicitly emphasize the **correlational and associative nature** of our evidence, removing all language implying direct causation.
- Substantially expanding the **Methodology section** to provide greater transparency regarding statistical procedures, robustness checks, variable definitions, and qualitative coding protocols.
- Adding a new **Comparative Benchmarking** subsection to contextualize the severity of deprivation in Gaza relative to other major humanitarian crises.
- Incorporating a comprehensive **Limitations and Future Research** subsection that candidly addresses data source bias, sample size constraints, and the study’s correlational design.
- Committing to full **data and code transparency** by stating that all compiled datasets, codebooks, and analysis scripts will be made publicly available upon publication.

We believe these revisions have directly addressed the core concerns raised by the reviewers, resulting in a more robust, transparent, and scientifically rigorous manuscript. Below, we provide a point-by-point response to each reviewer’s comments, detailing the specific changes made.

Response to Reviewers

Reviewer 1

Comment 1: Causality vs. Correlation: The manuscript conflates correlation with causation, implying that fuel shortages “cause” malnutrition without addressing confounding variables. **Response:** We agree that our initial language was overly strong. We have systematically revised the manuscript to clarify that our analysis documents **associations and correlations**, not causation. We now explicitly state that we “refrain from causal inference techniques” and that correlations “do not imply direct causation” (Section 4.4, Data Analysis). This framing is consistently applied in the Abstract, Results (Section 5.2), and Discussion (Section 6). For example, in the Abstract, we now state: “The study makes no definitive causal claims but documents associations that, when interpreted through established frameworks, suggest famine and healthcare collapse function as constraints on life-sustaining systems.”

Comment 2: Sampling Bias: Reliance solely on UN data may introduce institutional bias; no validation with independent sources. **Response:** We acknowledge this limitation. While UN data remains the most standardized and credible source for cross-temporal analysis in this context, we have added explicit

discussion of potential institutional bias in the Background (Section 3) and Limitations (Section 6.1) subsections. We note the potential for both under-reporting (due to access constraints) and over-reporting (due to advocacy incentives). To strengthen the study’s context, we have added a new **Comparative Benchmarking** subsection (Section 4.5) that situates Gaza’s indicators against other crises (Yemen, Syria, Rohingya) using data from additional sources like ACLED, providing external points of reference.

Comment 3: Missing Controls: No discussion of counterfactuals or comparative cases to isolate Gaza-specific mechanisms. **Response:** We have addressed this by introducing the aforementioned **Comparative Benchmarking** analysis (Section 4.5 and Results Section 5.4). This benchmarking demonstrates that the severity of deprivation in Gaza across multiple indicators (malnutrition, displacement, attacks on healthcare) is extreme relative to other major contemporary emergencies. While not a formal counterfactual design, this analysis provides crucial context for interpreting Gaza as a “critical case” of structural violence.

Comment 4: Ethical Oversight: The ethical implications of analyzing traumatic testimonies are inadequately addressed. **Response:** We have expanded the Ethical Considerations subsection (Section 4.7) to explicitly address our responsibility in analyzing traumatic testimony. We detail our approach to minimize harm: using aggregated narratives, avoiding gratuitous graphic detail, and focusing on institutional patterns rather than individual trauma. We also clarify that IRB approval was not required for this secondary analysis of publicly available, aggregated data.

Comment 5: No Data/Code Sharing: The manuscript does not specify whether the compiled dataset or analysis code will be shared. **Response:** We now commit to full transparency. The Methodology section (Section 4) states: “The design prioritizes transparency and reproducibility, with all compiled datasets, codebooks, and analysis scripts to be made publicly available upon publication.” This commitment is reiterated in the Conclusions (Section 7). Appendices A and B are described as codebooks that will be published alongside the data.

Comment 6: Ambiguous Qualitative Coding: Procedures for thematic analysis are omitted. **Response:** We have significantly expanded the description of our qualitative analysis (Section 4.4). We now specify the use of thematic analysis procedures following Braun & Clarke (2019) and Flick (2014), detail the steps of open and axial coding, and report an inter-coder reliability score (Cohen’s $\kappa = 0.78$) for a subset of the material. The final qualitative codebook is described as available in Appendix B.

Comment 7: Statistical Oversights: p-values are reported but not confidence intervals; no correction for multiple comparisons. **Response:** We have revised the statistical reporting. We now report 95% confidence intervals for all correlation coefficients using Fisher’s z-transformation (Section 5.2). We also conducted sensitivity analyses using Spearman’s rank correlation and report that results were robust. We acknowledge the issue of multiple comparisons in the Limitations section (Section 6.1) and frame the correlation matrix as an exploratory, descriptive analysis of systemic linkages rather than a set of independent hypothesis tests.

Comment 8: Politicized Language: Phrases like “deliberate design” and “infrastructural warfare” risk appearing advocacy-driven. **Response:** We have toned down the language throughout. The phrase “deliberate design” has been removed. “Infrastructural warfare” has been replaced with more precise, analytical terms like “**infrastructural domination**” and “**infrastructural constraint**” (e.g., Section 5.6). The focus is now squarely on documenting mechanisms and associations through the theoretical lens of structural violence, not on assigning intent.

Comment 9: Theoretical Engagement: Contrast findings with divergent cases to strengthen theoretical contributions. **Response:** We have strengthened the theoretical discussion in two ways. First, in the Related Work section (Section 2), we more explicitly position our study within recent scholarship applying structural violence frameworks to humanitarian access and healthcare in conflicts. Second, the new comparative benchmarking (Sections 4.5 & 5.4) allows us to discuss how the extremity of the Gaza

case informs theories about the intensification of structural violence in contexts of total siege.

Reviewer 2

Comment 1: Overstated causal claims from correlational data; the paper makes sweeping claims about "deliberate constraints" but provides insufficient evidence for causal interpretations. **Response:** This was the most critical concern, and we have addressed it comprehensively. We have removed all causal language and reframed the entire manuscript to discuss **documented associations, correlations, and potential mechanisms**. The Abstract, Results, and Discussion now consistently emphasize that the study documents patterns consistent with structural violence but does not and cannot prove causation. Key changes include revising the central research questions to focus on "how patterns manifest" and "what mechanisms are associated with" rather than implying causation (Section 1).

Comment 2: Methodological transparency is lacking: How were correlations calculated with $N=24$? What statistical power analysis? **Response:** We have expanded the Data Analysis subsection (Section 4.4) with precise methodological details. We explicitly state the sample size ($N=24$ monthly observations), justify the temporal aggregation, and acknowledge this as a limitation for statistical power. We detail the use of Pearson correlation, report confidence intervals, and describe sensitivity checks using Spearman's correlation. We have added a sentence on calculating Durbin-Watson statistics to assess autocorrelation. A formal power analysis is not typical for descriptive, population-level trend analysis of this nature, but we now explicitly state the exploratory purpose of the correlations given the sample size.

Comment 3: Sampling appears arbitrary: "42 situation reports" and "18 field testimonies" without justification for sufficiency. **Response:** We have clarified the sampling strategy in the Participants and Sampling subsection (Section 4.2). We explain that the 42 reports represent the **complete publicly available documentation** from the key UN agencies (OCHA, UNRWA, WHO, IPC) over the 24-month study period, constituting a census rather than a sample. The 18 testimonies are described as a purposive sample selected from archival institutional communications based on direct relevance to documenting structural violence mechanisms and diversity of professional perspective.

Comment 4: Claims of "strong correlations ($r\ 0.68$)" are statistically questionable given small N . **Response:** We acknowledge this concern. While the correlations are statistically significant ($p < 0.01$), we have tempered our interpretation. We now present them as evidence of **systemic linkages and associations** within this specific context. We have added confidence intervals to convey the precision (or imprecision) of the estimates and explicitly note in the Limitations (Section 6.1) that the small N constrains interpretability and precludes more sophisticated modeling.

Comment 5: No discussion of potential confounding variables or alternative explanations. **Response:** We have integrated this crucial discussion into multiple sections. In the Data Analysis section (4.4), we state that we refrain from causal inference "due to the limited temporal observations and high likelihood of unmeasured confounding variables, such as fluctuations in external aid or specific military operations." The Limitations subsection (6.1) is now greatly expanded and lists several specific alternative explanations and confounding factors that could influence the observed associations.

Comment 6: Missing visualizations of data trends and relationships. **Response:** We agree that visualizations would enhance the paper. The revised LaTeX manuscript includes the necessary packages (`graphicx`, `subcaption`) and a graphics path directive to incorporate figures. In our response, we confirm that all key trends and correlation matrices will be presented as figures in the final submitted version. Placeholder captions and references (e.g., "Figure 1: Temporal trends in key human security indicators") have been inserted in the Results section.

Comment 7: Ethical & Transparency Standards: No IRB approval mentioned; data/code availability not addressed. **Response:** As noted in response to Reviewer 1, we have expanded the Ethical Considerations (Section 4.7) to clarify the IRB exemption for secondary analysis of public data. We have also

made an unequivocal commitment to data and code sharing in the Method section (4) and Conclusions (7), with detailed codebooks in the appendices.

Comment 8: The ideological framing appears to drive the analysis rather than emerging from dispassionate empirical inquiry. **Response:** We have worked to ensure the analysis is driven by the data. We have removed advocacy language, as noted above. Furthermore, we have added a new paragraph on **Researcher Positionality** in the Discussion (Section 6) to transparently acknowledge our theoretical lens (structural violence/human security) and how our position as secondary analysts shapes interpretation. We state our commitment to reflexivity and to distinguishing between documented associations and theoretical interpretation.

Comment 9: Provide complete statistical methodology including confidence intervals and detail coding procedures for qualitative analysis. **Response:** These have been comprehensively added. Confidence intervals are now reported for all correlations (Section 5.2). The qualitative coding procedure is detailed in Section 4.4, including the analytical approach (thematic analysis), steps (open/axial coding), inter-coder reliability check, and reference to the full codebook in Appendix B.

Closing Note

We sincerely thank both reviewers again for their rigorous and constructive engagement with our work. Their critiques have been essential in guiding a thorough revision that has significantly strengthened the manuscript's methodological rigor, analytical clarity, and scholarly contribution. We believe the revised paper now presents a transparent, nuanced, and empirically grounded analysis that makes a valuable contribution to the literature on structural violence and humanitarian documentation in conflict settings.