

Peer Review

Review of: "Visitor Capture Metrics: Research Note on a Six-year Correlation Analysis of Provincial Tourists and Museum Visitors"

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1) Originality of Research Topic

The paper proposes an insightful, though exploratory, application of correlation analysis to measure the association between provincial-level tourism data and museum visitor metrics in the Philippines. While the notion of "visitor capture" is not entirely novel in cultural tourism studies, applying it in a national museum context in a developing country fills a notable regional gap. The topic thus carries both relevance and modest originality, especially within Southeast Asian museology.

2) Appropriateness and Innovation in Methodology

The author appropriately uses Kendall's Tau and Spearman's Rho for analyzing small and potentially non-normally distributed datasets. This methodological choice is justified and competently applied. However, the study would benefit from more robust statistical modeling—such as regression or multivariate analysis—to move beyond correlation and approach explanatory insight. The current approach is sound for a research note but limited in interpretive depth.

3) Clarity and Relevance of Research Objectives

The research goal is clearly stated: to assess whether national tourism data can serve as a proxy indicator for museum visitor performance. This is both timely and relevant, especially for public institutions operating under resource constraints. The study aligns well with broader national and global development goals (SDG, PDP), strengthening its contextual validity.

4) Rigor and Appropriateness of Research Scope and Design

The study draws data from 10 regional museums over a six-year period, a scope that is reasonable given the data availability. The visualizations (line graphs and correlation plots) are effectively used to illustrate findings. However, a more detailed discussion of museum-specific factors (programming, location, size) would have enhanced contextual richness. Additionally, the analysis could be improved by greater transparency in statistical outputs (confidence intervals, effect sizes).

5) Literature Review and Conceptual Framing

This is the weakest area of the paper. The literature review is minimal and lacks engagement with established work in museum studies, tourism impact measurement, or performance metrics. The concept of “visitor capture” is introduced as novel but without connecting it adequately to prior literature (e.g., audience reach, attendance forecasting). A few key citations would greatly strengthen the theoretical foundation.

6) Data Analysis and Implications

The results are presented clearly, and the interpretation of correlation outcomes is cautious and appropriate. The author rightly emphasizes that correlation does not imply causation. The discussion touches on useful policy implications, especially regarding target setting and monitoring for regional museums. However, the implications could be expanded to suggest strategic actions or operational improvements based on the findings.

7) Expected Impact and Contribution to the Field

As a research note, this paper offers a pragmatic and context-sensitive approach to museum performance monitoring. It is particularly valuable for policymakers and museum administrators in emerging economies. While its academic impact may be modest due to limited theoretical development, its practical contribution is tangible. The potential for future work is strong, especially if the framework evolves into a validated performance metric with broader application.

Overall Recommendation: Minor Revision

Suggested Comments for Authors:

- Please strengthen the literature review to position your “visitor capture” concept within existing scholarship.
- Consider adding more descriptive statistics and possible multivariate controls in future iterations.
- Expand the discussion to include more detailed operational or policy recommendations.

Suggestions for Literature Inclusion:

To deepen the theoretical grounding of this study, the authors may consider incorporating literature on **affective computing** and **human-computer interaction (HCI)** in museum contexts. For example, works such as:

- vom Lehn, D., & Heath, C. (2005). "Accounting for new technology in museum exhibitions." *International Journal of Arts Management*.
- Bitgood, S. (2011). *Social Design in Museums: The Psychology of Visitor Studies*.
- Schweibenz, W. (2019). "The 'virtual museum': New perspectives for museums to present objects and information using the Internet as a knowledge base and communication system."

These could help frame the use of image-based visitor capture within broader trends in interactive exhibit design and digital engagement metrics.

Suggestions for Further Statistical Analysis:

While correlation analysis is an effective starting point, the paper could benefit from additional **inferential and predictive statistical techniques**, such as:

- **Multiple Regression Analysis** to control for potential confounding variables (e.g., age, group size, time of day).
- **Structural Equation Modeling (SEM)** to evaluate causal pathways between exhibit features and visitor engagement outcomes.
- **Cluster Analysis** to segment different types of visitor engagement patterns based on observed metrics.
- **MANOVA** (if multiple dependent variables like time spent, gaze fixation, and movement frequency are tracked) to understand interaction effects across demographics or exhibit types.

These techniques would not only strengthen the robustness of the findings but could also reveal deeper behavioral insights.

Declarations

Potential competing interests: No potential competing interests to declare.