

Peer Review

Review of: "Factors Influencing Coffee Shop Visitors' Non-Verbal Communication Experience Based on the Choice of Colour and Interior Design Elements"

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This study presents a conceptually interesting investigation into the role of color and interior design in shaping non-verbal communication experiences within coffee shop environments. While the research question holds substantial merit for both academic and applied contexts in environmental psychology and hospitality design, several critical issues require attention to elevate the manuscript to publication standards.

The current title, while academically precise, could be substantially enhanced to increase reader engagement and better reflect the interdisciplinary nature of the research. Suggested alternatives such as "Beyond the Beans: How Color Psychology & Interior Design Shape Silent Conversations in Coffee Shops" or "The Hidden Language of Coffee Shops: Decoding How Colors & Spaces Influence Customer Behavior" would provide more compelling entry points into the research while maintaining scholarly rigor through the inclusion of key theoretical constructs.

A significant theoretical gap emerges in the treatment of the eight identified factors relating to visitors' color perception. The manuscript would benefit considerably from a thorough literature review establishing the conceptual foundations for each factor, accompanied by clearly articulated hypotheses. For instance, the factor "Social Warmth" should be theoretically grounded in Mehrabian's immediacy principles, while "Visual Comfort" could be linked to environmental psychology frameworks. Such

theoretical anchoring would strengthen the conceptual framework and facilitate more meaningful interpretation of findings.

Methodologically, the omission of demographic data in the Results section represents a notable oversight. The collected information regarding age, gender, education, and visit frequency is crucial for evaluating sample representativeness and could enable valuable subgroup analyses. This data should be presented in a dedicated participant characteristics table, accompanied by appropriate descriptive statistics and discussion of potential sampling biases.

The sampling methodology exhibits several concerning limitations that threaten the study's validity. The purported random sampling approach lacks operational clarity regarding the sampling frame and randomization process, potentially masking what may effectively constitute convenience sampling. The arbitrary division into unequal sample groups ($n=55$ for factor identification; $n=80$ for validation) requires proper statistical justification, particularly given the risk of demographic homogeneity in the smaller subsample. Furthermore, the total sample size of 135 respondents falls short of established standards for stable factor solutions in Exploratory Factor Analysis, especially given the apparent item-to-respondent ratio. The absence of a priori power analysis further compounds these concerns, leaving the study vulnerable to Type II errors when detecting small-to-medium effect sizes.

Despite these methodological limitations, the study demonstrates commendable alignment between its primary objectives and core findings. The identification and discussion of three dominant factors—Visual Comfort, Emotional Attachment, and Social Flexibility—are appropriately supported by relevant literature in color psychology and non-verbal communication. However, the treatment of secondary objectives proves inconsistent, particularly regarding the relationship between spatial flexibility and conducive atmospheres (Objective 5), which lacks empirical substantiation, and the connection between interior design and coffee shop identity (Objective 4), which remains underdeveloped.

To enhance the manuscript's coherence and impact, several substantive revisions are recommended. The Discussion section requires expansion to explicitly link spatial flexibility to atmosphere creation through empirical data, while the examination of design-identity relationships would benefit from illustrative case examples. The conclusion should incorporate a summary table mapping objectives to findings and explicitly address study limitations, particularly regarding cultural generalizability. Methodological improvements should include proper power analysis, sampling frame specification, and consideration of stratified sampling approaches in future research.

These collective refinements would significantly strengthen the manuscript's theoretical contribution, methodological rigor, and practical implications, positioning it more competitively for publication in high-impact journals. The research undoubtedly addresses an important gap in environmental design literature, and with these revisions, could make a valuable contribution to both academic discourse and industry practice in hospitality design.

Declarations

Potential competing interests: No potential competing interests to declare.