

REVIEWER'S REPORT

Manuscript No.: **IJAR-59086**

Title: From Tell-Show-Do To Behaviour Bots Gauging the Clinical Adoption and Hurdles of Artificial Intelligence in Pediatric Dentistry Across Kerala.

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's ID: JPR- **098**

Detailed Reviewer's Report

Decision: Accept after Major Revision

Major Revisions

1. Clarify the study methodology and questionnaire development

The manuscript should explain how the questionnaire was developed, whether it was adapted from previously validated instruments, whether expert validation or pilot testing was performed, and how questionnaire reliability was assessed.

2. Address the small sample size

Only 40 pediatric dental professionals were included. The authors should provide a justification or sample-size calculation and clearly explain how the sample size affects the statistical power and generalizability of the findings.

3. Describe the participant recruitment and sampling procedure in greater detail

The study should specify how participants were identified and recruited, the sampling technique used, the geographical/clinical distribution of participants, and the inclusion and exclusion criteria.

REVIEWER'S REPORT**4. Resolve inconsistencies in the reported sample and percentages**

Several percentages do not appear to correspond clearly to a total sample of 40, for example, 51.7%, 88.6%, and 89.2%. The authors should verify all denominators, frequencies, and percentages and ensure consistency between the Methods, Results, tables, and Abstract.

5. Strengthen the statistical analysis

The study currently relies almost entirely on descriptive statistics. The authors should consider appropriate inferential analyses to examine associations between variables such as age, professional background, AI familiarity, technology use, and perceived barriers. If inferential statistics are not appropriate because of the sample size, this should be explicitly justified.

6. Distinguish AI technologies from general digital technologies

VR/AR, gamification, chatbots, NLP, and AI-based anxiety detection are grouped together, although they do not all necessarily constitute AI. The authors should define the technologies more precisely and distinguish **AI-based tools from non-AI digital behaviour-guidance technologies.**

7. Avoid interpreting perceived benefits as demonstrated clinical effectiveness

The study measures clinicians' perceptions and self-reported use rather than children's clinical outcomes. Statements concerning reductions in anxiety, fear, pain, or improved cooperation should therefore be clearly presented as perceived or potential benefits. The manuscript itself acknowledges that these findings do not establish clinical effectiveness.

8. Provide ethical approval and informed-consent information

Because the study involves human participants through an online questionnaire, the manuscript should clearly report the ethics committee/institutional review approval, approval number/date where applicable, informed consent procedure, confidentiality measures, and data-protection procedures.

9. Strengthen the discussion by comparing the findings with previous studies

Although the Discussion cites previous Indian studies, the comparison should be more systematic. The authors should explain why the Kerala findings may differ from previous studies and identify similarities and differences in awareness, technology use, training requirements, and barriers.

REVIEWER'S REPORT**10. Strengthen the clinical implications and future research direction**

The manuscript should explain more concretely how the findings could influence pediatric dental education and clinical practice. Future studies should move beyond perception surveys toward multicentric studies using validated anxiety/behaviour measures, clinical outcomes, safety assessment, and cost-effectiveness analysis.

Minor Revisions

1. Correct typographical and spacing errors throughout the manuscript, e.g., **“Artificial Intelligencein”**, **“chatbotsandNatural”**, and **“technologies.These”**.
2. Standardize terminology throughout the paper, particularly **“behaviour guidance,” “behaviour management,” “AI,” “digital technology,” “VR,” and “AR.”**
3. The title is informative but somewhat lengthy. Consider shortening it while retaining the study population, technology, and geographical focus.
4. The Abstract should report the exact sample size consistently and ensure that all percentages correspond to the same denominator.
5. Provide the questionnaire as a supplementary file or appendix so that readers can assess the actual questions used.
6. Specify the exact data-collection period rather than stating only that the questionnaire was distributed over a **“defined data-collection period.”**
7. Tables should include the number of respondents (**n**) alongside percentages to improve transparency.
8. Avoid repetitive statements in the Discussion concerning awareness, training, cost, and infrastructure; these points are repeated several times.
9. The references should be checked carefully for consistency in author names, journal formatting, DOI presentation, and citation numbering. References 16–18 appear to duplicate studies already cited earlier.
10. The Conclusion should remain closely aligned with the cross-sectional survey design and avoid implying that AI adoption itself has been shown to improve clinical outcomes.