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| Book Name: | [**New Ideas Concerning Arts and Social Studies**](https://www.bookpi.org/bookstore/product/new-ideas-concerning-arts-and-social-studies-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4989** |
| Title of the Manuscript:  | **Noise Pollution in Dental Educational Activities : Risks and Prevention** |
| Type of the Article | **Book Chapter** |

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| PART 1: Comments |
|  | Reviewer’s comment**Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript highlights an important occupational health issue in dental education—noise pollution from dental instruments. The topic is relevant to both educators and students, as prolonged exposure to high noise levels can lead to hearing damage and other health concerns. Understanding these risks and implementing preventive measures can improve safety in dental training environments. However, the study needs better methodological clarity and citation accuracy to strengthen its contribution to the scientific community. |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | The title "Noise pollution in dental educational activities: Risks and prevention" is generally suitable, as it reflects the main focus of the manuscript. However, to improve clarity and alignment with academic standards, a more precise title could be: "Noise pollution in dental education: Health risks and mitigation strategies" |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | 1. Page 1: The authors have used "Summary" at the beginning of the chapter. However, for a book chapter, the most appropriate term is typically "Abstract" rather than "Summary." The authors should replace "Summary" with "Abstract" to align with standard academic conventions. If the section is intended as a concluding summary, it should be moved to the end of the chapter and labeled as "Conclusion" or "Chapter Summary."2. Page 1: The current "Summary" does not conform to the expected structure of an abstract for a book chapter. An abstract should be a single, cohesive paragraph that concisely summarizes the chapter’s background, objectives, key findings, and conclusions. The use of bullet points and numbered lists is not appropriate for an abstract, and the section should typically be 150-250 words. The authors should rename "Summary" to "Abstract", rewrite it as a single paragraph, remove bullet points, and ensure a smooth narrative flow that integrates mitigation strategies naturally. |  |
| **Is the manuscript scientifically, correct? Please write here.**  | The manuscript discusses an important issue, but it lacks scientific rigor in several areas. There are citation inaccuracies, missing references, and instances where claims are made without proper evidence. Additionally, the methodology is unclear, as the authors do not specify whether they conducted their own measurements or relied entirely on previous studies. The absence of exposure duration data further weakens the argument that noise levels pose a significant health risk. These issues must be addressed for the manuscript to be considered scientifically sound. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | In Page 6, Reference [16], the citation "Thiéry L., Canetto P. Evaluer et mesurer l’exposition professionnelle au bruit. Septembre 2009, [76 pages]. www.inrs.fr" is written in French, despite being included in an English-language book chapter. While the link provided exists and can be translated, the actual publication was not found on the website, though a similar citation appears on Google Scholar as: "Thiéry, L., & Canetto, P. (2009). Evaluer et mesurer l’exposition professionnelle au bruit. brochure ED, 6035." The authors should clarify why they included a French-language reference in an English-speaking book without providing an official translation or explanation. If the reference is critical, they should cite an English-translated version (if available) or summarize key findings in English for accessibility. Additionally, they should verify the availability of the cited publication to ensure that readers can access the source. If the document is not publicly available, an alternative reference should be considered.Page 6: In Reference [18], the citation "INRS Démarche de prévention http://www.inrs.fr/risques/bruit/demarche-prevention.html" lacks a publication year, and the full meaning of INRS is not provided. Additionally, the reference is in French, raising accessibility concerns for an English-speaking audience. The authors should provide the full name of INRS at its first mention (e.g., Institut National de Recherche et de Sécurité if applicable) and include the publication year of the cited source. If the reference remains in French, they should clarify its relevance to an English-speaking readership, either by summarizing key points in English or citing an English equivalent if available. In Reference [20], the citation "Bérubé G., Atienza R., Balez S. Propriétés acoustiques des matériaux & travaux de réhabilitation 2011-2012 http://www.grenoble.archi.fr" has multiple issues. The reference is in French, which may not be accessible to an English-speaking audience, and it lacks clear publication details such as the specific journal, report type, or publisher. Additionally, the provided link does not lead directly **to the cited publication,** raising concerns about source verification and accessibility. The authors should clarify the full source details, including the type of publication (e.g., book, report, article) and the publishing institution. If the reference remains in French, they should either provide a relevant English equivalent or summarize key findings in English. Additionally, they must ensure that the cited link directly leads to the publication or consider replacing it with a more accessible source. |  |
| Is the language/English quality of the article suitable for scholarly communications? | Partially |  |
| Optional/General comments | 1. Page 1, Lines 1-9 (Introduction section): The in-text citations throughout the introduction are incorrectly placed outside the period/full stop instead of inside, which does not conform to standard academic citation formatting. For example, "(1)" should be placed before the period, like this: "...auditory acuity (1)." This error occurs multiple times in the text and affects the readability and professional presentation of the chapter. The authors should revise all in-text citations by placing them inside the period to align with proper citation conventions.
2. In Page 1, Lines 7-8 (Introduction section), the statement:*"...are key indicators of acoustic comfort in this field."* The term "acoustic comfort" seems contradictory, as high noise levels typically contribute to acoustic discomfort, not comfort. If the intention is to highlight the negative impact of noise, the correct term should be "acoustic discomfort." The authors should clarify whether they mean that noise levels are detrimental to comfort (in which case "acoustic discomfort" is the appropriate term).
3. Page 1, Lines 8-9 (Introduction section): The chapter does not clearly define the research gap. While it reviews previous findings, it lacks a distinct contribution to the field. The authors should explicitly state the novelty of their study in the introduction. For example: How does this study differ from existing research? What specific aspect of noise pollution in dental education has been overlooked? Does this study propose new preventive strategies not covered in prior literature?
4. Page 1: There is an inconsistency in formatting between the "Introduction" section and the "I. ANALYSIS OF THE ACOUSTIC ENVIRONMENT IN PRACTICAL DENTISTRY TEACHING" subheading. The Introduction appears to have different spacing, and the subheading is written entirely in capital letters, which is not aligned with standard academic formatting. The authors should ensure uniform formatting throughout the chapter by standardizing spacing between section titles and body text, using consistent heading styles—typically, subheadings should be in title case (e.g., "Analysis of the acoustic environment in practical dentistry teaching") rather than all caps, and following the book’s formatting guidelines to maintain a professional and cohesive structure.
5. In Page 1, Line 1 (I. ANALYSIS OF THE ACOUSTIC ENVIRONMENT IN PRACTICAL DENTISTRY TEACHING), the statement: *"Noise, defined as an unwanted or disruptive sound,"* lacks proper attribution to a recognized authority or source. The authors should cite a credible source (such as the World Health Organization (WHO), the Occupational Safety and Health Administration (OSHA), semial journal articles, or an acoustics textbook) that provides a widely accepted definition of noise.
6. In Page 1, Lines 5-6 (I. ANALYSIS OF THE ACOUSTIC ENVIRONMENT IN PRACTICAL DENTISTRY TEACHING), the statement: *"Several studies have focused on this specific issue and have analysed the acoustic environment in dental practical training rooms."* lacks supporting citations. The authors should provide specific references to support this claim by citing relevant studies that have examined noise levels in dental practical training rooms. Without citations, the statement appears unsubstantiated and weakens the credibility of the discussion.
7. In Page 1, Lines 7-10 (I. ANALYSIS OF THE ACOUSTIC ENVIRONMENT IN PRACTICAL DENTISTRY TEACHING), the in-text citations (6, 1, 7) and (8, 27, 17, 10) are not arranged in numerical order. The authors should reorder the citations in ascending numerical order (e.g., 1, 6, 7 instead of 6, 1, 7 and 8, 10, 17, 27 instead of 8, 27, 17, 10) to maintain a consistent and professional citation format.
8. In Page 1, Lines 8-10 (I. ANALYSIS OF THE ACOUSTIC ENVIRONMENT IN PRACTICAL DENTISTRY TEACHING), the statement: *"According to the National Research Council of Canada (NRCC), the recommended background noise level for a classroom with a volume greater than 300 m³ is between 30 and 35 dB."* is problematic because the cited reference (Amine et al., 2021) does not contain this information. Additionally, the NRCC is mentioned, but no direct citation or reference to an official NRCC source is provided. The authors must either provide the correct reference that explicitly contains this information or remove the attribution to the NRCC if they cannot verify its source. Misattributing information undermines the credibility of the chapter and violates academic integrity standards. If the NRCC did indeed publish these noise level recommendations, the exact report or publication must be cited properly.
9. Several claims about the impact of noise pollution on health and learning lack clear empirical evidence. Examples: Page 1, Line 10: "Noise can cause cognitive impairment"—which studies support this? Page 2, Line 6 (II-4: Extra-Auditory Effects) "Students may experience stress and anxiety due to noise"—is this based on a specific survey or literature review? The authors should provide specific study findings or statistical evidence for these claims. If self-conducted surveys were used, the authors should describe the sample size and methodology.
10. In Page 2, Lines 3-6, the authors state that the sound levels in the preclinical setting range from 69 dB to 81 dB, while international standards, including the European directive, set 80 dB(A) as the threshold for preventive action. However, if the measured noise levels fall within or only slightly exceed this limit, it raises the question of whether the noise exposure truly constitutes a significant problem. If most noise levels remain below the threshold, the authors should clarify why this study is necessary and whether the focus is on cumulative exposure over time, individual susceptibility, or non-auditory effects. If noise pollution is indeed a concern, the authors should provide additional justification, such as potential long-term health impacts even at sub-threshold levels or inconsistencies in noise regulation enforcement. Without a clearer rationale, the study’s purpose and significance may appear weak.
11. Page 2, Line 5: While the study mentions noise levels (e.g., 69 dB to 81 dB), it does not compare them comprehensively against international standards (e.g., WHO, OSHA, ISO). The authors should include a comparison table showing the study’s noise level findings vs. regulatory limits. They should discuss how exceeding these levels impacts dental students and staff differently.
12. In Page 1, Lines 6-7 (Abstract) and Page 2, Lines 3-6, the authors describe noise levels in dental practical workrooms as ranging from 69 dB to 81 dB, with an international threshold for preventive action set at 80 dB(A). However, there is no indication that the authors conducted their own measurements; rather, they appear to be relying entirely on previously published studies. This raises concerns about whether the findings accurately reflect real conditions in a typical dental practical workroom. Additionally, the duration of exposure is never discussed, which is a critical factor in determining the actual risk posed by noise levels. Without specifying how long dentistry teachers, students, and professionals spend in these noisy environments, it is difficult to assess whether the noise exposure is significant enough to cause auditory or extra-auditory effects. The authors should clarify whether they conducted their own noise measurements or are relying solely on secondary sources. If the latter, they should acknowledge this limitation and discuss potential variations in noise levels across different institutions. Furthermore, they must include details on the duration of noise exposure in dental practical settings, as exposure time is essential in assessing the true impact of noise pollution on auditory health.
13. The chapter does not clearly describe its methodology for assessing noise levels. If this is a literature review, state it explicitly. If there is original data analysis, provide details on: measurement tools (e.g., type of sound level meter used), time and duration of measurements, number of dental schools or practical settings considered, and statistical methods used for noise level analysis. Without this, the credibility of the paper’s findings is compromised.
14. The chapter lacks figures, tables, or charts to visualize key data. The authors should include a diagram of a dental training room showing noise sources. They should also add a bar chart or heatmap illustrating noise intensity variations in different settings.
15. Page 2: Multiple sources are listed without differentiation, making it unclear which studies support which claims. If referencing multiple studies in one citation, clarify each source.
16. Throughout Section II: Effects of Noise (Page 2), the authors have provided large blocks of information followed by multiple references at the end of the paragraph or section. This citation style is problematic and raises concerns about academic integrity. In proper academic writing, each claim or factual statement should be directly supported by an in-text citation at the point where it is made, rather than grouping all references at the end. This approach is also suspicious, as it suggests the possibility that the text was generated first (potentially by an AI language model) and then retrofitted with references to make it appear well-sourced. A real research-based discussion cites studies as the arguments develop, ensuring each statement is clearly linked to its supporting evidence. The authors should properly attribute sources by placing citations immediately after the corresponding claims, rather than lumping multiple references at the end of a paragraph. Additionally, they must verify that the cited sources actually support the claims made. This correction will enhance the credibility of the chapter and align it with academic best practices.
17. In Page 3, Lines 4 & 13, the text cites reference [27], yet the reference list on Page 6 ends at number 20. This discrepancy raises concerns about the accuracy and completeness of the citations. It suggests that either the authors initially included more references but later removed them without updating the numbering, or there are missing references that should be added back to the list. The authors must carefully review and reconcile the in-text citations with the reference list, ensuring that all cited sources are correctly numbered and included in the final reference section. Any missing references should be restored, or the numbering should be adjusted to reflect the actual number of sources used in the study.
18. Page 3: The recommendations section restates points already discussed in mitigation strategies. The authors should use tables or bullet points to present mitigation strategies more concisely.
19. Page 4: The conclusion does not summarize the study’s key contributions or suggest areas for future research. The authors should strengthen the conclusion by restating the main findings succinctly; suggesting future studies (e.g., "Further research should explore the impact of silent haptic simulators on student learning outcomes"); and emphasizing the practical implications for dental educators and institutions.
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| **PART 2:**  |
|  | **Reviewer’s comment** | **Author’s comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?**  | *(If yes, Kindly please write down the ethical issues here in details)* |  |

**Reviewers:**

**Ochuko Felix Orikpete, University of Port Harcourt, Nigeria**