Gamification vs. teaching first aid: What is being produced by science in the area?

Rodrigo L. Vancini[1*] , Thais. Russomano[2, 3, 4] , Marilia S. Andrade[5] , Claudio A. B. de Lira[6] , Beat. Knechtle[7, 8] ,
Juliana S. Herbert[2, 4]

[1] Center for Physical Education and Sports, Federal University of Espirito Santo, Brazil
[2] InnovaSpace, UK
[3] Center for Aerospace Medicine Studies (CEMA), Faculty of Medicine, University of Lisbon, Portugal
[4] Space & Extreme Environment Research Center, Graduate Program of Information Technology and Healthcare Management, Federal University of Health Sciences of Porto Alegre, Brazil
[5] Department of Physiology, Federal University of São Paulo, São Paulo (SP), Brazil
[6] Human Physiology and Exercise Sector, Faculty of Physical Education and Dance, Federal University of Goiás, Goiânia, Goiás, Brazil
[7] Medbase St. Gallen Am Vadianplatz, St. Gallen, Switzerland
[8] Institute of Primary Care, University of Zurich, Zurich, Switzerland

* Corresponding author email address: rodrigoluizvancini@gmail.com

1.   Round 1

1.1   Reviewer 1

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Reviewer: This manuscript provides a valuable overview of the application of gamification in first aid and BLS education. With further depth in analysis and discussion, it could significantly contribute to the field by guiding future research and practical application.

1. Thematic Strength and Relevance

- **Context and Importance:** The manuscript effectively contextualizes the importance of gamification in health education, particularly in teaching first aid and BLS. It is timely and relevant, given the current technological advancements and educational needs in healthcare.

- **Literature Synthesis:** The narrative review synthesizes a broad range of studies well. However, the discussion could benefit from a more critical synthesis, contrasting different study findings and methodologies.

2. Methodological Analysis

- **Search Strategy:** The authors outline a clear search strategy using various databases and keywords. However, the justification for the selection and exclusion of certain studies seems lacking. More transparency in the selection process would add robustness.

- **Scope of Review:** The article presents a comprehensive look into gamification in first aid and BLS training. Yet, it might benefit from a more focused discussion on specific types of gamification strategies that have shown the most promise or need for improvement.

3. Discussion and Interpretation

- **Insights and Implications:** The discussion highlights the transformative potential of serious games and gamification in medical education. It could be enhanced by including specific examples of best practices or case studies demonstrating successful implementation.

- **Future Directions:** The article mentions the need for further research but could provide more concrete suggestions or identify particular gaps that future studies should aim to address.

Recommendations for Revision:

1. **Deepen Critical Analysis:** Provide a more nuanced comparison of study methodologies and results within the gamification domain.

2. **Clarify Selection Criteria:** Detail the inclusion and exclusion criteria more explicitly for the studies reviewed.

3. **Expand Practical Implications:** Discuss how these findings can directly impact curriculum development or policy in healthcare education.

4. **Diversify Sources:** Consider including a broader range of literature, possibly incorporating non-English language studies or grey literature to enrich the review.

Authors revised the manuscript and submitted the document.

1.2   Reviewer 2

Date: 25 February 2023

Reviewer: This narrative review addresses an innovative and important topic in healthcare education. With additional detail and critical analysis, it can be a significant resource for educators, researchers, and policymakers interested in the application of gamification in healthcare training.

- **Clarity and Relevance:** The introduction clearly states the significance of the research topic. However, it could benefit from a more explicit statement of the review's objectives and how it intends to contribute to the field.

- **Comprehensiveness:** The methodology section is thorough in its approach to identifying relevant literature. Consider expanding on how the quality of the included studies was assessed.

- **Reproducibility:** Future researchers should be able to reproduce the study based on the information provided. More details on the search strings and database specifics would enhance this.

- **Organization and Presentation:** The results are well-organized. Including summary tables or figures comparing key aspects of the studies (e.g., study design, sample size, main findings) could enhance readability and comprehension.

- **Integration of Results:** The discussion integrates findings from various studies to present a cohesive narrative. It could be improved by discussing conflicting results or explaining the variation in study outcomes.

- **Implications for Practice:** The manuscript discusses the potential of gamification in healthcare education but should further explore how these findings translate into practical applications or curriculum development.

Suggestions:

- **Enhance Introduction Clarity:** Make the objectives and anticipated contribution of the review more explicit.

- **Detailed Methodology:** Provide more detail on the literature search and study selection process.

- **Visual Data Representation:** Introduce tables or figures summarizing the reviewed studies.

- **Address Contradictions:** Discuss any discrepancies among study findings and possible reasons.

- **Practical Applications:** Offer more detailed suggestions for how educators and policymakers can use these findings.

Authors revised the manuscript and submitted the document.

2. Revised

Editor's decision after revisions: Accepted.
Editor in Chief's decision: Accepted.