

Review of: "EEG-based Emotion Classification using Deep Learning: Approaches, Trends and Bibliometrics"

Mustafa Azzawi¹

¹ Universiti Kebangsaan Malaysia

Potential competing interests: No potential competing interests to declare.

New Peer Review Qeios ID: V56K79 - Version 1

Review of: EEG-based Emotion Classification using Deep Learning: Approaches, Trends and Bibliometrics:

Thanks for the invitation to review the posted manuscript.

Although there is loads of detailed and well-structured information, I would always urge you to keep it concise for the audience. Please find the below points and suggestions for your consideration.

The title: The title has been written as keywords, which makes it a bit vague. I would suggest rewriting the title with something like this: "A Comprehensive Review of Emotion Classification Research: Insights from Bibliometric Analysis using Deep Learning."

Page 1:

1) Describing the submission as "meticulously collected" and "meticulously analyzed" with overly generous superlatives is not appropriate.

2) Why does this submission make such an ambitious claim when it is simply conducting a bibliometric review? This overarching statement is needlessly reiterated throughout the text.

Page 16:

- Unnecessary and excessively flattering superlatives are employed, which are not appropriate for the review conducted and presented. For instance, the phrase "In this elaborate and exhaustive analysis" is an example of such language.
- Why is the discussion section relatively brief considering that you've described this review as an "elaborate and exhaustive analysis"? I'm unable to locate where you've thoroughly analyzed the presented data. Could you please justify using your sentences in the Discussion section:
 - I. Where did your analysis focus on specific domains where emotion classification is gaining traction, particularly within healthcare and human-computer interaction?
 - II. Where did you identify the significant importance and profound impact of emotion classification emerging from these distinct and consistent patterns?

III. Where exactly did your findings align seamlessly with prevalent research themes, confirming the dynamic and rapid evolution characterizing this compelling field?

General Comments:

Methodological Limitations: While the article claims to conduct a comprehensive bibliometric analysis, it lacks transparency regarding the specific methodologies employed for data collection and analysis. The absence of detailed descriptions regarding search strategies, inclusion criteria, and data extraction methods undermines the reproducibility and reliability of the findings.

Key Findings: The findings revealed an unexpected trend: a notable surge in research activity, particularly post-2018. This upsurge underscores the growing recognition of how emotions profoundly impact human experiences and behavior. Researchers from diverse disciplines have underscored the imperative of advancing our understanding and description of emotions, resulting in a substantial increase in research output. However, challenges persist, notably in terms of achieving consensus on emotion categorization assessment methodologies and standardization processes. The absence of precise assessment criteria hinders comparability and reproducibility of study findings. Addressing this challenge necessitates concerted efforts among researchers to collaborate and develop a shared knowledge base.

Implications and Future Directions: The overarching aim of this review is to expand our comprehension of emotions, with the ultimate goal of informing policy formulation to enhance overall well-being. The insights garnered from this research can be translated into practical applications in psychological counseling and health promotion efforts, fostering closer social bonds and improving mental health outcomes. Moving forward, it is imperative for the scientific community to continue fostering interdisciplinary collaboration and methodological refinement to advance the field of emotion classification and its myriad applications.

Overall, this review provides valuable insights into the current landscape of emotion classification research and underscores the importance of ongoing efforts to enhance our understanding of emotions for the betterment of society.

Sincerely,

Mustafa Azzawi

