Review of: "A Simple Preprocessing Method Enhances Machine Learning Application to EEG Data for Differential Diagnosis of Autism"

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Potential competing interests: No potential competing interests to declare.

This study is very interesting, and the entire manuscript has been written well. I have several comments and suggestions regarding the manuscript "A Simple Preprocessing Method Enhances Machine Learning Application to EEG Data for the Differential Diagnosis of Autism." These comments aim to enhance the clarity, rigor, and relevance of the manuscript, ultimately contributing to its scientific impact and potential for translation into clinical practice.

1. The introduction section could be more concise and focused. It would be helpful to provide a brief overview of the current state of research on EEG-based diagnosis of ASD and highlight the gap in knowledge that your study aims to address.

2. The methodology section is well-written and detailed. However, it would be helpful to provide more information on the specific features extracted from the EEG data and how they were selected.

3. The results section is well-organized and easy to follow. However, it would be helpful to provide more information on the false positive and false negative rates of the KNN algorithm.

4. The discussion section is informative and provides a good summary of the study's findings. However, it would be helpful to discuss the limitations of the study and potential future directions for research.

5. The manuscript would benefit from more detailed information on the demographic characteristics of the study participants, such as age, gender, and ethnicity.

6. It would be helpful to provide more information on the clinical diagnosis of the study participants, such as the specific diagnostic criteria used and the clinical assessments performed.

7. The manuscript would benefit from more detailed information on the EEG recording and processing procedures, such as the specific electrode placements and the filtering methods used.

8. It would be helpful to provide more information on the generalizability of the study's findings, such as whether the results are applicable to other populations or EEG recording systems.