Review of: "A mobile app for dyslexia biomarker detection in children at home or at school: Feasibility, Acceptability, Economic impact, Pilot Study and Survey Results"

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1. Thank you for an interesting and innovative paper. It is a very exciting idea which I hope is used to support diagnosis of children with dyslexia in the future. The main issues identified in this review relate to clarity of writing which I believe is important as not all readers of this exciting paper will be scientists (this reviewer is not).

2. Abstract: While the abstract works to intrigue the reader there are a few things to consider changing. The first sentence of the abstract could improve by adding the word 'global' before the word societies. The abstract itself would benefit from a structure: Introduction, Methods, Findings and Conclusion. I would question whether the use of the word rehabilitation is the correct term to use as this term indicates "the action of restoring someone to health or normal life through training and therapy after imprisonment, addiction, or illness" (Oxford Dictionary online - accessed Nov. 2022). Dyslexia is now seen as a neuro diversity rather than something to fix through rehabilitation - you later refer to remedial work which may be more accurate. It is important to note that neuro plasticity occurs within the correct learning environments and compensatory strategies are important to learning within the right educational approaches. Ann, EEG and QEEG need to be written in full first time.

3. Introduction: some very old references used in first few paragraphs: 2007 and 2002 and 1990 - any more up to date references to provide more accurate and up to date information? This will add weight to your argument which is a good argument and has international relevance. Paragraph 3 lists machine assessment methods followed by cognitive assessments but does not state the latter are psychometric/cognitive assessments until the end of the long sentence and could state they are carried out by educational psychologists and are expensive for families, with mainly well off families affording them. There are issue to discuss re' SES of students diagnosed/not diagnosed. reports in the UK (written by Rose and another by Lamb etc) state repeatedly that families typically have to fight for diagnosis. this has worsened as funding has reduced over the years for support within schools.

4. Methods: How were the participants recruited/accessed - does not appear to be clear.

5. Results section: this section is written well and shows promising results, although to communicate to non scientists more clearly would be helpful. Some information did not quite make sense to a non scientist reviewer and it may be useful to consider who the audience/readership needs to be if this idea is to be taken forward further and hopefully funded by authorities. Replicability of a study should be aimed for and clarity of all terms and actions will support this.

6. Discussion: This section discusses the results and compares with other findings. There are one or two typos to correct such as 'led the' I believe should be 'let to'. What are the implications to diagnosis in the future? How much does it cost? Could the implications of identifying non dyslexic students as dyslexic mean many have dyslexic traits without

the level or severity required for diagnosis or does this mean these children had non diagnosed dyslexia?

7. Overall I believe the article is a promising addition to the dyslexia diagnostic research literature and is an exciting and innovative idea which will hopefully help many struggling families to gain easy access to diagnosis in the future and through further research. I hope this review is helpful. Good luck with this innovative project.