Review of: "14-channel neurofeedback with Auto Train Brain improves the left lateralization of the brain in dyslexia: A pilot study"

Christophe Domingos[1]

1 Instituto Politécnico de Santarém

Dear author,

First of all, congratulations on your work!

I've some significant suggestions, and I would like to see them answered so I can move on with my revision. Please, don't feel discouraged.

I'm afraid that this paper is written using ordinary language. I'll give you an example: you wrote "kids" instead of "children". This is only one example of many more.

Please, have another look at your paper.

Introduction:

I believe that this introduction is too extensive. Readers need clear and objective information.

You focus a lot on the gamma band, but I'm wondering if the alpha and beta bands have no changes in this population…?

The way your introduction is written can be led to false assumptions.

Methodology:

A.

I understand the importance of having females included in the study, however, the sample is not equally distributed, and I do not see any information about their possible menstrual cycle (if they have already biologically attained the age, it is essential to report what phase of the cycle).

I think more inclusion criteria, such as age, should be mentioned (assuming that you really considered them). At least, this one seems to be fundamental.

B.

There is a typo when describing the band's range. Check Beta-2.

C.

What do you mean by "many times"?

So, if I'm correct, you have 2 groups (20 doing Auto Train Brain and 20 doing Neurofeedback training) using 2 different equipment? Your study is not about comparing equipment, but training methods, so I really think this can be a major limitation of your study already.

What was the auditory/visual neurofeedback task?

How long was the auto train brain program?

What are your thoughts about using QEEG with only 5 and 14-channels?

Doing neurofeedback at home can be risky since the environment, such as noise, can contribute to the outcome (*Domingos et al., 2021).

You lack a section talking about **Statistical Analysis**. Please, add it.

Results:

Try to correct or ask the editor to correct R2 to R^2.

I would like to recommend greater rigor in the figures. If the axes are missing, remove the horizontal lines and, most importantly, put the axes' captions.

You talk about QEEG, but I don't see any QEEG map. I was not expecting to see them since you're only using 5 and 14 channels, and the visual information would lack rigor, however, the point is that it is not necessary to mention the QEEG in your work.

If you agree to change and answer the questions above, I'll consider helping with the discussion. Nevertheless, I see too many assumptions there without any reference supporting them.

Best of luck!

*Domingos, C., da Silva Caldeira, H., Miranda, M., Melício, F., Rosa, A. C., & Pereira, J. G. (2021). The Influence of Noise in the Neurofeedback Training Sessions in Student Athletes. International Journal of Environmental Research and Public Health, 18(24), 13223.

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