Peer Review File

Near and distance stereopsis restoration in amblyopia with 3D computer treatment

Reviewer: 1
This very nice presentation.
It is too interesting to measure stereoacuity for distance.

Reviewer 2
1. At the introduction, they stated, “The aim of our research was to determine if the recovery speed in near and distant stereoacuity is the same in different types of amblyopia”. There is no data regarding recovery speed in Results.
2. The authors stated “The whole treatment session was finished when BCVA reached a level within a normal range for the age of the participant. Page 10, line 25”. What is the normal level range? In other words, did all the patients with amblyopia and even ages>12 years gained normal visual acuity at the end of the study? It is somehow questionable and is not consistent with previous studies.
3. How did the glasses work? They only mentioned that “The shutter glasses’ lenses lighten and darken in synchrony”. They should explain in more details.
4. The results of this study are not in agreement with some previous studies. For example, Kelly et al assessed the effectiveness of binocular adventure game as amblyopia treatment. In their study, no change in stereoacuity was found with the binocular game. Kelly KR, Jost RM, Dao L, Beauchamp CL, Leffler JN, Birch EE. Binocular iPad Game vs Patching for Treatment of Amblyopia in Children: A Randomized Clinical Trial. JAMA Ophthalmol. 2016 Dec 1;134(12):1402-1408. doi: 10.1001/jamaophthalmol.2016.4224. They should point out to these studies in discussion and provide the hypothesis.
5. They checked divergence and convergence. Did they mean convergence and divergence fusional amplitude? Then they should present two sets of data for convergence and divergence, but there is only a graph for both convergence and divergence.
6. They can add the mean±SD treatment session in months for all the patients. Also, it is better to note the mean pre and post treatment near and distance stereopsis in the text in results.
7. Many sentences in Results are not written correctly. They stated “. In Fig. 3, there are [is] significant enhancement of ANA (shows in yellow arrow) compares with AMA (shows in blue arrow) in near distance. This trend also could be seen in the far distance shows in the Fig.4, but not that large with no statistic significant” Every sentence needs the exact p value. Furthermore, usage of adverbs like ‘dramatically’ is not correct.
8. I think the comparison of amblyopia patients with intermittent exotropia is not correct, page 13 line 2. In intermittent exotropia, firstly control of deviation deteriorates at far and it is reasonable that far stereopsis is worse than near stereopsis.
9. When an abbreviation (AMA, ANA) at the main text for the first time is used, it should be written in full words, then use an abbreviation (page 8, line47). The definition of an abbreviation in the abstract is not correct.
10. Any abbreviation in the tables (AE, DE,..) and graph should be clarified as footnotes.

Firstly, many thanks to the comments, I will answer all the comments one by one:
1. We do share our result of the recovery value of these two kinds of amblyopia in near and far
distance stereoacuity. The speed of the recovery is faster in near distance than in far, which might be stress out clearly in our revise version.

2. The amblyopia recovery statue of BCVA is reach to the normal level range, which means if the patients age more than 12 years, the BCVA is higher than 20/20.

3. The shutter glasses in our study is part of the commercial stereoscopic 3D display, which is commonly used nowadays. And the company's name has been mentioned in the article.

4. The game used in the Kelly is different from us, we focused on firstly to widen the range of fusion. But their game just focuses on improving vision acuity.

5. There are divergence and convergence range in the fusion. We used the synoptophore to get the whole fusion range, which will be clearly written in the new version.

6. We will add the Mean±SD values of the treatment session and other data in the new version.

7. Language will be revised, and P value will be added in the new version.

8. In the discussion part, to mention the intermittent exotropia, although we do not want to compare this disease with the amblyopia, they do have some similar character in training sequence in order to recover the stereoacuity. It is easier to get back the near distance stereoacuity in both diseases, in some extent, that they are all mono-vision diseases.

9&10. Those abbreviation and any abbreviation in tables will be clarified in the new version.