Reviewer’s report

Title: Do video game interventions improve motor outcomes in children with developmental coordination disorder? A systematic review using the ICF framework

Version: 0 Date: 20 Dec 2017

Reviewer: Margaret O'Neil

Reviewer's report:

BPED-D-17-00576

Title: Do video game interventions improve motor outcomes in children with developmental coordination disorder? A systematic review using the ICF framework

Abstract:

Background: The word 'range' is used twice in this paragraph - perhaps a synonym (variety) could be used so there is no redundancy.

Methods: Fine
Results: Fine

1. Background: This section reads well and is thorough.

2. Methods

2.1 Search strategy: seems like a reasonable and comprehensive approach; however, in review of the Additional File #1 - the term DCD was not included in the Search Terms - could the authors address why this was not included?

2.2 Selection criteria: good definitions of inclusion and exclusion criteria

2.3 Selection of articles, data extraction and quality appraisal: well written and nice to see that Additional File #2 is the modified Downs & Black rating scale.

3. Results:
3.1: Study details: Good description of study details. Table 1 & 2 are referenced in this section. Table 1 is a comprehensive overview of study details. Table 2 includes details on video game interventions.

3.2: Quality appraisal: This section is well done. Additional File #3 provides clear and important information to support this summary on quality.

3.3 Outcome measures: Good summary.

Page 9, Line 222: '…heterogeneity among (not between) articles…' (> 2 articles)

3.4: Outcomes of Level 2 and 3 studies

3.4.1: Body structure and function: This section provides a very good summary of BS/BF outcomes. Table 3 is referenced in this section and includes details on outcomes (sig; non-sig) after the video game interventions

3.4.2: Activity: This section provides a very good summary of activity outcomes. Table 4 is referenced in this section and includes details on activity outcomes (sig.; non-sig) after the video game interventions.

3.4.2.5: Page 15, Line 364: '….three Level 3 articles (consider using the word 'studies')…'

Page 15, Line 366: '… articles (consider using word 'studies')…

3.4.3: Participation: Page 16, Lines 368-374: For the study referenced, [34], the participation measure seems to be habitual physical activity (1 week of accelerometry wear) and there was no difference in HPA outcomes between control vs experimental phases of the study. It would be good to clearly define participation as HPA (measured by accelerometry).

3.5: Outcomes of Level 4 studies: This section provides a complete summary for the two studies classified as Level 4 (re: BS/BF and Activity outcomes; no participation outcomes reported).

3.6: Adherence, enjoyment, and safety: This section provides a good summary of those studies that used measures for these constructs.

4. Discussion: This is a complete and well organized section.

Page 21: Line 496: consider replacing 'articles' with 'studies'
Page 21: Line 502: consider replacing 'articles' with 'studies'

5. Conclusion: Well written summary and conclusion highlighting strengths, weaknesses and need for further research in use of AVG for children with DCD in pediatric rehab interventions.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal