Title: Effects of a physical education intervention on cognitive function in young children: randomized controlled pilot study.

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Author's response to reviews:

Responses to Second Set of Reviews and Summary of Changes Made, MS2697304325219426.
Note that changes to this version of the manuscript have been underlined.

Reviewer 1 (Hardy)
Did not require any further changes to the manuscript.

Reviewer 2 (Chinapaw)
Abstract
1. Recommended adding the ICC values and 95% CI to the text—now done.
Introduction
1. Recommended revised wording of the sentence on p4 lines 6 and 7. Now done—see revised text on p4, lines 8-9.
Methods
1. Requested clarification of sample size (n 184 or n 185 eligible)—now provided in revised text on p4.
Results
1. Various changes to p12 (lines 5-7) were recommended: using the term ‘difference’ rather than ‘change’; giving 95% CI; ‘analysis’ term to be added. These changes have all been made on revised p12, second paragraph.
Discussion
1. Recommended correction of an error (physical education when what was intended was physical activity)—now done on revised p12.
2. Recommended adding a comment on uncertainty/lack of consensus on
accelerometer cut-points. Now added to p15 in the section on limitations.

3. Requested that additional information be provided on the original study which established the reliability of the CAS. This detail is now provided on p15, together with a comment which notes that we cannot explain why the CAS reliability was higher than that of the other two cognitive outcome measures.

4. Reviewer noted that low return rate for the Connor’s rating Scale might reflect low practical utility. Point taken and now made in revised Discussion, p13 first paragraph.

5. Reviewer suggested a number of changes to Tables 1, 2, and 4. These have all now been made in the revised version of the manuscript.

Editorial Changes
We have now checked formatting of manuscript, and have provided author contributions in standard form, as requested.