Author’s response to reviews

Title: The feasibility and impact of embedding pedagogical strategies targeting physical activity within undergraduate teacher education: Transform-Ed!

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The feasibility and impact of embedding pedagogical strategies targeting physical activity within undergraduate teacher education: Transform-Ed!

Natalie Lander, Harriet Koorts, Emiliano Mazzoli, Kate Moncrieff, Jo Salmon

Dear Editor,

We are pleased that our revision has met all reviewers’ requests. We would like to thank you for the opportunity we have been given to further improve our manuscript, and we would like to extend our appreciation to the Reviewers for their time and careful revision. Please find below our point-by-point response to the Reviewer/Editor, in relation to the latest minor comments.

Reviewer/Editor reports:

Reviewer comment 1: Thank you for the careful response to reviews and the changes which strengthened the manuscript. There is one more revision that should not take too much time to do regarding presentation of results in the abstract and Table 2, and insertion of a sample size section.

Author response 1: We thank the Reviewer for this comment. We agree that the manuscript has
improved thanks to the revision process. We have addressed each revision point-by-point and have amended the manuscript accordingly.

Reviewer comment 2: Please insert a sample size section before the analysis section and i) give a rationale for the numbers used (which you have elsewhere but do again here - ie you took all students in the class) and ii) give a formal sample size calculation for a paired t-test so that hypothesis testing can be validly used and the results of the paired t test presented (your numbers should be large enough to show that you have enough power for a certain effect size so it would be good practice to show it here rather than present p-values with no power calculation).

Author response 2: Thank you for this suggestion. We have added a rational for the numbers used and have included a formal sample size for the paired t test so that hypothesis testing can be validly used and the results of the paired t test presented. Please see lines 285-290 of the manuscript as shown below:

All Bachelor of Education (Primary) pre-service teachers enrolled in the core unit, ‘Introduction to Curriculum and Pedagogy’ were invited to participate in the study (n = 300). Assuming small–medium effects to be found, a conservative estimation conducted using G*Power (35), parameters set at d = 0.25, two-tailed and α level = 0.05, suggested that a sample of 210 participants was necessary in order to detect statistically significant differences with Paired t-tests.


Reviewer comment 3: Please remove the t and p-values from the abstract and replace with means or mean difference and 95% CIs for means or mean difference (Paired CI) from Table 2 so the difference in scores can be seen.

Author response 3: All t- and p-values have been removed from the abstract and replaced with Mean Difference (Δ) and 95% confidence intervals. Please see lines 44-48 of the manuscript, as shown below:

Results: After 12 weeks, pre-service teachers (n=218) were significantly more willing (Δ = 0.54, 95% CI [0.16, 0.91]), confident (Δ = 1.40, 95% CI [0.89, 1.91]) and competent (Δ = 2.39, 95% CI [1.85, 2.92]) to deliver Transform-Ed!, had more positive feelings about the impact of physical activity on student outcomes (Δ = 2.05, 95% CI [1.58, 2.52]), and perceived fewer barriers to integrating Transform-Ed! into current and future teaching (Δ = -7.26, 95% CI [-8.88, -5.64]).

Reviewer Comment 4: In Table 2 please add CIs for the ICCs to show they range between 0.85 and 1.0 as stated in the text (they can go underneath the ICCs in brackets).

Author Response 4: We have now included 95% confidence interval for each of the ICC estimates reported on Table 2.