Author's response to reviews

Title: School-based strategies for oral health education of adolescents- a cluster randomized controlled trial.

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Author's response to reviews: see over
**Cover letter:**

The authors are grateful to the learned reviewers for their valuable comments that have been of great help in improving the manuscript.

The point to point amendments made in the manuscript are as follows (as the two reviewers had some points in common, the changes suggested by them have been taken up jointly):

The **editorial comment** about the ‘improvement in English used’ has been addressed, in the opinion of the authors, by having the manuscript proof read by three PhDs, one qualified from England. Unfortunately no native English speaking **colleague** was available to do the job.

Donald Chi: The guidelines of **CONSORT** 2010 for RCT and Cluster RCT have been followed to improve the manuscript as suggested.

Donald Chi: A priori **hypothesis** has been stated- Page 6.

Donald Chi: **Lack of concordance** between the stated behavioral theory, the intervention, and the questionnaire---. The details of OHE interventions and that of questions asked (Page 9-13) might have clarified this issue. The questions were not only related to the objectives of OHE but some of them especially the ones included in the structured interview also dealt with the constructs of the theoretical base of the study.

Jolanta Aleksejuniene: **Key words** have been corrected in the abstract- Page 4.

Jolanta Aleksejuniene: **Rationale** removed from the ‘Background’ section- Page 5.

Study design and study population: The **heading** amended- Page 6.

Jolanta Aleksejuniene & Donald Chi: **Eligibility criteria** defined- Page 8.

Jolanta Aleksejuniene: **Ethical approval**- Page 7 and **parental consent**- Page 8 moved earlier.

Jolanta Aleksejuniene: 100% response rate was achieved as the letters were sent through the school principals.

Jolanta Aleksejuniene: Amended details of the **sample size** estimation and the methods applied for calculation are given with references- Page 7.

Donald Chi: Concerns above power of the study and **limitations** discussed- Pages 20 & 21.

Donald Chi: Information about **randomization and allocation method** included- Page 8.

Donald Chi: **Details of OHE** interventions including operationalization of self-efficacy and social support **constructs** of social learning theory given- Pages 9 &10.
Donald Chi: Measures taken to ensure ‘Fidelity’ as part of OHE interventions and process evaluation described- Page 11.

Jolanta Aleksejuniene: ‘Under indirect supervision’ at previous page 8 explained- Page 10.

Jolanta Aleksejuniene & Donald Chi: Estimates of the reliability coefficients 7.9 and 8.7 corrected with a mention of the statistical method- Page 13.

Jolanta Aleksejuniene & Donald Chi: Kappa score for examiner reliability given- page 14.

Jolanta Aleksejuniene: Ranges for index scores mentioned in the text as well- Page 15.

Donald Chi: Reasons for inclusion and clinical relevance of some oral health knowledge questions discussed- Page 12.

Results:

Jolanta Aleksejuniene: Overall strategy-wise loss of subjects given in Table 1 and percentages included.

Jolanta Aleksejuniene: non-response analysis for drop outs by comparing the baseline values between the ones who completed the study and the ones who were lost---- given- Page 16.

Donald Chi: Logic for including percent change: ‘comparison with the previous studies’ stated-Page 15 in data analyses section.

Donald Chi: 95% Confidence interval for baseline and evaluation IV scores given in Table 2. Percent change was calculated manually as: evaluation IV score – baseline score/ maximum score of the index x 100. Actually presenting results in terms of percent change and p-values has been a common practice in dental literature.

Jolanta Aleksejuniene: Some redundant p-values have been removed from the text and only the p-values for statistically significant results have been included in Table 3 along with the percent changes to make it less cumbersome to read. In fact the authors did not come across a study in health education involving so many comparisons, and putting them together in just one table has been an uphill task.

Jolanta Aleksejuniene: The effect sizes of different OHE strategies have been given in a separate Table IV.

Donald Chi: Bonferroni corrections for multiple comparisons involved have been applied in GEE analyses that rendered a number of previously significant results non-significant- thanks for the guidance.

Jolanta Aleksejuniene: The point about mentioning cultural differences seems quite pertinent but there isn’t more than one study in dentistry to compare with.
Jolanta Aleksejuniene: “the COE examination of teeth for plaque…” This sentence has been revised- previous Page- 10.

Donald Chi: Intervention was directed at 10-13 years old adolescents- corrected as 10-11-year-olds.

Donald Chi: Schools were not allocated by geographical area. Distances between schools were not precisely measured. ‘Large’ was rather a rough estimate and has been removed.

Again thanks to both the reviewers for the wonderful critique and congratulations to the Editor for having such learned reviewers on his panel.