

## PEER REVIEW HISTORY

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### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Effectiveness of school-based smoking prevention curricula: systematic review and meta-analysis
<b>AUTHORS</b>	Thomas, Roger; McLellan, Julie; Perera, Rafael

### VERSION 1 - REVIEW

<b>REVIEWER</b>	Mathilde Crone Leiden University Medical Center
<b>REVIEW RETURNED</b>	20-Nov-2014

<b>GENERAL COMMENTS</b>	<p>It is an interesting paper: it confirms the importance of school-based smoking prevention programs directed at social competence skills in preventing the uptake of smoking.</p> <p>I have reviewed an earlier version of this manuscript for another journal. The authors now have addressed several of my comment in this version.</p> <p>My main comment is still about the follow-up period. I would recommend to stratify the analyses for the studies with a follow up of one year or less and the ones with a longer follow-up. This would provide more information on whether it is indeed the studies that have a longer follow-up that are more effective. Now the longest follow-up analyses include both studies with a longest follow-up of 1 year or less and studies with a longer follow-up.</p> <p>Next it could be interesting to look at the interventions included in these longest follow-up analyses. Is the longer term effect caused by new interventions included in the analyses or are the ones with a shorter follow-up performing better on the longer-term?</p> <p>They do not really discuss the limitations and strengths of their study. Are there no potential biases in the review process? For example under-reporting of the contents of the interventions, categorization of the interventions.</p> <p>Other comments:</p> <ul style="list-style-type: none"><li>• The analyses comparing multi-focal and only tobacco interventions is somewhat difficult to understand: does the part on only tobacco refer to social competence/influence intervention or to all interventions?</li><li>• How did they define booster sessions? And what was in general the period between the intervention and the booster session?</li><li>• The authors describe in the data analyses that they extracted data as absolute number or odds ratios, based on loss of never smokers from baseline to follow-up: I am not sure what they mean with that: the ones who had smoked (or tried) at follow-up?</li><li>• Figure 2 seems to have some configuration problems, while Figure</li></ul>
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	<p>3 doesn't: for example Nujbeam (but maybe it is caused by my computer?)</p> <ul style="list-style-type: none"> <li>• Just curious (as I could not download the paper): Connell et al. has a follow-up time of 11 years (table 3): is that right?</li> </ul>
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### VERSION 1 – AUTHOR RESPONSE

<p>It is an interesting paper: it confirms the importance of school-based smoking prevention programs directed at social competence skills in preventing the uptake of smoking.</p> <p>I have reviewed an earlier version of this manuscript for another journal. The authors now have addressed several of my comment in this version.</p>	<p>Thank you</p>
<p>My main comment is still about the follow-up period. I would recommend to stratify the analyses for the studies with a follow up of one year or less and the ones with a longer follow-up. This would provide more information on whether it is indeed the studies that have a longer follow-up that are more effective. Now the longest follow-up analyses include both studies with a longest follow-up of 1 year or less and studies with a longer follow-up.</p>	<p>We have carried out a sensitivity analysis excluding those studies that provided data only for 1 year or less as their longest follow-up. The results remained stable after this sensitivity analysis.</p> <p>We have now included the following sentence into the Methods:</p> <p>“In order to determine the impact that studies only reported short term follow-up (one year or less) had on our the long term effect estimates we carried out a sensitivity analysis excluding these trials from this estimate.”</p> <p>And the following sentence in the Results.</p> <p>“Our estimate of long term effect was robust to the exclusion of studies that reported only short term (1 year or less) follow-up (see online supplementary material: Table 1)”</p> <p>We have also added the Table below as an e-appendix.</p>
<p>Next it could be interesting to look at the interventions included in these longest follow-up analyses. Is the longer term effect caused by new interventions included in the analyses or are the ones with a shorter follow-up performing better on the longer-term?</p>	<p>Our analysis will lead us to believe the latter is true. As reported on an analysis focusing only on those studies that provided data at short (1 year or less) and long (over 1 year) follow-up, restricting our analysis to these studies provided the same findings as those reported for the whole data.</p> <p>“There were 10 trials (15 arms) that provided</p>

	<p>separate data both for analysis at one year or less and for the analysis at longest follow-up. Restricting the analysis to these trials alone showed the same overall effects as the primary findings; no overall effect at one year or less follow-up and a statistically significant effect at longest follow-up.“</p>
<p>They do not really discuss the limitations and strengths of their study. Are there no potential biases in the review process? For example under-reporting of the contents of the interventions, categorization of the interventions.</p>	<p>We have now included the following sentences to the Limitations</p> <p>“It is well documented that the reporting of interventions from RCTs is poor (TIDIER). This leaves the possibility that the classification of these interventions might not be completely accurate. Nevertheless, given that all information available was extracted from the published articles, we have confidence in our classification which reported good concordance with an independent evaluator.”</p>
<p>The analyses comparing multi-focal and only tobacco interventions is somewhat difficult to understand: does the part on only tobacco refer to social competence/influence intervention or to all interventions?</p>	<p>We have now given a fuller definition of a multi-focal intervention</p>
<p>How did they define booster sessions? And what was in general the period between the intervention and the booster session?</p>	<p>We have added a definition of a booster session and their range of follow-up.</p>
<p>The authors describe in the data analyses that they extracted data as absolute number or odds ratios, based on loss of never smokers from baseline to follow-up: I am not sure what they mean with that: the ones who had smoked (or tried) at follow-up?</p>	<p>We have added the following to this sentence</p> <p>“i.e. those that started smoking.”</p>
<p>Figure 2 seems to have some configuration problems, while Figure 3 doesn't: for example Nujbeam (but maybe it is caused by my computer?)</p>	<p>We regret the reviewer has experienced problems with the files. There appears to a problem with the uploaded version of the figure. The file has been replaced with a new version.</p>
<p>Just curious (as I could not download the paper): Connell et al. has a follow-up time of 11 years (table 3): is that right?</p>	<p>11 years is correct. We obtained 11 year follow-up data direct from the author.</p>

Online supplementary material: Table 1: Longest follow-up, with short term (one year or less) data removed

Theoretical orientation of intervention	Odds ratios (95% CI) longest follow-up	Longest follow up with short term (1 year or less) data removed
Information only	0.12 (0.00, 14.87)	Not estimable
Social competence	0.65 (0.43, 0.96)	0.65 (0.43, 0.96)
Social influences	0.92 (0.84, 1.00)	0.93 (0.85, 1.01)
Combined Social competence and Social influences	0.60 (0.43, 0.83)	0.52 (0.29, 0.92)
Multi Modal	0.88 (0.73, 1.05)	0.88 (0.73, 1.05)
Overall	0.88 (0.82, 0.95)	0.90 (0.83, 0.97)

#### VERSION 2 – REVIEW

<b>REVIEWER</b>	Mathilde Crone Leiden University Medical Center
<b>REVIEW RETURNED</b>	10-Jan-2015

<b>GENERAL COMMENTS</b>	<p>The authors responded well to my comments. They conduct an additional analysis on the longest follow-up outcome, excluding studies that provided longest follow-up data of 1 year or less as their longest follow-up. They also restricted an analysis to trials that provided separate data both for the analysis at one year or less and for the analysis at a longer follow-up. All analyses confirm that the effects of school interventions on smoking uptake is most evident on the longer term and in particular for interventions focussing on social competence.</p> <p>Minor typo Page 11 line 10: the word “our” should be deleted.</p>
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