Reviewer's report

Title: The effectiveness of the Allen Carr smoking cessation training in companies tested in a quasi-experimental design.

Version: 4 Date: 25 July 2014

Reviewer: Ron Borland

Reviewer's report:

This paper is greatly improved. I am disappointed that the authors did not take up my suggestion to tabulate the varying results, but as it is now somewhat easier to follow, I don’t see this as a major failing.

The main compulsory revision I recommend is a statement along the lines of: “However, we cannot rule out an influence of having agreed to attend a cessation program as compared to just being surveyed (Controls) as a contributor.” If the authors wish, they could add, “but we think it unlikely. “

The very act of committing to engage in a program of quitting is a major difference between the two groups. This cannot be wished away. The measures they report are all valid in that they have some predictive validity, but for all prediction of quitting outcomes is weak at best. Behaviour, including the act of committing to something, is generally more predictive than attitudes even those that predict the actions in question.

The argument about age at starting is flawed. Age of starting is mainly as they say in the teens, but even within this short range, it is predictive. It is unrelated to age at the point of surveying, except in very young samples which include non-smokers. This should be corrected.

It is impossible to completely control for differences between two groups recruited in different ways. The authors have done the best they can and show that these efforts do not result in any attenuation of the between-group differences. They should leave it to the readers to decide on how convincing this is by being as open as they can about what they cannot control. That said, the size of the differences and the high abstinence rates in the ACT group convinces me there is likely to be a real effect, especially as other uncontrolled studies of Act have found similar effect sizes.

I agree with Reviewer 3 that it would be preferable not to use “Intention to treat”, but to talk about all-cases analysis, particularly as in the controls there was no intention to treat. Originally ITT focussed on preventing the tendency of some studies to exclude cases that did not engage sufficiently with the intervention. This creates bias favouring intervention groups over controls and is rightly discouraged. As it was common in such cases to discontinue follow-up, this became conflated with failure to follow-up.

Level of interest: An article of outstanding merit and interest in its field
Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests