Reviewer's report

Title: Perceptions of typical users of plain vs. branded cigarette packs among young smokers and non-smokers. A between-subjects experimental survey

Version: 3 Date: 10 August 2013

Reviewer: Janet Hoek

Reviewer's report:

This is an interesting paper that reports on a topic area of high international interest. Many countries have indicated they propose introducing plain packaging, prompting swift opposition from tobacco companies and creating an urgent need for robust research evidence. The authors respond to this need by outlining a study of 15-22 year olds that found plain packaging generally reduced the attractiveness of smoking's image among this demographic.

I have outlined some suggestions below that I hope will be useful to the authors as they refine their work.

Major Revisions

1. Because young adults are a key demographic where smoking experimentation and addiction occurs, several researchers have studied their perceptions, attitudes and likely behaviours. The authors could create a stronger context for their work if they provided a more comprehensive review of recent studies. I have noted below work that is particularly relevant and that should be referenced; I also suggest removing references to the very early plain packaging studies, which test stimuli that bear no relationship to plain packaging as implemented in Australia (or under current consideration by other countries). By providing a more detailed overview of recent work, I think the authors could better demonstrate the contribution their own study makes to our understanding of plain packaging.

There are also several studies examining descriptors that arguably should be referenced here (see work by Dave Hammond and his team, and studies from the ITC, particularly by Ron Borland and Geoff Fong; Ron Borland also has a recent Tobacco Control paper examining descriptors and plain packaging).

2. If the authors placed more emphasis on denormalisation, they could create a stronger theoretical context for plain packaging and the relationship they draw between this and social identity. Stan Glantz, Pam Ling and Ruth Malone have all written extensively on denormalisation and the background could make better use of their work.

Overall, I think the authors could better reference some of the claims they make. As well as referencing the "negative norms" climate (p.3) the authors could reduce some of the tentative phrasing they use by providing a stronger reference base. For example “Young people are perhaps more influenced…” (p.3); “the
design of cigarette packs might…” (p.4) – although it is not always possible to draw strong conclusions, the authors could advance clearer claims if they drew more widely on the existing evidence. In summary, I would like to see the background section revised to create an introduction that better reflects the current state of knowledge.

3. I found some aspects of the methods section more difficult to understand. Why were six packs shown as different plain pack versions than other packs (p.5)? Why were the brands used chosen? The authors note they “largely reflect the realities of the registered Norwegian market at the time” (p5) but could they provide a reference for the market share data and then a rationale to support their choice? The comment on unregistered tobacco seems quite speculative – is there any evidence about the prevalence of this source or the brands likely to be most affected? How did this potential source affect the decision regarding test brands?

4. The plain and plain descriptor packs are very similar in appearance; to test the effect of gradual branding removal, it might have been more logical to use residual brand imager (the stylised brand logo) rather than a variant name (see Wakefield’s Addiction paper). The strong visual similarity may explain why the packs did not elicit different responses, and why they were subsequently merged in the analyses.

5. Neither plain pack has much in common with the Australian plain packaging, which features a large pictorial warning at the top of the pack and uses a highly dissuasive colour as the substrate against which the brand and variant names appear. There is a lot of confusion among the public as to what plain packs will look like, thus it would be helpful if researchers adopted consistent formats or provided a clear explanation of why they have deviated from the reference plain pack that Australia has introduced. Given the plain and plain descriptor packs were computer generated, I am surprised that the authors did not model these more on the Australian policy.

6. The PCA suggests the attributes tested all corresponded to the same fundamental construct; this raises the question of why the authors did not test more diverse attributes. Given non-smokers represented nearly 80% of the sample, some negative attributes could have provided more variance. This is the approach taken by Gendall et al (2011 and 2013) and the authors could explain why they used only positive attributes, which seem more relevant to smokers only. As they note later, the attributes seemed more salient to female respondents than males, which again raises questions about the pre-testing undertaken and lack of reference to existing literature?

7. I understand why the authors have created summed scores for each pack, though the criteria used (one positive attribute association only cf. none at all) requires some justification. I was not sure why the global score was created, given this draws together all pack versions? Some more detail would be helpful. If possible, it would also be helpful to differentiate between daily and more occasional smokers; the “smoked in last 30 days” covers many different smoking
behaviours.

8. Some of the comments made about Table 3 do not seem to match the content of Table 3. There were three differences for boys, all between the branded and fully plain pack, but not between the branded and plain + descriptor packs. Given the plain and plain + descriptor were so similar, what can we make of the finding that boys seemed to see branded and plain + descriptor packs as more similar than plain + descriptor and plain packs? How do these findings fit with girls, who seemed to see the plain + descriptor as less attractive than the plain packs (though not all differences were significant).

9. The Adjusted R² for Table 4 is very low for the boy model; the findings seem to repeat the findings evident from Table 2, which showed that girls were more likely to differentiate between brands than boys. Can the authors comment more on the attribute associations and how these link to the wider literature (Doxey and Hammond’s work, for example)?

The explanation about the lack of variability in boys’ responses seems quite speculative; could the authors ground their suggestions (p.11) in wider literature? Given the authors had both smokers and non-smokers in their sample (and given smoking status was significant for girls) would there be any value in running separate analyses for smokers and non-smokers?

10. Overall, this is an interesting study, but it would be stronger if it had a more comprehensive introduction presenting recent literature, and a strong and clear set of research questions. The research stimuli need more explanation and support, and the authors could also suggest how future research could be updated to correspond with existing practice in Australia.

I wish the authors well as they continue their work in this important area.

Minor Revisions
11. Are the plain and plain descriptor packs mislabelled in Figure 1?

12. Could the authors outline the measures they used to estimate perceived health risks, views on smoking and tobacco regulation? Did they source these from studies such as the ITC or were the measures created specifically for this study? Some of the statements on p.8 assume a level of knowledge non-smokers might not have (whether cigarette packs require more warnings) and it is not clear what “more warnings” means – larger warnings or pictorial warnings are two possible interpretations.

13. Why was the “has no bearing” value combined with “does not possess the attribute”? These are conceptually different constructs and the comparisons might have been more rigorous if the “0” values had been excluded from the analyses.

14. Table 2 is referred to before Table 1? Suggest renumbering the Tables.

15. Table 1 is not discussed in the results? I appreciate there are few differences
noted so wondered whether this table could be excised as it does not seem central to the research questions?

16. Table 3 seems to be missing the a,b and c annotations? Although Table 3 presents findings for girls first, boys are discussed first in the text. Suggest following the same order as that used in the table. Should the 1.4 score relating to girls’ score for the “slim” attribute in connection with plain packs be significant (it is greater than the 1.3 for branded packs, which is significant)?

Suggested References


Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:
I declare that I have no competing interests