# PEER REVIEW HISTORY

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# **ARTICLE DETAILS**

TITLE (PROVISIONAL)	The impact of cigarette branding and plain packaging on
	perceptions of product appeal and risk among young adults in
	Norway. A between-subjects experimental survey
AUTHORS	Scheffels, Janne; Lund, Ingeborg

### **VERSION 1 - REVIEW**

REVIEWER	Hoek, Janet
	University of Otago, Marketing
REVIEW RETURNED	19-Sep-2013

GENERAL COMMENTS	The authors' major challenge will be to establish either the novelty of their work or a reason why replication using a Norwegian sample is important. They may have other responses, but the MS would benefit from a stronger and clearer rationale. I would very much like to see analyses by smoking status - other work suggests this

REVIEWER	Ford, Allison University of Stirling, Institute for Social Marketing
REVIEW RETURNED	19-Sep-2013

GENERAL COMMENTS	
SERENAL GOMMENTO	This paper is similar to existing plain packaging studies, for example, Hammond et al. (2012) & Wakefield et al. (2008). It would be included in the body of evidence which demonstrates that plain packaging reduces appeal. However, I am unsure of the manuscript's unique contribution. This is something that the authors could perhaps highlight in the paper, or if it is replicating previous studies (albeit conducted in a different setting — Norway), this should be highlighted too. I also have concerns over the use of a grey plain pack. Australia has mandated an olive green/brown colour. Plain packaging studies which have examined plain pack colour usually conclude that colours in shades of brown are most unappealing. Grey has been found to be indicative of "lighter" and less harmful cigarettes than other plain pack colours such as brown and also than some branded packs (see for example studies by Gallopel-Morvan/Moodie). That a grey plain pack condition was used to test differences in perceptions of taste and health risk concerns me and this may account for the few significant differences between pack conditions. It would be useful to have clarification on why grey was chosen, and this should also be discussed as a possible limitation.

Below are some areas where I feel the manuscript could be improved.

The study was given full clearance by the Norwegian Social Science Data Services, please clarify in the text that this was ethical clearance.

It would be useful to have clarification how participants were assigned to the pack condition, and in which order the packs were shown to participants, for example, were they randomised?

Was the sample representative?

Both English and Norwegian language descriptors were present among the packs. Could there have been any language comprehension issues for the English descriptors? I know English is a common language taught in Norway, but it would be useful to comment on this in the paper.

In Tables 1 and 2, I am surprised that the plain pack without descriptors, was sometimes rated more positively than the packs with descriptors (and sometimes than the branded pack, although not significantly so). If I am reading the results correctly, for example, 32.7% of females agreed that Marlboro Gold originals (plain pack with descriptors) were more appealing than other brands. This was significantly lower than the branded pack where 41.6% agreed it was more appealing. However, the plain without descriptors condition was not significantly lower (36.4%). This is at odds with what is outlined in the introduction which describes how descriptors have a useful marketing function. There are other instances where this pattern emerges and is something which should be discussed.

The structure of the discussion could be improved, starting with a clearer description of the findings in relation to the hypotheses. followed by what the paper adds to the literature in terms of the strengths and limitations of the study in line with other plain packaging studies. I also feel that the conclusions are a little overstated. On page 17, it would be better to conclude that within the study there was a reduction in positive perceptions, rather than if plain packaging were introduced there would be a reduction in these perceptions among adolescents. I'm also uncomfortable with the conclusion that identical packaging would remove the opportunity to signal affinity to any particular subgroup (page 17, line 56). Brand names will always be visible on packs, and brand imagery associated with that brand name, which has been built up over time in the minds of consumers, will continue to occur. For example people still remember cigarette adverts years after they have been banned. In the event of plain packaging, I expect smokers will continue for example, to be loyal to a particular brand to some extent, and among adolescent starters, subgroups may still favour a particular brand name. However, as we cannot know these things for sure I would omit this from the conclusion. Also, be wary of linking the study to a behavioural outcome i.e. "plain packaging could potentially be an efficient aid in reducing smoking uptake among adolescents" (page 18). I would rather the conclusions focused on what the study results showed, than what plain packaging potentially may do.

#### **VERSION 1 – AUTHOR RESPONSE**

#### Comments from reviewer 1:

Reviewer 1 raised two issues about the paper.

First, she argues that we have not clarified enough the rationale of this study, and suggests we either establish better the novelty of our work or give a reason why using a Norwegian sample is important. We have met this by contextualizing the study more clearly. We have described how Norway is one of the most regulated tobacco markets in the world, and that the restrictions on marketing also include a regulation (1995) on 'introducing packages with unconventional design or appearance with the aim of increasing sales or attracting new consumer groups'. In this sense, Norway can serve as an example of a country where marketing regulation efforts have gone almost 'all the way', and where this regime has been in effect for a long time. The findings that Norwegian consumers still attach a lot of meaning to cigarette brands and packages thus shows how the potential of branding for increasing the appeal of tobacco products is still substantial, also when the most conspicuous designs or more elaborate packaging elements such as pack shape, opening methods or shape of the cigarette are not being used. In our opinion, this is an interesting addition to the picture drawn up by other plain packaging studies.

Second, the reviewer says she would like to see analyses by smoking status. Due to the sample size, a separation into boy smokers and non-smokers and girl smokers and non-smokers was not possible. As boys and girls were shown different packs, it was also not unproblematic to join the genders together. In the bivariate analyses, smoking status was therefore not taken into account. However, smoking status was entered as a separate variable in all regression models. In tables 1-3, we chose not to take the moderating variables into the presentation of the findings, as these tables are already very large and sums up a lot of information. In table 4, Beta and p-values of significant moderators, including smoking, are presented.

### Comments from reviewer 2:

Reviewer 2 first raises a similar concern as reviewer 1, namely that the unique contribution of this study is not made enough clear. As explained above, we have tried to meet this by contextualizing the study: We have described how Norway is one of the most regulated tobacco markets in the world, and that the restrictions on marketing also include a regulation (1995) on 'introducing packages with unconventional design or appearance with the aim of increasing sales or attracting new consumer groups'. In this sense, Norway can serve as an example of a country where marketing regulation efforts have gone almost 'all the way', and where this regime has been in effect for a long time. The findings that Norwegian consumers still attach a lot of meaning to cigarette brands and packages thus shows how the potential of branding for increasing the appeal of tobacco products is still substantial, also when the most conspicuous designs or more elaborate packaging elements such as pack shape, opening methods or shape of the cigarette are not being used. In our opinion, this is an interesting addition to the picture drawn up by other plain packaging studies.

Second, she raises a question about the grey color we have chosen to represent plain packaging. The study is based on a survey that was carried out before the Australian plain pack regulation was enforced, and before consensus on the best design of plain packs had been reached. Had our study been done today, it is likely that the packs would have looked more like the Australian. The main reasons why we chose grey as the colour for the plain packs were that no existing pack on the Norwegian market had a similar colour, grey is a very neutral colour, and is mostly considered boring. We have included a clarification of the choice of plain pack colour on page 6 in the methods section. In addition, we have included a reflection over whether the choice of plain pack color could account for the few significant differences between packages in the discussion (page 19).

Third, according to the reviewers request, we have included in the text that the clearance this study has received from the Norwegian Social Science Data Services included ethical clearance (page 5).

Fourth, we have added 'randomly' to the description of how participants were assigned to the pack conditions (page 5). We have also added a clarification that the packs were shown to each respondent in a random order, that is, the order of the packs was not the same for all respondents, but an automatic function securing random order was programmed into the setup of the survey (page 7).

5th, we have added in the text an explanation about representativity (page 5): The panel is representative of the population as regards demographical variables, panelists were invited into the survey with age and gender as inclusion criteria.

6th, we have added a sentence about Norwegian and English descriptors and the possible consequences of using both in this survey (page 6): English is a language spoken among a large majority of the population in Norway and in particular among young people. It is thus unlikely that the respondents had problems understanding the descriptor words in any of the languages.

7th, we have discussed the fact that the plain packs without descriptors was sometimes evaluated more positively than the packs with descriptors, with focus on the strength of brand names – he majority of the packs that showed these results were packs with strong brand names, that seems to have great value in themselves, sometimes it seems even stronger when they are not 'disturbed' by sub-names. We have also discussed how this is in some ways at odds with what one might expect, based upon previous research about descriptors, but still also in accordance with other similarly designed plain packaging studies (Hammond, Daniel & White 2012, White et al 2012, see page 18). One possible consequence of plain packaging may thus be that brand family names may become relatively more important in distinguishing between brands and promoting appeal in the absence of brand imagery and descriptors.

Finally, we have restructured the discussion in line with the suggestions from the reviewer. First, we have summed up the findings in relation to the hypotheses, and we have discussed the findings more, in relation to the more contextual focus that the paper now has: that is, we have given more focus to how the Norwegian market is in some ways different from other markets (e.g in the variation and array of brands available), regarding the findings that some individual plain packages are rated higher without than with descriptors (page 18) and regarding the gender differences. We have also included more reflection on the limitations of the study, in particular regarding the color of the plain packs used. Finally, we have lifted out the fact that brand names will still be visible on packages after plain packaging is implemented, and we have toned down or taken out all linking of the results to behavioural outcomes. The conclusions are rewritten so that they focus directly on the results, rather than what the consequences of introducing plain packaging might be.