Demarketing cigarettes through plain cigarette packaging

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Résumé :
Le paquet de cigarettes est un outil marketing très important pour l’industrie du tabac. A travers des éditions limités, des logos, des couleurs et visuels attractifs, la promotion des produits du tabac est assuré par ce vecteur de communication. Afin de réduire l’attractivité du packaging du tabac, l’OMS préconise la mise en place des paquets de cigarettes génériques ou standardisés, dont la couleur, la forme seraient identiques pour toutes les marques. Dans cet article, le concept du paquet générique a été testé sur 540 Français âgés de 15 à 25 ans exposés, dans une étude expérimentale, à différents paquet Marlboro (paquet normal, paquet générique gris, blanc ou marron). Les résultats indiquent que le paquet générique est un outil pertinent pour le marketing social puisqu’il réduit l’attractivité du packaging et améliore l’efficacité des avertissements sanitaires.

Mots-clés : marketing social, packaging, couleur, tabac

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Abstract:
As the tobacco industry has been stripped of most of the marketing mix, the cigarette pack has become an increasingly important marketing tool. The cigarette pack helps promote the product through novel pack design and recognisable colours, logos and trademarks, and also familiar brand names. It may be possible however to reduce the attractiveness of the pack, and also tobacco, through plain (or standardised) packaging, which involves removing these pack design elements and leaving only the health warning and brand name in standardised font and size. To investigate this, in this study 540 French people (15-25 years) were recruited and randomly exposed to one of four Marlboro packs (normal branded pack or white, grey, brown plain pack). Plain packaging was found to significantly reduce the appeal of the pack and increase the prominence of the health warning.

Key-words: Social marketing, packaging, colour, tobacco
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Introduction

The marketing literature often highlights the crucial role played by the pack in the marketing mix: it conveys brand identity through logos, trademarks, colours and pictures, it attracts attention through attractive design, and it serves to differentiate brands, which is especially important among homogeneous product categories (Underwood, 2003). The pack is of particular significance for tobacco products given that most countries now have at least some restrictions on tobacco marketing and many have comprehensive restrictions (co-author, in press). In addition, tobacco industry marketing reports reveal the pack to be an effective means of recruiting new smokers, particularly among younger age groups (Cummings et al., 2002; Wakefield et al., 2002). Although smoking prevalence is decreasing in some European countries, prevalence remains highest for 15 to 24 year olds, with almost one in four people in this age group in France a regular smoker (Eurobarometer, 2009). Worryingly, smoking continues to kill almost seventy thousand people a year in France and half a million across Europe. To combat the tobacco epidemic, the Framework Convention on Tobacco Control (FCTC) was adopted by the World Health Organisation in 2003. It proposes a number of measures to help prevent smoking initiation and encourage cessation. Article 11 of the FCTC addresses tobacco packaging and labelling and recommends the use of plain (or standardised) packaging, which would involve the standardisation of packs so that they are the same size, shape, base colour, have the same method of opening, and have no branding or other promotional elements.

The aim of this article is to determine the impact of plain versus branded cigarette packaging and the impact of different plain pack colours so as to provide new insights that could inform social marketers of new ways to use packaging as a deterrent from health risk behaviours.
1. Literature Review

Most research conducted on plain cigarette packaging comes from public health. These studies, which predominantly involve consumers being exposed to pictures of plain packs, or plain pack mock-ups, suggest that plain cigarette packs have an impact on consumers’ cognitive, affective and behavioural responses.

Early plain pack research found that removing branding from cigarette packs altered youth perceptions of both the pack and the user, with plain packs perceived more negatively (less attractive, less cool) than branded packs (Beede and Lawson, 1992; Goldberg et al., 1995; Madill-Marshall et al., 1996). In many respects plain packaging appears to reduce the ‘badge’ value of the pack. Focus group and experimental research with young people from New Zealand and Canada also found that health warnings on plain packs were recalled more readily than for branded packs (Beede and Lawson, 1992), especially for shorter warnings (Goldberg et al., 1999), and were perceived as more serious (d’Avernas et al., 1997). Recent research largely confirms these earlier findings. For instance, two web-based experimental Australian studies found that as cigarette packs were progressively stripped of brand-associated elements, both adult smokers and youth smokers and non-smokers rated the pack (less attractive, less value), perceived attributes of smokers of the pack (less trendy, less confident) and perceived sensory characteristics of cigarettes contained with the pack more negatively (less rich in tobacco, high in tar and nicotine) (Wakefield, Germain and Durkin, 2008; Germain, Wakefield and Durkin, in press). Finally, Hoek, Gendall and Louviere (2009) also conducted an experimental design, with 245 students, who were asked to picture an imaginary scenario in which they had created a new network of friends with whom they smoked socially, and had to select which pack (familiar, unfamiliar or plain pack, each with either text or pictorial health warnings) they would buy to share with their new friends. Results suggested that the plain pack significantly decreased the attractiveness of packs.
beyond that of pictorial health warnings and thus the intention to buy it, especially for non-smokers.

These studies suggest that plain packaging has a number of potential benefits for public health. There are however some areas that have not been properly addressed, such as the most suitable base colour for standardised packs. The evidence suggests that the most appropriate colours for plain packs, i.e. the most effective deterrents to smoking, are brown and white, as used in all the studies previously considered, but research fails to consider other suitable colours or compare the impact that different colours have on consumers’ responses to plain packs. This is important as it appears that the colour used for packaging and within marketing communications more generally can alter the meaning of these communications and can predict consumer behaviour (Favre and Norember, 1969; Kojina, Hoken and Takanashi, 1986; Tom et al., 1987; DeCraen et al., 1996, Pantin-Sohier, 2009). For instance, coloured ads are perceived as more effective than black-and-white ones (Waring, 1981; Percy and Rossiter, 1983) and individuals feel more pleasure in viewing ads when the dominant colour is red compared with blue (Lichtlé, 2007).

Previous research has also failed to explore whether different colours, in terms of plain packs, results in different perceptions of the cigarettes inside. Within the marketing literature however it has been demonstrated that consumers use pack colour as an extrinsic cue to infer product attributes. For example, Roullet and Droulers (2005) demonstrated a significant influence of colour and darkness of pharmaceutical pack on perceived drug potency. This explains why the tobacco industry uses light colours on packs. For instance, when Philip Morris consumer tested a new concept pack for the Parliament brand, they found that when consumers saw a white diagonal line on the pack they perceived the cigarettes as “cleaner, lighter and more refreshing”, whereas a “thin gold stripe appealed as adding a touch of class” (Philip Morris, 1994). For tobacco companies then the choice of pack colour is important
because it can help persuade consumers that the cigarettes inside are lighter, which many erroneously consider to mean safer (Wakefield et al., 2002).

We build upon and extend past research by employing an experimental design to explore how pack (branded vs plain) and plain pack colour (brown, white, grey) influence consumer responses.

2. Methodology

Using a street-intercept approach, a total of 540 people aged 15 to 25 years (average age 19.6 years) were interviewed. We focused on this age group as they are a key target sample for the tobacco industry and also French health practitioners, given that almost one in three are smokers. Approximately half the sample was female (50.6%) and half regular or occasional smokers (49.8%). Non smokers were included in the sample as plain packs can help them to remain abstinent.

Participants were randomly exposed, via showcards, to one of four pictures of cigarette packs; either a branded Marlboro pack, or a white, grey or brown plain pack with Marlboro printed in a standardised black font in the centre of the pack. All packs had the text warning ‘Fumer Tue’ (Smoking Kills) covering 30% of the front panel of the pack, consistent with the EC Tobacco Products Directive, and Marlboro was chosen because it is the leading brand in France. Two of the colours (brown and white) were selected based upon the existing literature, and the third (grey) based upon negative perceptions of grey found in qualitative research with a French sample (CNCT, 2008) and also because a study assessing perceptions of colour found grey to be considered particularly unattractive (Adams and Osgood, 1973).

Participants were asked to rate the pack that they were exposed to on a number of measures. Health warning and brand prominence were assessed by asking participants, unaided, what they first saw on the cigarette pack. Pack perceptions and behavioural intentions were
assessed using items selected from the marketing and tobacco literature. We used a five-point semantic differential scale to measure the following items: this pack is attention grabbing/not attention grabbing, attractive/repellent, original/ordinary, nice/ugly, flashy/dull, trendy/old-fashioned and motivates to purchase it/does not motivate to purchase it. We also assessed, on a five-point Likert scale, perceptions of pack price (expensive pack), whom the pack may be targeted at (a pack for young people) and the cigarettes inside (good quality, light taste).

3. Results

Analysis of variance (ANOVA) was conducted to test differences between the pack conditions (‘branded vs plain packs’ and ‘grey vs white vs brown plain packs’) and Bonferroni t-tests for multiple comparisons. Chi-square tests were also performed to examine brand and health warning awareness.

Demographics and smoking status did not vary significantly across the different pack conditions. When comparing the four packs, it was found that participants did not pay attention to the same stimuli at first sight, i.e. brand name or health warning (see table 1). In the plain pack conditions the health warning was significantly more prominent than in the branded pack condition ($\chi^2 = 20.21, p<0.001$) and significantly less prominence was given to the brand name ($\chi^2 = 9.52, p = 0.023$). The results highlighted that colour of plain packs had no effect on brand or health warning prominence.

<table>
<thead>
<tr>
<th>Branded pack</th>
<th>Brown plain pack</th>
<th>White plain pack</th>
<th>Grey plain pack</th>
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<tr>
<td>(N = 140)</td>
<td>(N = 120)</td>
<td>(N = 140)</td>
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ANOVA showed a main effect of branded pack vs plain pack for all measures except originality (see Table 2). The branded pack was rated significantly higher than the three plain packs (grey, white and brown) for the variables: “attention grabbing” (F = 20.25, p<.001), “attractive” (F = 10.92, p<.001), “nice” (F = 26.42, p<.001), “flashy” (F = 75.48, p<.001), “motivates purchase” (F = 20.96, p<.001), “expensive” (F = 56.68, p<.001) and contains “good quality cigarettes” (F = 59.13, p<.001). The branded pack was also rated significantly higher than the grey pack for “targeting young people” (F = 3.37, p = 0.018). Finally, the grey and white plain packs was perceived as containing significantly lighter tasting cigarettes than the branded pack (F = 22.22, p<.001).

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<thead>
<tr>
<th></th>
<th>Branded pack</th>
<th>Brown pack</th>
<th>White pack</th>
<th>Grey pack</th>
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<tr>
<td>Perceptions (1-5)</td>
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<td>Comparison of the</td>
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### Table 2: Perceptions of the branded and plain packs

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<th>A</th>
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<th>C</th>
<th>D</th>
<th><strong>Bonferroni t-test)</strong></th>
<th><strong>Bonferroni t-test)</strong></th>
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<tr>
<td>Attention grabbing</td>
<td>3.51</td>
<td>2.76</td>
<td>2.63</td>
<td>2.42</td>
<td>20.25 <em>(p&lt;.001)</em></td>
<td>2.44 <em>(p=.088)</em></td>
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<td>A&gt;B, C, D <em>(p&lt;.05)</em></td>
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<td>Attractive</td>
<td>2.70</td>
<td>2.34</td>
<td>2.04</td>
<td>2.12</td>
<td>10.92 <em>(p&lt;.001)</em></td>
<td>2.79 <em>(p=.062)</em></td>
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<td>A&gt;B, C, D <em>(p&lt;.05)</em></td>
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<tr>
<td>Original</td>
<td>1.93</td>
<td>1.73</td>
<td>1.68</td>
<td>1.71</td>
<td>1.6 <em>(p=0.18)</em></td>
<td>0.08 <em>(p=.92)</em></td>
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<td>Nice</td>
<td>2.48</td>
<td>1.68</td>
<td>1.48</td>
<td>1.72</td>
<td>26.42 <em>(p&lt;.001)</em></td>
<td>2.28 <em>(p=1)</em></td>
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<td>A&gt;B, C, D <em>(p&lt;.05)</em></td>
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<td>Flashy</td>
<td>2.91</td>
<td>1.68</td>
<td>1.26</td>
<td>1.51</td>
<td>75.48 <em>(p&lt;.001)</em></td>
<td>6.88 <em>(p=.001)</em></td>
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<td>A&gt;B, C, D <em>(p&lt;.05)</em></td>
<td>B&gt;C <em>(p=.001)</em></td>
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<tr>
<td>Trendy</td>
<td>2.71</td>
<td>1.96</td>
<td>1.88</td>
<td>2.14</td>
<td>14.35 <em>(p&lt;.001)</em></td>
<td>1.69 <em>(p=0.18)</em></td>
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<td>A&gt;B, C, D <em>(p&lt;.05)</em></td>
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<tr>
<td>Motivates purchase</td>
<td>2.62</td>
<td>1.77</td>
<td>1.73</td>
<td>2.04</td>
<td>20.96 <em>(p&lt;.001)</em></td>
<td>3.52 <em>(p=.03)</em></td>
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<td>A&gt;B, C, D <em>(p&lt;.05)</em></td>
<td>B&lt;C <em>(p=.091)</em></td>
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<td>C&lt;D <em>(p=.053)</em></td>
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<td>Expensive</td>
<td>3.33</td>
<td>2.01</td>
<td>1.76</td>
<td>2.14</td>
<td>56.68 <em>(p&lt;.001)</em></td>
<td>4.24 <em>(p=.015)</em></td>
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<td>C&lt;D <em>(p=.012)</em></td>
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<tr>
<td>Targets young people</td>
<td>2.38</td>
<td>2.26</td>
<td>2.12</td>
<td>2.05</td>
<td>3.37 <em>(p=.018)</em></td>
<td>1.78 <em>(p=.17)</em></td>
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<td></td>
<td>A&gt;D <em>(p&lt;.05)</em></td>
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<tr>
<td>Good quality cigarettes</td>
<td>3.75</td>
<td>2.16</td>
<td>2.22</td>
<td>2.45</td>
<td>59.13 <em>(p&lt;.001)</em> A&gt;B, C, D <em>(p&lt;.05)</em></td>
<td>2.34 <em>(p=.097)</em></td>
</tr>
<tr>
<td>Light tasting cigarettes</td>
<td>1.69</td>
<td>2.05</td>
<td>2.70</td>
<td>2.54</td>
<td>22.22 <em>(p&lt;.001)</em> A&gt;B, C, D <em>(p&lt;.05)</em></td>
<td>10.56 <em>(p&lt;.001)</em> B&lt;C <em>(p&lt;.002)</em></td>
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For perceptions between the three plain packs, significant effects are detected for four items. Compared to the brown pack, both the white and grey plain packs are considered to contain
lighter cigarettes (F = 10.56, p<.001). The white pack is also perceived as significantly less expensive than the grey pack (F = 4.24, p = 0.015) and significantly less flashy than the brown pack (F = 6.88, p = 0.001). The grey pack was found to motivate purchase significantly more than the brown and white packs (F = 3.52, p = 0.03).

4. Discussion and conclusion

This study points to the potential benefits of plain packaging for reducing the promotional appeal of the tobacco pack, consistent with past research, and explores, for the first time, perceptions of different plain pack colours.

The findings highlight the value of plain packs for improving the prominence of health warnings, and thus efficiency, as warnings that are not salient cannot be effective (co-authors, in press). Resource-Matching Theory, which postulates that the persuasive impact of a communication is improved when the resources allocated to processing it match those required for the task, may help explain this finding. Stimuli that demand too many resources to be made available should undermine persuasion (Meyers-Levy and Peracchio, 1995; Peracchio and Meyers-Levy, 1997). Regarding branded cigarette packs, the logos, trademarks, colours, and other executional cues, may consume cognitive resources by attracting attention and thus reducing the resources required for processing health warnings.

Our results also reveal that the branded pack is more likely than the plain packs to generate positive cognitive, affective and behavioural reactions (attractive, flashy, attention grabbing, motivates purchase, etc), consistent with Priming Theory (Bargh, 1989). Specifically, previous cigarette advertising may prime and then make salient positive images of the product, causing unconscious positive attitudes towards it (Pechmann and Knight, 2002). Although tobacco advertising is banned in France, Marlboro has fostered a powerful brand image and is still strongly associated with positive images conveyed via the Internet and in American films, e.g.
showing cowboys or wild landscapes. Our findings indicate that the famous logo and colours of Marlboro brand inserted on the pack may raise the brand imagery previously conveyed by Marlboro advertising and improve pack perceptions. Plain packaging however breaks this effect.

While all plain packs were generally perceived negatively, some differences were noted between the three colours tested (brown, white and grey). Our research suggests that consumers use pack colour to infer intrinsic tobacco product attributes, supporting Cue Utilization Theory (Richardson et al., 1994; Underwood and Klein, 2002). Grey and white plain packs were perceived as having the lightest cigarettes, which is important as consumers often erroneously equate lightness with safer cigarettes (co-author, in press). This explains why the tobacco industry uses light colours on packs in countries where descriptors such as low tar and lights have been prohibited (Borland et al., 2008). As a consequence, health practitioners must be cautious with the use of these two colours, and in particular white, which was also perceived as the least expensive pack which can be a selection criterion to buy it, especially among younger age groups. Concerning the grey and brown packs, the findings suggest that darker or dirtier shades may be more effective for deterring people from cigarettes. The higher scores given to the brown pack, when compared with the white pack, may be because younger people prefer warmer colour such as red, brown, orange, while older people prefer colours such as blue and green (Child et al., 1968; Benson et al., 2000). Future research exploring different hues of brown and grey to find the most suitable colour and shade of plain pack colour would be fruitful.

In conclusion, the pack is an important promotional tool for marketers in helping drive favourable consumer responses but it can also function as a deterrent (Schneider, 1977). This has important implications for the social marketing literature, which has focused predominantly on warnings (Argo and Main, 2004, co-authors, in press). Our research
highlights the possibility of influencing behaviour through altering pack design. Specifically, it suggests that plain packs are more effective than branded packs at delivering health benefits by making health warnings more prominent, by reducing pack attractiveness and motivation to purchase. Our study also contributes to the theoretical literature on the impact of pack colour on perceptions of the pack and the product within.

There are a number of study limitations that must be considered. First, as with all previous plain packaging research we did not measure the effect of plain packaging on real behaviour (for this ecological research would be required) nor on a representative sample. Second, as packs were displayed via showcards this did not permit a three-dimensional experience of the pack and research has shown the important influence of tactile input on the evaluation of products (Grohmann et al., 2007). Finally, further research is needed to assess the impact of different hues (of grey and brown) to find the optimal plain pack colour, and to test the relevancy of pack colour for other consumer products in the marketplace, which in turn can be used to help inform social marketing practice.
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