Consumer perceptions of cigarette pack design in France: a comparison of regular, limited edition and plain packaging

Karine Gallopel-Morvan,1 Crawford Moodie,2 David Hammond,3 Figen Eker,4 Emmanuelle Beguinot,4 Yves Martinet5

ABSTRACT
Background In the face of comprehensive bans on the marketing of tobacco products, packaging has become an increasingly important promotional tool for the tobacco industry. A ban on the use of branding on tobacco packaging, known as ‘plain’ packaging, has emerged as a promising regulatory strategy. The current study sought to examine perceptions of cigarette packaging among adults in France.

Methods Adult smokers and non-smokers (N=836) were surveyed using computer-assisted personal interviewing to assess perceptions of pack design by comparing ‘regular’ branded packs and ‘limited edition’ packs (with novel designs or innovations) with ‘plain’ versions of these packs with all branding, including colour, removed.

Results Plain packs (PP) were less likely than regular packs, and particularly limited edition packs, to be considered attractive, attention grabbing and likely to motivate youth purchase. PP were also rated as the most effective in convincing non-smokers not to start and smokers to reduce consumption and quit. Logistic regression showed that smokers motivated to quit, in comparison to smokers not motivated to quit, were significantly more likely to consider the PP as the packs most likely to motivate cessation.

Conclusions Novel cigarette packaging, in the form of limited edition packs, had the highest ratings of consumer appeal, ahead of regular branded packs and also PP. Interestingly, PP were perceived to be the packs most likely to promote cessation among those adults with quitting intentions. Plain packaging, therefore, may be a means of helping existing adult smokers motivated to quit to do so.

INTRODUCTION
Tobacco packaging is a crucial promotional vehicle which helps to generate brand awareness, increase brand appeal and foster positive attitudes towards smoking, with the ultimate goal for tobacco companies to maintain and increase market share and possibly also market size.1 2 The packaging strategies employed to meet this goal include ‘value packaging’, where price marking is used to communicate value for money, ‘image packaging’, where pack design is used to create and drive favourable brand imagery, and ‘innovation packaging’, which entails creative changes to pack shape or method of opening in order to stimulate pack interest.3 These packaging strategies can boost sales and often appear to be targeted at, or appealing to, younger people.4 5 For example, a Philip Morris document discussing a new innovative ‘oval’ pack shape explained it to be an idea well received in a concept study and concluded that the ‘pack has tremendous appeal among young smokers’.6 This would help explain the increasing use of pack innovation in jurisdictions where other marketing channels are restricted or prohibited. For instance, ‘slide’ packs and ‘wallet’ packs have appeared in the last 5 years in Canada, Australia and the UK, all countries with wide ranging controls on tobacco marketing.7 8 Similarly, in France, where most forms of marketing are banned, Japan Tobacco International has launched many ‘limited’ edition Camel packs, which carry novel pack designs. A number of innovative packs, such as ‘zip’ packs, have also been introduced on to the French market.

To prevent the branding on packaging being used to increase the attractiveness of tobacco products, the guidelines for Articles 11 and 15 of the Framework Convention on Tobacco Control recommend Parties to implement ‘plain’ packaging.9 10 Plain packaging would involve the removal of all branded elements from packaging, including colour, leaving only the name of the brand in a standard colour and font, along with all legally mandated information. Research in Canada, Australia, the UK, France and New Zealand suggests that plain packs (PPs) reduce brand appeal among both adults and youth, increase the salience of health warnings and reduce false beliefs about the RR of different brands.11–17 Despite the recent research focus on plain packaging, no study has yet to explore perceptions of PPs in comparison with both regular branded and limited edition packs. Given that limited edition packs with eye-catching designs or innovations are becoming increasingly prominent in recent years, especially in ‘dark’ markets, allied to their importance in driving sales,18 we add to the literature by exploring perceptions of these limited edition packs in addition to both plain and standard edition packs.

We sought to examine adult perceptions of cigarette packaging in France. Three types of cigarette packs, for the same brands, were examined: (1) ‘regular’ packs on the French market, (2) ‘limited edition’ packs released in France and (3) ‘plain’ versions of the same cigarette brands.

METHODS
Sample and design
A national survey was conducted by a market research company (LH2) with a representative sample (N=836) of French adult (18 years and...
older) smokers and non-smokers. Sampling involved random selection of respondents in wards stratified by geographic area (nine broad areas that cover all of France) and size (<2000 inhabitants; 2000–20,000; 20,000–100,000; >100,000; Paris region). Within each ward, a quota sample balanced across gender, age group and socioeconomic status was sought, following the national percentages indicated by the National Institute of Statistics and Economics Studies (INSEE). In-home face-to-face interviews were conducted, by market recruiters, using computer-assisted personal interviewing.

Measures
Demographics and smoking status
Smoking status, gender and socioeconomic status (based on occupation and defined by INSEE) were assessed. To assess smoking status, we used the same items employed in the European Commission’s Eurobarometer survey. Participants were asked, “Are you an: occasional smoker (you do not smoke daily); or a regular smoker (you smoke daily); or a non-smoker.” They had to choose among the three responses.

Perceptions and attractiveness of Camel, Lucky Strike and Gauloises packs (current, limited edition and plain)
Respondents were shown images on a series of three computer screens. Each computer screen displayed an image of three cigarette packs for the same brand: a ‘regular’ pack, a ‘limited edition’ pack and a ‘plain’ version with the brand name printed in standard font against a grey background (see figure 1). Grey was selected as the base colour because previous research in France found dark grey packs to be perceived as more unattractive than either white or light brown packs.19 Three leading brands in France (Camel, Lucky Strike and Gauloises) were used in this study. For each brand, respondents were asked which pack (regular, limited edition, plain or none) was (1) most effective in getting attention, (2) most attractive, (3) most effective in convincing non-smokers not to start, (4) most effective in motivating smokers to quit, (5) most effective in motivating smokers to reduce consumption and (6) most effective for motivating youth to purchase the pack. The order that respondents were shown each set of packs was randomised.

Statistical analysis
All analyses were conducted on weighted data using SPSS software (V.19.0). For pack perceptions, chi-square tests were used to examine for differences in the proportion of respondents selecting each pack. Logistic regression models were run to examine differences in perceptions (attention grabbing, attractiveness and youth motivation to purchase) of the limited edition packs in comparison to regular and PPs. For each of the three limited edition packs, the dependent variables were attention grabbing (where 0=selecting the regular or PP as most attention grabbing and 1=selecting the limited edition pack as most attention grabbing), attractiveness (0=selecting the regular or PP as most attractive and 1=selecting the limited edition pack as most attractive) and youth purchase motivation (0=selecting the regular or PP as most likely to motivate youth to purchase the pack and 1=selecting the limited edition pack as most likely to motivate youth to purchase the pack). Gender, age (18–34 vs 55 years and over) and smoking status (non-smoker vs smoker) were entered as predictor variables in each of the models.

Logistic regressions were also conducted to examine whether PPs, in comparison to regular and limited edition packs, were perceived by smokers as more likely to reduce consumption or motivate quitting. Gender, age, daily cigarette consumption (<10 cigarettes per day vs 10 or more cigarettes per day) and quit intentions (intending to quit vs not intending to quit) were used as predictor variables. A separate logistic regression was also conducted to test whether PPs were perceived by non-smokers as a means for preventing non-smokers from starting, this time using age and gender as predictor variables. For each of the three PPs (Camel, Lucky Strike and Gauloises), the dependent variable was either reducing consumption (0=regular/limited edition pack, 1=plain pack), motivating quitting (0=regular/limited edition pack, 1=plain pack) or preventing non-smokers from starting (0=regular/limited edition pack, 1=plain pack).

RESULTS
Sample characteristics
Table 1 shows the characteristics of the sample. A third (33.2%) of those interviewed were smokers and two-thirds (66.8%) non-smokers. Young adults (18–24 years) were significantly more likely to be smokers than non-smokers ($\chi^2=80.19, p<0.001$).
Prevent non-smokers starting (non-smokers only) 8.6% 8.1% 71.9%*** 10.2%

Motivate youth purchase 31.8% 63.9% 1.4%*** 2.1%

Table 1 Sample characteristics by smoking status (weighted data)

Table 2 Perceptions of regular, limited edition (LE) and plain packs (PPs)

Perceptions of limited edition packs and regular branded packs

Table 2 Perceptions of regular, limited edition (LE) and plain packs (PPs)

When comparing the Gauloises regular and limited edition packs, the regular pack was perceived to be less likely to get attention ($\chi^2=14.47, p<0.001$), less attractive ($\chi^2=22.11, p<0.001$) and less likely to motivate youth purchase ($\chi^2=81.38, p<0.001$). No difference was observed between the Gauloises regular and limited edition packs at convincing non-smokers not to start smoking than the regular and limited edition packs, for motivating smokers to quit than the regular pack and limited edition packs and for reducing consumption than the regular and limited edition packs (see table 2).

Perceptions of PPs (in comparison to regular or limited edition packs)

When comparing the three Gauloises packs, similar findings were obtained. For both Gauloises and Camel packs, PP was perceived to be more effective for convincing non-smokers not to start smoking than the regular and limited edition packs, for motivating smokers to quit than the regular pack and limited edition packs and for reducing consumption than the regular and limited edition packs.
Research paper

p<0.001). No significant differences were found in terms of convincing non-smokers not to start and motivating smokers to quit or reduce consumption.

Perceptions of tobacco packaging among people

Logistic regression models were conducted to examine the effect of gender, age and smoking status on selecting the limited edition packs of the three tested brands. As shown in table 3, young adults (aged <35 years) were significantly more likely than older adults (35 years and over) to report the Camel and Gauloises limited edition packs as most attention grabbing, attractive and most likely to motivate youth purchase (except for Gauloises limited edition pack on motivating youth purchase). No differences by gender, age or smoking status were observed for the Lucky Strike packs.

As shown in table 4, smokers motivated to quit were significantly more likely than those not motivated to quit to select the PPs, rather than the branded packs, when asked which pack they thought would motivate smokers to quit (at least for Camel and Gauloises). For non-smokers, young adults were more likely than older adults to select the Lucky Strike PP as the pack that would be most likely to prevent non-smokers from starting.

DISCUSSION

This study provides further evidence that the removal of branding can reduce the promotional appeal of cigarette packaging. PPs were perceived as an effective means of preventing youth initiation and motivating smokers to reduce consumption and quit. These findings are consistent with the existing evidence base. If we extend the literature by showing that limited edition packs with novel eye-catching designs or innovations are perceived by both smokers and non-smokers more favourably than PPs and regular ‘standard edition’ packs.

That novel pack design and innovation is viewed more positively than both PPs and regular branded packs helps explain the exorbitant sums spent by tobacco companies on altered packaging runs, including the purchasing and installation of new equipment for producing cigarettes in unique packaging. With most other marketing channels now closed to tobacco companies in France, as in many other jurisdictions, the pack has become the key marketing driver and limited edition packs appear to be central to this. As a Dutch design agency director explains, “If you look at the limited-edition packs, you will notice how quickly they all sell out. Because when consumers see an attractive pack, they want it. They want to have the newest thing”. Our findings support this assertion and help demonstrate the value of unique packaging to tobacco companies.

According to tobacco industry marketing documents, young adults are a key target audience given the importance of brand image among this group. It is perhaps unsurprising then that young adults perceived the limited edition packs as most attractive and attention grabbing and most likely to motivate purchase (at least for Camel and Gauloises). As smoking prevalence is higher for young adults than for any other age group in France, these eye-catching pack designs and pack innovations, such as zip packs, may be preventing or delaying young adult smokers from quitting. That smokers intending to quit were significantly more likely than those not intending to quit to select the PPs, rather than the branded packs, when asked which pack they thought would motivate smokers to quit (again only for Camel and Gauloises), suggests that this may be the case. Alternatively, as more smokers appear to be taking up the habit after the age of 18, perhaps as a consequence of more stringent tobacco control efforts, it is possible that limited edition packs are in some way contributing to this increase.

Our findings must be considered in light of a number of limitations. As we assessed what respondents thought other

Table 3 Binary logistic regression 1: selection of limited edition, rather than plain or regular, cigarette packs, by gender, age and smoking status

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Age</th>
<th>Smoking status</th>
<th>Model R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood of selecting the Camel PP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most attention grabbing</td>
<td>0.029</td>
<td>−0.44*</td>
<td>0.062</td>
<td>0.015</td>
</tr>
<tr>
<td>Most attractive</td>
<td>0.16</td>
<td>−0.37*</td>
<td>−0.025</td>
<td>0.011</td>
</tr>
<tr>
<td>Motivate youth purchase</td>
<td>0.14</td>
<td>−0.39*</td>
<td>0.020</td>
<td>0.012</td>
</tr>
<tr>
<td>Likelihood of selecting the Lucky Strike PP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most attention grabbing</td>
<td>0.19</td>
<td>−0.31</td>
<td>−0.13</td>
<td>0.008</td>
</tr>
<tr>
<td>Most attractive</td>
<td>−0.013</td>
<td>0.3</td>
<td>−0.19</td>
<td>0.007</td>
</tr>
<tr>
<td>Motivate youth purchase</td>
<td>0.25</td>
<td>−0.35</td>
<td>0.20</td>
<td>0.015</td>
</tr>
<tr>
<td>Likelihood of selecting the Gauloises pack</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most attention grabbing</td>
<td>0.009</td>
<td>−0.45**</td>
<td>0.15</td>
<td>0.018</td>
</tr>
<tr>
<td>Most attractive</td>
<td>−0.07</td>
<td>−0.53**</td>
<td>−0.028</td>
<td>0.02</td>
</tr>
<tr>
<td>Motivate youth purchase</td>
<td>−0.12</td>
<td>0.3</td>
<td>0.23</td>
<td>0.013</td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01.

Table 4 Binary logistic regression 2: selection of plain, rather than regular or limited edition, cigarette packs, by gender, age, daily cigarette consumption and motivation to quit

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Age</th>
<th>CPD</th>
<th>MQ</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood of selecting the Camel PP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevent non-smokers starting (non-smokers only)</td>
<td>−0.13</td>
<td>−0.28</td>
<td>−</td>
<td>−</td>
<td>0.006</td>
</tr>
<tr>
<td>Motivate cessation (smokers only)</td>
<td>−0.29</td>
<td>−0.024</td>
<td>−0.69</td>
<td>0.766*</td>
<td>0.063</td>
</tr>
<tr>
<td>Reduce consumption (smokers only)</td>
<td>−0.18</td>
<td>−0.024</td>
<td>−0.58</td>
<td>0.48</td>
<td>0.034</td>
</tr>
<tr>
<td>Likelihood of selecting the Lucky Strike PP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevent non-smokers starting (non-smokers only)</td>
<td>−0.22</td>
<td>−0.67*</td>
<td>−</td>
<td>−</td>
<td>0.015</td>
</tr>
<tr>
<td>Motivate cessation (smokers only)</td>
<td>−0.34</td>
<td>−0.33</td>
<td>−0.32</td>
<td>0.44</td>
<td>0.038</td>
</tr>
<tr>
<td>Reduce consumption (smokers only)</td>
<td>−0.13</td>
<td>0.06</td>
<td>−0.24</td>
<td>0.39</td>
<td>0.016</td>
</tr>
<tr>
<td>Likelihood of selecting the Gauloises PP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevent non-smokers starting (non-smokers only)</td>
<td>−0.39</td>
<td>−0.22</td>
<td>−</td>
<td>−</td>
<td>0.013</td>
</tr>
<tr>
<td>Motivate cessation (smokers only)</td>
<td>−0.2</td>
<td>−0.15</td>
<td>−0.053</td>
<td>0.8*</td>
<td>0.047</td>
</tr>
<tr>
<td>Reduce consumption (smokers only)</td>
<td>−0.45</td>
<td>−0.17</td>
<td>0.072</td>
<td>0.44</td>
<td>0.032</td>
</tr>
</tbody>
</table>

*p<0.05.

CPD, daily cigarette consumption (<10 a day or more than 10 a day); MQ, motivation to quit (yes or no); PP, plain pack.

4 of 5

What this paper adds

- Plain packs were perceived as less appealing than branded packs and considered a more effective means of preventing initiation and motivating cessation.
- Limited edition packs, with novel pack designs or innovations, were perceived considerably more favourably than both plain packs and normal branded packs.

people might do, rather than what they would do, this is a limitation. In addition, as participants viewed images of packages on a computer screen, rather than being given the opportunity to handle the actual packages, this may have impacted upon their ratings of attractiveness, the ability to capture attention and the influence of the packs on smoking initiation and cessation. Attempting to accurately gauge the impact of plain packaging on actual, rather than perceived, smoking behaviour is difficult, however, prior to plain packaging being implemented. And although we measured hypothetical pack perceptions through forced exposure, the tobacco industry has done likewise, with at least some of the novel cigarette pack designs and innovations on the European market, resulting from hypothetical package testing. For instance, ‘slide’ packs, introduced in the UK in 2006, were researched almost a decade earlier according to tobacco industry marketing briefs. The findings are also consistent with industry research and industry statements on the importance of packaging. For example, the Chief Executive of Philip Morris noted the positive responses from smokers in France to the freshly designed Marlboro Red pack recently introduced to the French market.

Despite these limitations, the current study suggests that limited edition cigarette packaging has added value beyond that of normal branded packaging. Given that the use of packaging design and innovation for cigarettes and other tobacco products is more pronounced when other marketing channels are prohibited, combined with the fact that limited edition packaging is now common on the French market, it appears to be in other ‘dark’ markets, this study suggests that introducing plain packaging would prevent tobacco companies using these limited edition packs to create positive consumer perceptions. Future research could meaningfully build upon this study by exploring consumer perceptions of image and innovation packaging, as we have done, and of value packaging, for example, comparing price-marked versus non-price-marked branded and PFS.

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