Adolescent perceptions of cigarette appearance

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Background: To reduce the possibility of cigarette appearance misleading consumers about harm caused by the product, the European Commission’s draft Tobacco Products Directive proposed banning cigarettes <7.5 mm in diameter. It appears however, following a plenary vote in the European Parliament, that this will not be part of the final Tobacco Products Directive. To reduce the appeal of cigarettes, the Australian Government banned the use of branding on cigarettes and stipulated a maximum cigarette length as part of the Tobacco Plain Packaging Act. We explored the role, if any, of cigarette appearance on perceptions of appeal and harm among adolescents.

Methods: Focus group research with 15-year-olds (N=48) was conducted in Glasgow (Scotland) to explore young people’s perceptions of eight cigarettes differing in length, diameter, colour and decorative design. Results: Slim and superslim cigarettes with white filter tips and decorative features were viewed most favourably and rated most attractive across gender and socio-economic groups. The slimmer diameters of these cigarettes communicated weaker tasting and less harmful looking cigarettes. This was closely linked to appeal as thinness implied a more pleasant and palatable smoke for young smokers. A long brown cigarette was viewed as particularly unattractive and communicated a stronger and more harmful product. Conclusion: This exploratory study provides some support that standardising cigarette appearance could reduce the appeal of cigarettes in adolescents and reduce the opportunity for stick design to mislead young smokers in terms of harm.

Introduction

The guidelines on Article 13 of the Framework Convention on Tobacco Control recommend that ‘individual cigarettes or other tobacco products should carry no advertising or promotion, including design features that make products attractive’.1 To reduce the appeal of cigarettes, the Australian Government stipulated partial product standardisation as part of the Tobacco Plain Packaging Act, which was fully implemented in December 2012. The use of branding (including colour, brand name and decorative elements) on cigarettes is now prohibited, a maximum length for cigarettes has been specified and cigarettes must be white or white with an imitation cork filter. The legislation does not, however, place any parameters on cigarette diameter.

The European Commission proposed a different approach from Australia with the draft Tobacco Products Directive (TPD) announced in December 2012. The draft TPD did not propose a ban on branding on cigarettes but instead a ban on cigarettes less than 7.5 mm in diameter, on the basis that ‘cigarettes with a diameter of less than 7.5 mm shall be deemed misleading’.3 This recommendation would have prohibited the sale of very slim cigarettes, called ‘superslims’, in the European Union. However, no research to date has examined the impact of slimmer cigarettes on product attributes such as the perceived attractiveness or level of harm among adolescents.

Tobacco companies increasingly offer brand variants that feature alternative cigarette diameters, decorative designs and lengths.4,5 Analyses of tobacco industry documents show that modifications to the appearance of cigarettes can make them more appealing to specific target groups, notably ‘starter’ and female smokers and can help to boost sales and market share.6–8 Exemplifying the potential for product design to influence growth, sales of slim cigarettes grew by 50% from 23 855 million sticks in 2000 to 35 673 million sticks in 2010 in Europe, despite a general decline in factory manufactured cigarette sales.9 This is consistent with global trends where the superslims segment is reported to have grown 10 times faster than the overall market in the past 5 years.10

It has been suggested that younger people are often the target of novel product design11 and most vulnerable to the impact of tobacco marketing as they are especially susceptible to tobacco brand imagery and particularly concerned with their identity.12,13 Recently, the public health focus on cues which influence brand imagery and product beliefs has lain with cigarette packaging.14–17 However, marketing literature suggests that cigarette characteristics, such as length, diameter, colour and decorative elements, are intrinsic product cues that are not only consumed along with the
product but also contain the message of the product and infer product attributes. Indeed, for young adult smokers, cigarette appearance has been found to be a method of product differentiation with respect to attractiveness, quality and strength of taste. Slim and white cigarette designs have also been shown to help distance young adult female smokers from negative associations with smoking by portraying a glamorous, slim, elegant and clean image.

This study aimed to extend recent work by exploring whether cigarette appearance may act as a promotional and communications tool. We examined the appeal of cigarette design and whether design influences harm perceptions among adolescents. To our knowledge there has been no research outside the tobacco industry, which has explored adolescents’ perceptions of different cigarette designs.

**Methods**

**Design**

Focus groups were employed to explore how young people engage with different cigarette designs. Exploratory research is appropriate when there has been little prior study of the issue and the objective is to gain general insights and an understanding of the dynamics of a particular subject. Focus groups provide a setting where participants can freely express beliefs and attitudes, which in turn can be justified with meaning and interpretation. Focus groups also gave participants an opportunity to handle cigarettes, rather than viewing images, and therefore allowed a true representation of tactility, dimension and colour.

Using purposive sampling, participants were recruited by market research recruiters according to quota controls on gender and socio-economic grouping. Potential participants were approached by recruiters via door-to-door methods and in the street. To reduce socially desirable responses and disguise the health related aspect of this research, participants were informed that the study purpose was to explore the marketing of a range of consumer products to young people, including tobacco.

Informed participant and parental consent was obtained prior to the focus groups. Both participants and parents were provided with an information sheet, given the opportunity to ask questions and told of their right to withdraw from the research at any time. Participants received a small incentive (£15) for participation. All study procedures were approved by the Institute for Socio-Management ethics committee at the University of Stirling. Because of potential sensitivities involved in exposing young people to cigarettes, each session ended with a discussion to ensure the group did not encourage participants to look favourably on cigarettes or smoking. Participants were given an information pack, specifically developed for a youth audience, to take away. This included information on smoking related harms, harms associated with second hand smoke exposure, support on quitting (for those who were smokers) and information explaining how tobacco marketing may promote smoking among young people. Educating young people on why and how they are a particular target of the tobacco industry has been found to be an effective prevention intervention.

The study took place in Glasgow, Scotland, in April 2011. The groups were held in a modern community venue which provided an informal and relaxed environment. Each group lasted approximately 90 min.

**Sample**

Eight focus groups, each with six participants, were conducted with 15 year olds (N=48). Groups were split evenly by gender and socio-economic grouping (ABC1—middle class/C2DE—working class). We focused on 15 year olds given the difficulty recruiting those below this age and because of their greater involvement with smoking than younger age groups, e.g. 13% of 15 year olds in Scotland are regular smokers (smoke one or more cigarettes a week) compared with 3% of 13 year olds. Within the sample, 19% percent (N=9) were identified as regular smokers on a recruitment questionnaire and 81% (N=39) as non-smokers. It was not possible to segment groups by smoking status, as intended, because of recruitment difficulties; however, the smoker/non-smoker split was in line with comparative national figures. Among the 39 non-smokers, 34 had never smoked and 5 had tried smoking in the past. All nine smokers were from the C2DE economic grouping. Five female smokers comprised the majority of Group 1 and four male smokers the majority of Group 4 (see table 1).

**Table 1 Sample composition**

<table>
<thead>
<tr>
<th>Group</th>
<th>Gender</th>
<th>Social grade</th>
<th>Smoking status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>C2DE</td>
<td>Smoker a</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>ABC1</td>
<td>Non-smoker</td>
</tr>
<tr>
<td>3</td>
<td>Female</td>
<td>ABC1</td>
<td>Non-smoker</td>
</tr>
<tr>
<td>4</td>
<td>Male</td>
<td>C2DE</td>
<td>Smoker b</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>ABC1</td>
<td>Non-smoker</td>
</tr>
<tr>
<td>6</td>
<td>Male</td>
<td>C2DE</td>
<td>Non-smoker</td>
</tr>
<tr>
<td>7</td>
<td>Female</td>
<td>C2DE</td>
<td>Non-smoker</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>ABC1</td>
<td>Non-smoker</td>
</tr>
</tbody>
</table>

a: Group 1 comprised a majority of smokers with five smokers and one non-smoker.
b: Group 4 comprised a majority of smokers with four smokers and two non-smokers.

**Procedure**

At the start of each group, participants were informed that there were no right or wrong answers, and we were only interested in what they thought. The groups started with a warm-up discussion on general shopping habits before moving on to consumer goods packaging, tobacco packaging and then cigarette design awareness. Participants were asked to think about cigarettes they had seen and to describe where they saw them, what they looked like and any differences. Eight cigarettes, which differed in length, diameter, colour and decorative design, were then shown to participants; all were available on the UK market at the time of the study. The eight cigarettes were: a longer length brown cigarette, a superbking size with an imitation cork tip, three narrow slims and superslims cigarettes with white tips and decorative elements, a standard king size cigarette with an imitation cork tip, a white-tipped king size cigarette and a short unfiltered white cigarette (see figure 1). To explore the messages young people infer from cigarette design, participants were asked to group the cigarettes together in whatever way they thought appropriate. Projective imagery techniques such as free association, where participants raise whatever thoughts come to mind when viewing products, were used to assess what is communicated by cigarette design. This allowed participants to link concepts with product appearance and indicate the brand imagery projected. Participants then ordered the items for attractiveness, strength and harm. Photographs were taken to record the positioning of cigarettes.

The lead moderator used a semi-structured topic guide to allow the same questions to be asked across groups while allowing flexibility in the group discussions. A second moderator observed and recorded participants’ non-verbal reactions to cigarettes including body language, facial expressions and verbal exclamations. This ensured that other, but no less important, responses were not missed. Observations, recorded in a systematic way, can be useful to give accurate accounts of responses and behaviours as they
happen and do not rely on the eloquence of participants. These observations supplemented the data from the group discussions, which were audio-recorded with participants’ permission and transcribed.

Analysis

Transcripts were initially checked against recordings for accuracy. Data from the transcripts, photographs and focus group observations were reviewed using thematic analysis to identify key and emergent themes. The research team met to discuss and review the themes until consensus was achieved. Transcripts were coded using NVivo9 software and the analysis followed an inductive approach to interpret the data.

Results

Awareness of cigarette design

When initially asked about cigarette appearance, the ‘standard’ identified was a white king-size cigarette with imitation cork filter. As the discussion progressed, participants recalled cigarettes that differed from the norm, suggesting that details of cigarette appearance are noticed by adolescents. Most groups were able to recall cigarettes with white tips, assumed to indicate menthol flavouring, and a pink-tipped cigarette was also mentioned. One group commented that cigarettes could be different lengths. There was also some awareness of cigarettes displaying branding, such as brand symbols and brand names, and other decorative features such as gold bands.

Cigarettes as a promotional and communication tool

When shown the eight cigarettes, a small number of participants, who had previously referred to cigarettes as disgusting, ugly and smelly, were disinterested in them or visibly recoiled. However, for most, the cigarettes generated interest and curiosity. Participants were surprised with the amount of variation in cigarette appearance and, in general, studied the cigarettes intently, with particular attention paid to diameter and decorative elements, including the font style of brand names. Some participants took the time to smell them and were sometimes reluctant to pass them on. It was highlighted in one group that a different looking product is enough to spark their interest and one boy wanted to try the superslims size.

You’d be interested. You’d be like ‘what’s that? Does it taste the same?’ (Boy, C2DE).

I’d smoke it (superslims). I’d only have one but (Boy, C2DE).

There was little evidence that the smokers’ responses were any different to those identifying as non-smokers. Irrespective of smoking status, there was surprise at being shown cigarettes, which differed from the ‘standard’, suggesting that the more unusual slim, brown and filter-less cigarettes were as unfamiliar to smokers as they were to non-smokers. There were also few group differences in terms of gender and no apparent differences by socio-economic grouping. Participants had no difficulty differentiating and assigning categories and meanings to the cigarettes. The two cigarettes with imitation cork filters were usually placed together as ‘standard’ ones and sometimes with cigarettes of similar diameter. The three slimmer cigarettes were grouped together because of their size and decorative patterns or brand name font on the filter, often described as the ‘cool’ ones, which looked ‘fancy’ and ‘expensive’. They were repeatedly called ‘skinny’, ‘cute’ and ‘feminine’ and likened to ‘sweeties’. The slims and superslims had the most favourable reaction, leading some participants to laugh and smile. These positive responses overshadowed the general negative attitude to smoking among most participants—even among the two groups with participants who identified as smokers, there was a feeling of stigma and shame attached to smoking. Within one group of non-smoking girls, there was a particular tension where they found it difficult to associate the slimmer cigarettes with something they had previously held firm negative views on. In contrast, the brown cigarette enhanced the negative associations most participants held with regard to smoking. It was repeatedly likened to a ‘cigar’ and ‘twig’ and described as ‘disgusting’ and ‘old fashioned’.

Product appeal

The slims and superslims were consistently rated as most attractive. The exception was one boy group that rated them as unattractive as they perceived them to be feminine. For some, the novelty of these cigarettes, that they did not resemble a ‘standard’ cigarette, enhanced their appeal.

The patterns, they just look nicer (Girl, ABC1).

There were mixed feelings about the two more ‘standard’ looking cigarettes: the king size and superking size with imitation cork filters. Half the groups rated the king size attractive, while three rated the superking size attractive. Others felt they were boring. This mixed response was because of the perception that this style of cigarette was common, which for some participants was a positive and for others a negative.

Just boring.

You always see they cigarettes (Girls, C2DE).

These ones are attractive because everyone smokes them (Girl, ABC1).

The white-tipped king-size cigarette was generally viewed as unattractive and described as ‘boring’, ‘cheap’ and ‘plain’. Often, appeal was based on the perceived smoking experience. In this regard, the brown and unfiltered cigarettes were perceived as particularly unattractive, an unpleasant smoke and smelly, while the slimmer cigarettes were described as ‘nicer’.

There’s no bud (filter) on it. It doesn’t look like it would be comfortable to smoke (Boy, ABC1).

They (superslims) look nice to smoke (Boy, C2DE).

Like they (superslims) don’t look like they would taste horrible (Girl, ABC1).
Strength and harm perceptions

From the outset and unprompted, participants associated cigarettes with different levels of strength and harm. Judgements about strength and harm appeared to result primarily from diameter and to a lesser extent, colour, decoration and length. Overall, the three slimmer cigarettes were rated weakest and least harmful because of their small diameter. The general view was that because they contain less tobacco, they must, therefore, be less harmful. The white tips and longer length also helped to portray a ‘cleaner’ female image described as ‘glamorous’ and ‘classy’ and reminded some participants of females smoking in old movies. These images helped to soften harm perceptions.

Because it’s skinny you feel that you’re not doing so much damage (Girl, ABC1).

…they don’t look like cigarettes so you wouldn’t think like harmful

When you think about who smokes them you don’t think of someone who is really ill (Girls, C2DE).

Conversely, larger diameters and imitation cork filters gave the impression of a stronger and more harmful product as did the longer length of the brown and cork-tipped superking-size cigarette. The fully brown cigarette was seen as particularly strong and harmful.

It (brown cigarette) looks really, really strong ...
Cos it’s very dark.
Overpowering, the colour (Boys C2DE).

There were mixed responses to the white-tipped king-size cigarette. This cigarette’s white tip was associated with menthol and perceived as weaker and less harmful. However, its diameter sometimes produced a conundrum as the thicker size was considered to indicate a stronger product. This suggests that adolescents view cigarette design holistically when forming value judgments.

Discussion

We found that cigarette appearance can generate significant interest among adolescents. Intrinsic cues, such as colour, length, diameter and decorative features, easily communicated messages and imagery related to gender suitability, price, glamour and coolness. Appeal was based on these characteristics. The slims and superslums with smaller diameters, white tips and decorative elements were consistently perceived as most attractive. This is in contrast with previous findings with young adult ever-smokers, who rated an image of a cigarette with a standard length and diameter and cork tip as most attractive. In our study, smaller diameters, in particular, communicated weaker and less harmful looking cigarettes. This was closely linked to the level of appeal as they implied a more pleasant and palatable smoke for ‘starter’ smokers. These differences may suggest that adults and adolescents prefer and place importance on different features of cigarette designs. Alternatively, differences in study design and the presentation of cigarettes may account for this incongruence, with previous research showing images of cigarettes to participants, whereas we allowed participants to handle cigarettes.

The positive imagery conjured up by slimmer cigarettes was at odds with participants’ negative attitudes towards smoking and smokers. These cigarettes appeared ‘cleaner’ and did not resemble a ‘standard’ cigarette, thereby losing some of the negative associations of smoking. Similarly, the attractiveness of slim cigarettes has been found to resolve the dissonance between the self-image and identity young adult females wish to create and the negative connotations of smoking. Cigarette characteristics that reduce negative perceptions and indicate smoothness and mildness have been identified as important for young smokers in industry documents. Slim cigarettes help the tobacco industry create the image of a safer cigarette by implying ‘ease of draw’ and less sidestream smoke and tar. However, importantly, recent research suggests that while superslums may contain less tobacco than regular-sized cigarettes, some superslums brands have higher levels of tobacco specific nitrosamines and aromatic amines than regular cigarettes.

The study has a number of limitations. Given the small sample size, the findings cannot be considered representative, although given the exploratory nature of the study, this was not our aim. As real cigarettes were used as stimuli, brand names were visible on some of the cigarettes. Therefore, it is possible that prior brand knowledge may have played a role in influencing participants’ perceptions, especially for the Mayfair cigarettes, a popular youth brand. As the nine smokers comprised the majority of two groups, it is unlikely that non-smoker norms would have influenced their responses, although it is possible that the stigma the smokers attached to smoking meant their true responses may have been suppressed. This may account for the lack of differences between smokers and non-smokers. In addition, we do not know whether attractiveness of cigarette design translates into smoking behaviour or brand choice. However, this exploratory research does suggest that standardising cigarette appearance may reduce the potential for cigarettes to be used as a marketing tool, particularly as tobacco industry journals describe the cigarette as an increasingly important advertising medium for tobacco companies.

Participants found a longer length brown cigarette least attractive. This design enhanced participants’ negative associations with the brown cigarette design translates into smoking behaviour and mislead adolescents in respect to product harm. While providing support for the ban on branding, colour and other decorative elements on cigarettes in Australia, this study suggests that standardising diameter could further reduce the opportunity for the tobacco industry to communicate with and influence young people. In this respect, the fact that the European Parliament has voted against the proposed ban on cigarettes less than 7.5 mm in diameter would appear a missed opportunity for improving tobacco control policy in Europe.

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Conflicts of interest: None declared.

Key points

- This is the first study to assess adolescent response to cigarette design.
- Slim and superslim cigarettes were rated most attractive and indicated weaker and less harmful products, while a long
brown cigarette was viewed as particularly unattractive, communicated a stronger and more harmful product and strengthened negative associations with smoking.

These findings suggest that product standardisation may help reduce the appeal of cigarettes and smoking in adolescents.

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