Surveys in secondary schools in Scotland show 3% of 13 year olds to be regular smokers, i.e. smoke one or more cigarettes a week, with this number rising to 13% for 15 year olds (Black et al., 2011). While smoking prevalence is in long-term decline in Scotland, and indeed most of Europe, these figures are concerning given that trying a single cigarette increases the risk that an adolescent will become a later smoker, even after a gap of not smoking for up to three years (Fidler et al., 2006). Furthermore, the earlier that adolescents start smoking regularly, the greater the risk of developing tobacco-related cancers and other diseases (International Agency for Research on Cancer, 2004; Muller, 2007). For smoking prevention to be effective a coordinated approach is required. This may include policy measures such as increasing taxation on tobacco products to keep prices high, and non-policy measures such as providing health advice to parents and carers, as well as promoting smoke-free domestic environments and encouraging smoking cessation (Muller, 2007). For smoking prevention to be effective a coordinated approach is required. This may include policy measures such as increasing taxation on tobacco products to keep prices high, and non-policy measures such as providing health advice to parents and carers, as well as promoting smoke-free domestic environments and encouraging smoking cessation (Muller, 2007). School-based interventions can also play a key role in helping prevention efforts (NICE, 2010).

One particular strategy in preventing smoking uptake focuses on encouraging children and young people to resist wider social pressures to smoke, for example, those pressures coming from the tobacco industry. ‘Social influence resistance models’, often used in tobacco education, include learning about the tobacco industry and recognising marketing tactics used to promote smoking among young people. A review of tobacco prevention programmes in the United States suggested social influence resistance models were the most effective school-based education intervention, with the greatest impact on smoking related attitudes and behaviours (Lantz et al., 2000). In the UK, a comprehensive ban on tobacco advertising, sponsorship and promotion, including point-of-sale displays, protects children and young people from the harmful effects of these types of marketing - exposure has been shown to influence smoking susceptibility and uptake (DiFranza et al., 2006; Lovato et al., 2011; MacKintosh et al., 2012). However, children and young people remain vulnerable to tobacco industry marketing through packaging, a powerful promotional and communications tool (Wakefield et al., 2002; Freeman et al., 2008).

Tobacco marketers use packaging to align brands with target groups of consumers, and increasingly, new styles of cigarette packaging are being introduced to the UK market (Moodie & Hastings, 2011; Centre for Tobacco Control Research, 2012). These include ‘innovative’ packaging (packs with novel shapes or method of opening), ‘image’ packaging (packs which use graphics, including colour, symbols and fonts, to create a favourable brand image) and ‘value’ packaging (packs which communicate value for money through price-marking or variations in pack size). Tobacco industry documents reveal that young smokers have previously been targeted through these packaging strategies (Cummings et al., 2002; Kotnowski & Hammond, in press). Nowadays, the tobacco industry is careful to make it clear that new packs and brands are targeted at ‘young adult smokers’; however, package designers acknowledge that cigarette packs designed to appeal to young adults will

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How adolescents perceive cigarette packaging and possible benefits of plain packaging
inevitably also appeal to younger age groups (Helk, 2007).

Plain packaging - which involves standardisation of pack size, shape, texture, method of opening, base colour and font - has been shown to reduce the appeal of tobacco for children and young people, increase the salience of health warnings, and reduce false beliefs about the harmfulness of tobacco products (Moodie et al., 2012). Ultimately, plain packaging reduces the ability of tobacco marketers to communicate and influence through packaging design. However, aside from in Australia (the only country so far to implement plain packaging in 2012), children and young people continue to be exposed to brightly-coloured and attractive cigarette pack designs. As such, it is important for those working with children and young people to help them understand how packaging works as a marketing tool, and how it may appeal to youth.

This research explored adolescents’ responses to, and perceptions of, different cigarette pack styles. Packs included: ‘innovation’ packaging (packs with a novel shape or style of opening), ‘image’ packaging (packs with distinctive pack graphics), ‘value’ packaging (packs with price marks or different size offerings) and ‘plain’ packaging (a brown pack which featured the same legal markings as other packs, e.g. health warnings, but without any branding other than a fictitious brand name).

**Methods and settings**

This paper draws on a report funded by Cancer Research UK to explore the role of packaging for tobacco products, and how adolescents respond to tobacco packaging (Centre for Tobacco Control Research, 2012). Eight focus groups were employed with 15 year olds (N=48), with groups segmented by gender and social grade (ABC1/C2DE). The sample was recruited by professional market research recruiters. Focus groups were used to gain insight into how adolescents respond to tobacco packaging, and allowed them to handle packs rather than relying on images; a more common approach in such research. This method allowed participants to get a true representation of different pack structures, textures and colours.

The focus groups followed a semi-structured approach and took place in April 2011 in Glasgow (Scotland). Each group lasted approximately 90 minutes. Informed participant and parental consent was obtained prior to study onset. Participants received a small incentive for participation. Ethical approval was granted by the departmental ethics committee at the University of Stirling. Due to the potential sensitivities involved in exposing adolescents to tobacco packaging, each session ended with a discussion to ensure that the groups did not encourage participants to perceive cigarettes and smoking favourably, and participants were given written information to take away.

Participants were initially asked to examine a range of packs (including the plain pack) and group them together however they thought appropriate. Packs were then grouped or ordered according to statements written on show cards, such as: Appealing/Unappealing, Most harmful/Least harmful, Eye-catching/Not eye-catching, Appealing to someone thinking of starting smoking/Not appealing to someone thinking of starting smoking, and Strongest/Weakest. Based on the comments made and emerging themes, the discussion focused on individual packs and participants’ thoughts and associations. Projective imagery techniques were used to assess what packaging communicates (Schlackman & Chittenden, 1986). Personification, where participants are asked to imagine and describe the pack as a person, and free association, where participants raise whatever thoughts come to mind when viewing the pack, enabled participants to link concepts and brand imagery with packaging. Transcriptions were coded using NVivo9 and analysis followed an inductive approach to interpret the data.

**Findings**

**Innovation packaging**

Packs with a different method of opening or unusual shape sparked much interest and curiosity. Having something different or unusual was seen as a positive. Two packs with innovative openings, Marlboro Bright Leaf with a ‘Zippo’ lighter style opening and a Benson & Hedges slide pack (see Figure 1), produced some of the most positive reactions across the groups. When shown the openings, all but one group were openly impressed and interested in the gadgetry. There were obvious displays of
Boys, in particular, had positive perceptions of these packs. The Marlboro pack was called “snazzy” and “sophisticated”, with a better opening than a standard pack; a “unique” selling point. Those who perceived the Marlboro pack favourably described the design as “professional” and “designer” and like “art”. This was reflected in the price perceptions of the pack, which was considered “classy” and “expensive”. The slide design produced similar perceptions, suggesting that adolescents view effort in packaging design to be a reflection of a quality product. However, despite repeatedly being described as “cool”, the functionality of the Benson & Hedges slide pack was questioned, and described as “awkward”, “annoying” and “inconvenient”. It was seen as a novelty which could soon wear off, e.g. “You might try it cause it looks cool the way it opens... then the fun would wear off” (Boys, C2DE).

Boys and girls responded positively to slim, feminine oriented packs, curious about what they contained. The Silk Cut Superslims pack (see Figure 2) was repeatedly referred to as looking like perfume or makeup, and a slim Vogue pack, like chocolate. That these packs did not resemble a regular cigarette pack generated significant interest, particularly for girls, who commented that “they don’t look like cigarette packets” and “you’d want to buy it to see what it’s like inside” (Girls, ABC1).

Generally liked and rated ‘appealing’, these packs were commonly described as “cool”, “cute”, “compact” and “skinny”. These packs evoked positive user imagery, relating to a slim, attractive and classy female. The smaller shapes led to the perception that they contained less tobacco, resulting in lower harm perceptions. The slimness of these packs was thought to provide added convenience, being easy to carry around in a pocket or bag. Their size, along with the perception that they didn't immediately look like cigarette packs gave an element of discretion. This was thought to be advantageous in hiding smoking from others, e.g. “if you were smoking and you were trying to like hide it from your mum and dad and that like fell out your pocket or something it wouldn’t be cigarettes” (Girl, C2DE).

**Value packaging**

Packs containing 14 cigarettes were considered interesting. Why the packs had a large 14 on the front was questioned, which some speculated may be related to weight or product strength. However, the most common response was that the number 14 was related to age. For instance, “People like younger than us would probably think if they looked at that, it would be for us because like they are fourteen” (Girl, C2DE). Others stated: “I don’t know if they are deliberately trying to sell to fourteen year olds, but I think it sort of appeals, because they’ll look at it... they are sort of saying it without actually saying it, like subliminally saying, you know, fourteen year olds” (Boy, ABC1). The design of the Benson & Hedges 14 pack (see Figure 3) also conjured up associations with something fun, with mention made of sports, game shows and Lego: “They look like a wee children’s toy, not that it’s a toy but it
reminds me of it, like a wee boy would like... Lego” (Girls, ABC1).

Figure 3: Value pack, with 14 cigarettes

Image-based packaging

It was clear that all styles of packaging communicated a brand image, whether positive or negative, and participants were adept at identifying how on-pack features, such as colour, font, brand name and background design, impact on brand and product perceptions. Sometimes, one overriding feature impacted on pack and brand impressions, but perceptions generally came from the combination of pack elements, including the health warnings. Generally, darker coloured packs were described as boring, for older smokers, and associated with greater strength, harm and ill health, while lighter coloured, feminine packs, were consistently rated ‘appealing to those thinking of starting smoking’ and ‘weakest’, e.g. “They look too colourful to be harmful... Just cos of the wee designs... looks more friendly, more approachable” (Girls, C2DE).

Figure 4: Packs with novel graphical designs

The most positive imagery came from eye-catching, brightly coloured packs with prominent and bold designs. Although not always liked, the distinctive bright pink Pall Mall and gold holographic Lambert & Butler packs drew particularly strong responses (see Figure 4). The Lambert & Butler pack was repeatedly associated with parties and discos. Those that liked the pack said it was “fun” and “funky” and it was associated with a young “bubbly”, “happy” and “outgoing” person. The Pall Mall pack was viewed as looking cheap by those that disliked it. However, girls who liked it described the pack as “bright” and “happy” and associated it with “girly things” such as “Barbie”. The consistent user image was a young girl: “The pink just looks really like it would attract teenage girls” (Girl, ABC1).

Plain pack perceptions

The dark brown plain pack was rated overwhelmingly negatively (see Figure 5). It was consistently categorised as being a pack that “older people smoke” (Girl, C2DE), with boring and “dull colours” (Girl, C2DE), and a pack that would “put you off (smoking)” (Boy, C2DE). It was described as old fashioned, cheap and a strange colour. Several groups commented on the lack of effort put into its design, commenting that it “looks dead cheap” and “no-one would buy it” (Girls, ABC1).

Figure 5: Plain pack

These negative perceptions transferred to the user of the plain pack, resulting in a very distinct image, which was unappealing and negative in the eyes of participants. They described the image of an old man, a heavy smoker in ill-health, with old-fashioned clothes and few interests. Additionally, the plain pack
reinforced negative smoking attitudes among participants, while some of the more attractive branded packs, particularly the feminine, slimmer packs, softened negative attitudes towards smoking and smokers, e.g. “I think that one (plain pack) looks like you’d be more ill if you kept smoking them but they ones (Silk Cut Superslims) look like you wouldn’t be so unwell if you smoked them for ages” (Girl, C2DE).

**Affective responses to packaging**

When asked to hold their favourite pack, and to imagine and describe how they would feel if that was their pack, rather than describing negative feelings and responses, which would be in line with their smoking attitudes, participants within all groups described how packs generated positive feelings. These responses differed by gender. Within the girl groups, the female-oriented Silk Cut and Vogue Superslims packs were most frequently chosen as a favourite pack, evoking feelings of cleanliness, niceness and femininity, e.g. “(I’d feel) like more classy and not so dirty (Silk Cut Superslims)” (Girl, C2DE). Among the boys, the Marlboro Bright Leaf, Lambert & Butler and Benson & Hedges slide packs were commonly chosen and associated with feelings of maturity, popularity and confidence. For instance, in respect to Marlboro, it was suggested that “it looks as if you’re like more mature, better and more popular” (Boy, C2DE).

For both genders, these packs were seen as something to be proud of and show off. They were thought to make people feel better about smoking in contrast to the plain pack. For example, “You’d feel better about it (smoking) than carrying that brown thing (plain pack).... To see that you’d think, ‘what am I doing, carrying this about?’.... People who don’t smoke would look at you like they were ashamed of you” (Boys, C2DE). The plain pack eliminated any of the benefits associated with the more appealing packs. It generated negative emotional responses such as embarrassment, shame, cheapness and being unclean, and participants described feeling “disgusting”, “boring and smelly” and “old”. The general consensus was that “it would make you feel depressed smoking” (Boy, C2DE).

**Conclusions**

The findings highlight that cigarette pack design can have a powerful influence on adolescent perceptions and affective responses. Adolescents appeared particularly tuned into design, valued the effort put into design and gave sophisticated accounts of how individual packaging features influence product perceptions and user imagery. The packs most highly appraised featured innovative, unusual or distinctive designs. This included a small, ‘perfume-type’ Silk Cut Superslims pack, a Marlboro pack with an innovative opening, a Lambert & Butler holographic pack and a bright pink Pall Mall pack. This suggests adolescents are most vulnerable to innovation and image-based designs. This is consistent with findings from industry documents which show young people place more importance on having something ‘new’, and portraying the right ‘image’, than value (Cummings et al., 2002; Wakefield et al., 2002; Wen et al., 2005).

The findings show that adolescents are susceptible to messages communicated by branded pack design. Smaller and lighter coloured packs implied reduced harm. Brighter coloured packs and those with distinctive designs generated strong positive user imagery and were associated with young, attractive and happy people. In this regard, packaging was able to soften the negative smoking attitudes that many adolescents held. Of particular concern, benefits were presented to adolescents through tobacco packaging: functional benefits, including convenience and discretion; emotional benefits, particularly more positive feelings about themselves and smoking; and information on harm and strength, due to shape and colour.

Comparatively, plain packaging reduced these benefits. It simply exposed tobacco as being harmful and dirty, something for older heavy smokers. This suggests that plain packaging may be an effective way to reduce the ability of the tobacco industry to communicate with adolescents through pack design. While plain packaging has been introduced in Australia, recent reports suggest the UK Government remains cautious about following suit (Doward, 2013) and even if they do proceed with plain packaging it would likely be many years before it is introduced. As such, incorporating information about tobacco packaging and how it is used by tobacco companies within a social influences resistance
model could help adolescents recognise how they continue to be targeted by the tobacco industry. This type of tobacco education has been found to help smoking prevention (Lantz et al., 2000) and schools have unique opportunities to discourage tobacco use, whether as part of the science curriculum; personal, social, health and economic (PSHE) education; or activities related to National Healthy School Status (NHSS) or Healthy Schools (NICE, 2010). Information related to the pressure coming from the tobacco industry to smoke could also be integrated into classroom discussions in a range of subject areas. For example discussions around tobacco marketing generally, or packaging specifically, could be relevant when teaching art and design, media studies, history and citizenship.

Packaging remains a key marketing vehicle, through which the tobacco industry is able to influence and communicate messages and positive smoking imagery to adolescents. Finding ways to help adolescents recognise and resist such pressures may help contribute to smoking prevention efforts.

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