Title: Young adult smoker’s perceptions of plain packs, numbered packs and pack inserts in Turkey: A focus group study

Authors: Burcu Mucan¹, Crawford Moodie²

Affiliations:
¹ Department of Business Administration, Faculty of Business, University of Celal Bayar, Manisa, Turkey.
² Institute for Social Marketing, School of Health Sciences and Sport, University of Stirling, Stirlingshire, Scotland

Corresponding author:
Crawford Moodie, Institute for Social Marketing, School of Health Sciences and Sport, University of Stirling, Stirlingshire, Scotland, FK9 4LA, Email: c.s.moodie@stir.ac.uk, Tel: 0044 (0)1786 466456

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Young adult smoker’s perceptions of plain packs, numbered packs and pack inserts in Turkey: A focus group study

ABSTRACT

Introduction: The Turkish Government’s ‘National Tobacco Control Program 2015-2018’ included plans to introduce plain packaging and also a ban on brand names on cigarette packs, allowing only assigned numbers on packs. We explored perceptions of these proposed measures, and also pack inserts with cessation messages, another novel way of using the packaging to communicate with consumers.

Methods: Eight focus groups were conducted with 47 young adult smokers in Manisa and Kutahya (Turkey) in December 2016. Participants were shown three straight-edged plain cigarette packs, as required in Australia, and then three bevelled-edged plain packs, as permitted in the United Kingdom. They were then shown plain packs with numbers rather than brand names, and finally three pack inserts with messages encouraging quitting or offering tips on how to do so. Participants were asked about their perceptions of each.

Results: Plain packs were considered unappealing and off-putting, although the bevelled-edged packs were viewed more favourably than the straight-edged packs. Numbered packs were thought by some to diminish the appeal created by the brand name and potentially decrease interest among never smokers and newer smokers. Pack inserts were thought to have less of an impact than the on-pack warnings, but could potentially help discourage initiation and encourage cessation.

Conclusions: That bevelled-edged plain packs were perceived more positively than straight-edged plain packs is relevant to countries planning to introduce plain packaging. The study provides a first insight into smokers’ perceptions of a ban on brand names, which was perceived to reduce appeal among young people.

INTRODUCTION

According to the World Health Organisation (WHO) tobacco kills around seven million people each year, with this predicted to get worse, particularly in low- and middle-income countries, where nearly 80% of the world’s smokers live.1 In Turkey, a middle-income country, smoking prevalence is 27.3% (41.8% of men, 13.1% of women).2 Approximately 110,000 people die of smoking-related diseases each year in Turkey, a figure expected to rise to 240,000 per year by 2030. In contrast to many developed countries, smoking prevalence in Turkey has increased recently.2,3 To combat this, Turkey set a ‘National Tobacco Control Program’ for 2015-2018, which included a range of possible measures for consideration, such as plain packaging and also a ban on brand names on cigarette packs, to be replaced with numbers.4 The rationale for numbered packs is to prevent brand names from being an incentive to smoke for consumers.5 The concept is supported by previous research which has found that brand and variant name are still able to influence product perceptions and the smoking experience even on plain packs.6,7 Currently, cigarette packs in Turkey have 1 of 14 pictorial warnings covering 65% of the pack front with 1 of 2 text-only warnings covering 43% of the pack reverse.8

Australia became the first country to fully implement plain packaging in December 2012, followed by France in January 2017 and the United Kingdom (UK) in May 2017. In Australia, plain packaging is required for all tobacco products, whereas in France and the UK it is only required for cigarettes (factory-made cigarettes and hand-rolled). Another difference is that plain cigarette packs in Australia must be straight-edged whereas bevelled-edged and rounded-edged packs are permitted in France and the UK. Kotnowski and Hammond9 identified 66 tobacco industry documents related to consumer research and marketing plans
on pack shape, size and opening, drawn from 1973 to 2002, and found that rounded and bevelled-edged packs were consistently perceived as stylish, elegant and classy. Other industry documents suggested that a high-quality product can be conveyed by bevelled or rounded edges, and that bevelled-edged packs held greater appeal to smokers than traditional straight-edged packs, being considered more convenient and aesthetically pleasing. Only one study, an online survey with smokers in Australia, has explored perceptions of plain packs with different types of edge, with straight-edged plain packs perceived as less attractive and lower quality than bevelled-edged plain packs.

Aside from plain packaging, some countries are using different methods for communicating with customers. In Canada, for instance, pack inserts with positive messages about quitting or tips on how to quit are used to supplement the on-pack warnings. In June 2012 eight rotating pack inserts with coloured graphics were introduced, replacing the previous set of sixteen text-only inserts used since 2000. Few studies however have explored how smokers respond to pack inserts, and none in middle-income countries. A focus group study in Scotland with 120 smokers explored their perceptions of the pack inserts used in Canada. They were thought to would capture attention and prolong the health message. The positive style of messaging was well-received and thought to increase message engagement. The inserts were often preferred to the on-pack warnings, although the general feeling was that both were needed. Some participants suggested that they had the potential to encourage smokers to think about their smoking behaviour and alter the behaviour of others, particularly younger people, would-be smokers and those wanting to quit. A longitudinal survey in Canada with adult smokers between 2012 and 2014 explored response to the inserts introduced in 2012. At each wave, between 26-31% reported having read the inserts at least once in the prior month, with younger smokers and those intending to quit or having recently tried to quit significantly more likely to have read them. Smokers who read the inserts a few times or more in the previous month were more likely to have made a quit attempt at the subsequent wave compared to smokers who had not read the inserts. Reading the pack inserts significantly increased across waves, with more frequent reading of inserts associated with self-efficacy to quit, quit attempts, and sustained quitting at follow-up.

In this study we explored young adult smokers’ perceptions of plain packs, including plain packs with bevelled-edges and, for the first time, perceptions of plain packs with numbers rather than brand names, as proposed within Turkey. Finally, we considered smokers’ response to pack inserts.

**METHODS**

**Design and sample**
Eight focus groups were conducted with young adult smokers (N=47) aged 18-24 years in Turkey in December 2016. Groups were segmented by gender and social grade. Social grade was measured according to the chief income earner of the household, assessed using the Turkish Statistical Income and Living Conditions Survey. This is an established classification system where individuals are categorised into quintiles, with ABC1 reflecting those in the top three quintiles, who earn more than 2501 Turkish Lira (TL), and C2DE reflecting those in the bottom two quintiles, who earn less than 2501 TL. The sample characteristics are shown in Table 1. The sample were recruited in one lower income area (Kutahya) and one higher income area (Manisa) in the Aegean Region of Turkey, using purposive sampling. A recruitment questionnaire was used to determine eligibility for inclusion (at least weekly smokers aged 18-24 years).
Table 1: Sample composition of the eight groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Gender</th>
<th>Social Grade</th>
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<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>Male</td>
<td>C2DE</td>
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<tr>
<td>2</td>
<td>6</td>
<td>Male</td>
<td>C2DE</td>
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<td>3</td>
<td>5</td>
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<td>Female</td>
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<td>5</td>
<td>7</td>
<td>Male</td>
<td>ABC1</td>
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<td>ABC1</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>Female</td>
<td>ABC1</td>
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</tbody>
</table>

Materials
Each group was shown six plain packs from the UK, three straight-edged and three bevelled-edged (see Figure 1). Our aim was to use cigarette brands that had low market share in Turkey so as to limit the potential role of the brand name on participants’ perceptions of these packs. At the time of the study the only bevelled-edged plain packs available on the UK market were for the Pall Mall brand family (which only has capsule variants), which is why all three bevelled-edged packs were for this brand and all contained capsule cigarettes. Groups were then shown five mocked-up plain packs with numbers rather than brand names, and a product list which showed the brand variants corresponding with each number, as well as pack size and price (see Figure 2 for an example of a numbered pack and product list). They were also shown pack inserts with messages highlighting the benefits of quitting or providing tips on how to do so, which were adapted from those used in Canada, but displaying the Turkish quitline (171) at the bottom of each insert (See Figure 3).

Figure 1 Six plain packs used. Top row straight-edged, bottom row bevelled-edged

Procedure
Potential participants were identified through street intercepts in Manisa (Manisa province) and Hisarcık (Kutahya) by one of the authors (BM). For those interested in participating,
eligibility was assessed using a recruitment questionnaire. If they met the inclusion criteria, they were given an information sheet explaining what the study was about (perceptions of cigarette packaging), what it involved (a group discussion), and that it was voluntary. They were also given a consent form and required to provide written consent acknowledging that they understood that they were asked to be part of a discussion group, which would be audio recorded, that they could withdraw at any time, and that they would not be identified if the findings were published. At the start of the groups, which were recorded using a digital recorder, the moderator introduced herself and explained that she worked at the University of Celal Bayar. Participants were informed that the aim of the groups was to explore perceptions of cigarette packaging, and they were given the opportunity to ask any questions and the right the withdraw from the study. Participants received a small cash incentive (10TL) for taking part.

**Figure 2** Numbered pack with product list

**Figure 3** Inserts explaining the benefits of quitting ‘Quitting…What’s in it for me’, encouraging smokers to ‘Never quit trying to quit’, and describing tips on cravings ‘They only last an average of a few minutes’
For participants recruited in Manisa province the groups were held in an office within the University of Celal Bayar (in Manisa). For participants recruited in Kutahya, the groups were held in an office within the Hisarçık Vocational School, University of Dumlupınar (in Kutahya). Groups were moderated by BM, who was not known to the sample. Groups lasted 70-90 minutes and a semi-structured interview guide was used.

Participants were handed three straight-edged plain packs and asked their perceptions of these and what impact, if any, they may have on them and others, e.g. ‘What do you think about these packs?’ They were then handed three bevelled-edged plain packs to explore whether these were perceived differently. If participants did not mention any differences between the straight-edged and bevelled-edged packs, they were asked if they were aware of any differences between the packs, and if they had a preference (see Figure 1). Participants were then given numbered plain packs, displaying health warnings currently used in Turkey, alongside a product list and informed that the Turkish Government planned to only allow numbers on packs, which could be found in shops selling tobacco, giving a list of numbers and the corresponding brand variant (see Figure 2). They were asked what they thought the reason was behind these plans, and their perceptions of cigarette brands. They were then given the three pack inserts (Figure 3) and allowed time to look at these before being asked about their impressions of these and whether they thought they may be useful. The institutional review board at the University of Celal Bayar provided ethical approval for this study.

Analysis

The audio files were transcribed in Turkish and translated to English by BM. The transcripts were reviewed using an iterative approach, being read and re-read to develop main themes and categories. The main themes used were based on the topics explored within groups, i.e. plain packs, numbered packs, and pack inserts. Within these themes a number of categories were identified, e.g. for plain packs the categories identified were Appeal, Emotional response, Avoidant behaviour, and Perceived impact. Quotes were then added to the identified categories if they were able to add to the explanatory power. Following this, quotes not used were reviewed again to see if they fitted within any of the categories. Data were coded by BM using Nvivo 11 software, with the themes and categories agreed by BM and CM. Themes and categories were compared within and across groups; where gender or social grade differences were identified these are reported within the Results.

RESULTS

Plain packs

Appeal

The plain packs were consistently considered unappealing, described as ‘horrible’, ‘gloomy’ and ‘ugly’. The lack of appeal was related to pack colour, which was disliked across the groups, being associated with ‘tar’ and ‘illness’ and being seen as ‘a reminder of death’.

It is absolutely very unattractive. I don’t want to carry and smoke it. Too dark, which distresses me (Female, C2DE).

It is really so unattractive. I don’t like it. As they said, they talked about ash which squeezes the lungs. It becomes this colour. I am sorry but you will see this colour when you remove the phlegm that accumulates in your throat (Male, ABC1).
While all the plain packs were viewed as unattractive, several participants commented that the bevelled-edged packs were slightly more appealing, even though the images on the bevelled-edged packs were considered more serious than on the straight-edged packs. The greater appeal of the bevelled-edged packs was due to them being perceived as easier and more pleasant to carry, and more elegant, e.g. ‘It is more beautiful’ (Female, C2DE).

*I prefer the bevelled-edge pack, which is more elegant. I think it's a little thinner and useful when you put into your pocket* (Male, C2DE).

*I think it [bevelled edge] looks like cigarette packs that we get used to* (Female, ABC1).

**Emotional response**

Most females, especially those in the lower social grade, had negative feelings about the packs. The general view was that participants would feel scared, unhappy, guilty and ashamed of having these packs due to the unpleasant appearance.

*It's scary... this pack is dangerous* (Male, ABC1).

*It would make me feel unhappy* (Female, C2DE).

**Avoidant behaviour**

Several participants thought that they would not want to show or carry the packs, e.g. ‘I would keep [the] packs in my cupboard’ (Female, C2DE). Some mentioned putting them in an alternative carrier to hide them, such as a cigarette case, and that they would hide smoking from others as well.

*I don’t want to get the packs out in front of my friends. I would probably have a special case and put the cigarettes into it* (Male, C2DE).

*I would smoke secretly and put into another box* (Female, C2DE).

Conversely, several participants within the higher social grade said that they would not be concerned about having these packs as everyone else would.

**Perceived impact**

Several, mostly female groups, suggested that the unpleasant appearance of the plain packs may prompt them to reduce consumption or quit, e.g. ‘Those would effect my smoking habit, they look so bad’ (Female, ABC1).

*I smoke 10-15 a day, I would reduce it to 4-5. When I open branded packs it says “Come and smoke”, but I do not know if that [referring to plain pack] says that* (Female, C2DE).

*I would quit directly because it is really unattractive* (Male, C2DE).

The plain packs had less of an impact on males, with several male participants suggesting that they would not have any impact on smokers, particularly heavier smokers. It was suggested, however, that it may deter those who smoke primarily to show off.
I do not think people will have any trouble with plain packs after a while because we [smokers] will get used to this (Male, C2DE).

People who smoke just to show off will disappear (Male, ABC1).

It was generally felt that plain packs would have a more pronounced effect with younger people, particularly those contemplating smoking or newer smokers.

These packs would have an effect on young people who want to start smoking because people who just started to smoke usually start by imitating a friend. When such a pack is available, nobody is enthusiastic (Female, ABC1).

Numbered packs

Perception of brand names
Brand names, including the fonts used, were considered important, attractive and a marker of quality. While several participants, particularly those in higher social grade groups, commented that they were disinterested in the brand name, and some felt that it was the cigarette itself that was most important, most agreed that brand names allow for differentiation and make smoking more appealing.

The impression that brands create on people is different. For example, a person with a high-income level might smoke Marlboro, not less than Parliament (Male, ABC1).

I think brands are completely important. These are eye catching, and have visual appeal (Male ABC1).

The brand is not the point, I think holding a cigarette and showing off makes people smoke more (Female, ABC1).

Perceived rationale for numbered packs
When asked why they thought that a ban on brand names had been proposed, several participants commented that it could be to reduce appeal, as the positive effect of the brand name would disappear, and also to make packs look ordinary. Several participants, mostly within female or lower social grade groups, suggested that it was to stop non-smokers thinking about the cigarette, e.g. ‘When you say 71, who will know that is a cigarette?’ (Male, C2DE). Others suggested that as only smokers would understand what the numbers mean, it could be an attempt to deter children from smoking.

For children to be less influenced and [brand names] not placed in their subconscious. To keep them away from smoking (Male, C2DE).

Perceived impact
The consensus was that regular smokers would not respond favourably because it may cause delays within the retail environment, e.g. ‘Will we queue up for the lists?’ (Female, ABC1). While it was suggested that the use of numbers rather than brand names may be difficult for smokers to get accustomed to, it was generally felt, particularly among those within higher social grade groups, that it would not encourage cessation. However, some participants did
suggest that it could function as a deterrent for smokers because of the unattractive appearance, especially for smokers seeking to create a certain image.

*It does not make any difference for me... it's nonsense* (Female, ABC1).

*It may be useful for quitting. It is too unattractive, it looks simple* (Female, C2DE).

There was general agreement that numbered packs would be useful for newer smokers and particularly children. Several participants, mostly those in the lower social grade, thought that they would deter initiation due to it being difficult for non-smokers to understand what the different brands are. Some, mostly female participants, thought that it would not make any difference for non-smokers as they are not familiar with brand names.

*I started smoking at primary school. I saw a Marlboro pack in my father's pocket. I said I wanted to carry that package. It will have a positive effect on those who do not smoke* (Male, ABC1).

*It will be definitely unattractive for beginners* (Male, ABC1).

*I think it is really functional as a deterrent for those who have just started or are about to start or want to quit* (Male, C2DE).

**Inserts**

*Salience*

While several participants from the higher social grade groups thought that the inserts were not particularly eye-catching, the general view was that they would create interest and be read, at least at first. Within several female groups they were also thought to keep the message going as they could be removed from packs and retained.

*It would always come out of the package and you would see it constantly* (Male, C2DE).

*When inserts get out of the packs, it will arouse curiosity. If at least one person can quit, it is a success* (Male, ABC1).

Despite capturing attention initially, the consensus was that they would be discarded or ignored thereafter.

*Message framing*

For most participants the messaging was considered credible, informative, interesting and relevant, whereas for others it was seen as boring and information that was already known.

*The message is very good because telling the truth, "I want to reward myself by saving money", the cigarette will remain in my pocket as money. I can save and get something I want* (Male, C2DE).

*The message is creative and good* (Male, C2DE).

*These are dull messages that everyone knows* (Female, ABC1).
The general view was that inserts would be less effective than the on-pack warnings, which were more memorable, e.g. ‘Images are much more striking than words’ (Female, ABC1). Within several female groups however it was felt that the on-pack warnings and inserts would work together, as the inserts would encourage people to think about quitting and the warnings highlight the dangers of doing so.

They address both the brain and eye (Female, C2DE).

**Perceived impact of inserts**

Several participants, mostly within the female groups, expressed the view that the inserts could help to reduce consumption, particularly for health conscious people, young people who have just started smoking, and those intending to quit. Some participants suggested that inserts may even benefit non-smokers. The general view was that they would not help people who are heavily addicted and less concerned about their health.

Ten people out of a hundred can even quit smoking [because of the inserts] (Female, C2DE).

It may be helpful for who has just started to smoke, but I don’t think it will help for addicted people (Male, C2DE).

Personally, if such things get out of the pack, I can collect and put them on a visible place. This is like a subliminal message. If they appear frequently I may start to think about quitting. Nice idea (Female, C2DE).

**DISCUSSION**

We found that among young adult smokers in Turkey, plain packaging was perceived negatively. Plain packs were seen as horrible and a reminder of illness and death, eliciting feelings of fear, guilt and shame. Some participants, mostly young women, suggested that they could motivate them to think about the dangers of smoking and encourage reduced consumption or cessation, and would be off-putting for those thinking about smoking or had just started to do so. These findings are consistent with previous research and add to the global evidence base given that most plain packaging research has been conducted in Western Europe, North America or Australasia. They also provide some support for the Turkish Government’s decision to introduce plain packaging, as has been suggested by recent media coverage.

Importantly, while all the plain packs were perceived as unappealing, the bevelled-edged packs were viewed more favourably than the straight-edged packs, being considered more convenient and elegant. This finding needs to be considered in light of differences between these packs however. At the time of the study the only bevelled-edged plain packs in the UK were for Pall Mall, which would likely be a more recognisable brand in Turkey than any of the brands used for the straight-edged packs. While brand name was not mentioned within any groups as a factor relating to the greater appeal of the bevelled-edged packs, it is possible that the name, or the fact that all the Pall Mall variants contained flavour-changing capsules, which have been found to appeal to younger people, influenced participants’ responses. As there are no brands on the UK market that use both straight-edged and bevelled-edged packs, even after the full implementation of plain packaging, to control for brand name future research would need to use mocked-up packs or images. The different
warnings displayed on the bevelled-edged and straight-edged packs is another potential confounder, although the fact that the warnings on the bevelled-edged packs were considered more serious suggests that appeal was not significantly influenced by the warnings. While these differences need to be taken into our consideration, our findings are consistent with a previous quantitative study\(^{10}\) and tobacco industry documents.\(^{9}\) If it is the case that pack structure (e.g. bevelled edges) can help increase appeal, then for governments considering implementing plain packaging they may prefer to follow the Australian approach, which only permits straight-edged plain packs.

Following the introduction of plain packaging in Australia, tobacco companies have increasingly included a colour within the variant name, most typically well-known strength indicators such as blue, red, silver and green,\(^{21}\) with a similar pattern already emerging in the UK post-plain packaging. One regulatory option available to counter this would be to completely ban the use of brand and variant names on packs,\(^{22}\) as has been proposed in Turkey. In this study, most smokers felt that the brand name was important and had an appeal function, consistent with past research.\(^{23,24}\) In this study some participants thought that the positive effect of the brand name would diminish if it was replaced by a number, and that packs would look more simplistic. While the numbered packs were not thought to have much of an impact on regular smokers, it was thought that they may help out off newer smokers and deter initiation as they would be confused by the numbers and find it difficult to know what different brands are and thus form positive images of brands; others however suggested that it would not make a difference for non-smokers as they would not be familiar with brands. Further research, particularly with non-smokers, would be beneficial. While it was felt that smokers would dislike the change as it could lead to delays within shops, which would be a possible adverse outcome and one that researchers may wish to explore, given the high level of brand loyalty among smokers this would be unlikely to be an enduring problem.

Pack inserts allow tobacco companies and governments an additional platform from which to communicate with consumers.\(^{25}\) Only one government, Canada, has chosen to take advantage of this opportunity. Among our sample the inserts, which were adapted from those in Canada, were not considered as eye-catching, memorable or effective as the on-pack warnings. However, consistent with qualitative research in Scotland,\(^{12}\) within several female groups they were considered an appropriate supplement to the on-pack warnings. Moreover, with respect to discouraging smoking, it was felt that inserts would be useful for young people, those who have just started smoking and those intending to quit, as has been found in past research.\(^{11,12,26}\) While few studies have explored pack inserts, the consistency of the findings suggest that they may be deserving of regulatory consideration beyond Canada.

Limitations include the lack of generalisability, with the sample restricted to young adult smokers. The novelty of the stimuli, and forced exposure to these, may have also influenced responses, with the study providing no insight into the actual impacts of these measures. The groups were conducted, transcribed and coded by only a single investigator for practical reasons, but this may also be considered a limitation. Nevertheless, the findings point to the design of plain packs in the UK being weaker than in Australia, provide a first insight into the response of smokers to cigarette packs displaying numbers rather than brand names, and suggest that there may be potential for inserts to be used as a means to extend health messaging beyond the pack exterior.

**What this paper adds**
- Bevelled-edged plain packs were considered more appealing than straight-edged plain packs, which has implications for plain pack design.
- The study explored, for the first time, perceptions of numbers on packs rather than brand names. Numbered packs were thought to reduce the appeal of cigarettes for younger people and new smokers.
- Inserts were thought to be less effective than the on-pack warnings, but nevertheless were viewed as a deterrent for younger people, new smokers and those intending to quit.
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**Competing interests**  None declared.

**Author contributions**  CM designed the study. CM and BM drafted the paper. BM conducted and analysed the groups.

**Ethical approval**  Granted by the Institutional Review Board at the University of Celal Bayar, Turkey.

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