## Who is the target? Package health warnings and the role of market segmentation

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Guidelines for implementation of Article 11 of the WHO Framework Convention on Tobacco Control recognise that 'it is important to assess the impact of packaging and labelling measures on the target populations,' yet how target populations may be identified is largely unspecified.<sup>1</sup> We have previously characterised that early tobacco control efforts are often implemented in a given jurisdiction with a mass market approach, where the total population is treated in its entirety and largely undivided, but market segmentation should be adopted over time.<sup>2</sup> Indeed, marketing strategists normally recognise the human diversity of consumers they are attempting to influence and a segmentation strategy involves the identification of well-defined consumer subgroups who share certain common characteristics to facilitate marketing communication that is more efficient, customised and personally relevant. When people find a message personally relevant, they are more likely to pay attention and process the message more thoroughly.3

The target market heavily affects communication decisions regarding where it will be said, what will be said, how it will be said, when it will be said and who will say it.4 Concerning where it will be said, decisions must be made about the medium of communication (eg, magazines) or the message channel of the traditional communication process.<sup>5</sup> The cigarette package may also be regarded as a medium of communication for tobacco control efforts, with the cigarette brand serving to inform which health warnings and messages are most relevant based on the target consumer. A health warning that is more directly aimed towards women is more suitably placed on a Virginia Slims package in the USA.<sup>6 7</sup> For health

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Correspondence to Professor Timothy Dewhirst, Department of Marketing and Consumer Studies, College of Business and Economics, University of Guelph, Guelph, ON N1G 2W1, Canada; dewhirst@uoguelph.ca warnings that aim to resonate with a vounger age demographic, heavier placement is advisable on the cigarette packaging of Marlboro, Camel and Newport, which are brands particularly popular among younger smokers.<sup>8 9</sup> Moreover, recent academic research suggests the message content that would be suitably placed on such brand packages: health warnings demonstrating the social risks of smoking or the harms of smoking on others, including children and animals, prompt comparatively stronger negative emotions among younger smokers than warnings placing emphasis on the longterm harms of smoking. 10 11 The revelations of marketing planning documents from the tobacco industry, made public from litigation, can also be used to inform tobacco control efforts including the packaging and labelling of tobacco products. 12

Market segmentation involves identifying target consumers for a product by dividing a mass market into subsets on the basis of demographics, geography, behavioural components or psychographics. 13 Demographic segmentation accounts for dimensions such as age, gender, stage of the family life-cycle, education, socioeconomic status and occupation. Using gender and stage of the family life-cycle as an example, eight inserts are used in Canadian cigarette packages by Health Canada that aim to encourage cessation; one of the inserts poses the question, 'Thinking of having a baby?' and shows a pregnant woman and refers to 'your pregnancy,' which personalises the message but also places the spotlight on women contemplating having a child (and largely excludes men, partners or families from responsibility). Such an insert promoting cessation can generate attention, enhance message engagement and be influential, but seemingly is limited in its reach based on the proportion of smokers that would deem the message personally

Geographic segmentation accounts for dimensions such as market density and regional differences of a domestic market. In Canada, the Mark Ten cigarette brand demonstrates strong sales on a regional basis, primarily in the province of Quebec. Consequently, health warnings placed on the packages of Mark Ten might provide a testimonial or health effects information with particular regional or provincial relevance.

Behavioural segmentation involves dividing consumers into groups according to user status, usage situation, extent of use and product benefits sought. Social smokers, for example, often do not identify themselves as smokers and they may consequently be less motivated to engage in adaptive behaviour that minimises their health risks. 15 Health warnings could be designed to enhance awareness that there is no safe level of cigarette consumption and that occasional smokers are not immune from the harms of smoking. Obviously, message content can be tailored accordingly to appeal to social smokers as opposed to those classified as experimenters or heavy users of tobacco products.

Psychographics is another commonly used segmentation approach in which the personality, activities, interests and opinions of the target market are considered. One strategic consideration for making messages relevant to target consumers is whether to create messages that are predominately visual or verbal according to the demonstrated preferences of the target market. 16 17 Some people process information more cognitively and they tend to prefer verbal messages, whereas others tend to rely on how they feel when they process information and they are inclined to prefer visual messages. 16 18 Moreover, consumers are different about how they process information regardless of the modality of information (ie, visual vs verbal information). Research, for example, has differentiated between visualisers, who are predisposed to process information with visual images, and verbalisers, who are predisposed to process information semantically without creating images. 19

In this issue, articles by Lochbuehler and colleagues as well as Popova and colleagues address important aspects of text and visual health warning labels in the context of the US Food and Drug Administration's nine proposed pictorial health warning labels (PWL), which were meant to replace text-only warnings on tobacco products. Legal rulings prevented the installation of PWLs, however, in part due to the visual not being regarded as factual or informative. 20 21 Lochbuehler et al found that the visual in the health warnings captured and held smokers' attention better than the text component. Additionally, smokers demonstrate better recall when visual and textual information

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is congruent rather than incongruent. They suggest that the text should be complemented with congruent visuals in health warnings. Meanwhile, Popova et al argue that the dichotomy of 'factual text and emotional pictures' is overly simplified. Their study reveals that there are no significant differences in perceived information between textual and pictorial warning labels: pictorial health warnings can be informative and factual, whereas text-based health warnings can evoke emotions. Given the aforementioned psychographic considerations, an implication from both articles is that text-only health warning messages, as currently observed in the USA, are not likely to be personally relevant to visualisers.

By identifying and understanding the idiosyncrasies, attitudes and interests of identified targets, marketing initiatives are far more likely to elicit favourable consumer responses, in contrast to a single undifferentiated effort towards the mass market. While the extant literature concerning health warnings on tobacco packaging is considerable, future research could further account for the role of market segmentation to evaluate which themes and message content appear most effective. One direction for future research is to examine the advised number of health warnings that should be rotated on tobacco packaging. Canadian regulations, for example, require the rotation of 16 warnings, which has facilitated the targeting of subgroups.<sup>22</sup> Nevertheless, the inclusion of themes such as the financial costs of smoking would allow for the further targeting of subgroups, with the health warning being strategically aligned with brands and their pricing strategy.<sup>23</sup> Market segmentation principles also suggest rethinking the random rotation of health warnings. More research is needed that further builds upon the valuable contributions by Lochbuehler, Popova and their colleagues.

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