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RESEARCH

FOR THE WORLD

# Do tobacco warnings change behaviour?

Published 12 July 2022

**Amitav Chakravarti**
is Professor of Marketing in the Department of Management at LSE. He has recently co-authored a book on consumer rights (with Manoj Thomas) titled *GO & STOP Signals: why consumers (don't) buy* and his research interests include consumer insights, digital marketing, consumer behaviour and behavioural public policy and decision making.

Tobacco warnings which evoke feelings of shame are much more effective at deterring smoking than those which evoke fear, argues **Amitav Chakravarti**, whose work explores decision-making and the impact of public health messages.

Whether you smoke or not, chances are, you will have seen a packet of cigarettes in recent years emblazoned with a warning about the dangers of tobacco. Often these warnings, particularly the accompanying pictures, are shocking and emotive. But do they deter people from smoking and are certain warnings more effective than others?

This was the question posed in 2012 by the European Commission to Professor Amitav Chakravarti from the Department of Management at LSE, and his colleagues Professor George Gaskell and Dr Caroline Rudisill.

Europe has one of the highest rates of tobacco use in the world, with an estimated 700,000 premature deaths each year caused by smoking in the European Union (EU).

Prominent text warnings on tobacco packaging have been mandatory in the EU since 2003 but in many countries these warnings were small and did not include images.

> When you use fear you grab people's attention, but this impact is very short-lived and wears off quickly.

## Not all public health warnings are the same

Thus, in 2012, the European Commission decided to revise its guidelines and the Commission's Executive Agency for Health and Consumers (EAHC) set up a research consortium to test the effect of different tobacco product warnings. Professor Chakravarti and his colleagues were asked to join the group.

"As a researcher, I primarily look at why people make decisions, their biases and how we can help individuals improve their decision-making," explains Professor Chakravarti. "Literature in this area is often used to help companies sell products, but I've always been interested in approaching the process from the public policy side instead."

When Professor Chakravarti and his colleagues joined the consortium, the European Commission's prevailing view was that tobacco warnings did deter the purchasing of tobacco products but that all warnings had the same impact on consumers. It was felt this was the case regardless of whether they warned about damaged lungs, heart attacks, rotting teeth, family members affected by passive smoke or numerous other health and social concerns.

To test this theory, the researchers set up a large-scale survey of 8,000 European citizens across 10 countries to study participants' responses to existing health warnings as well as a variety of new possible warnings and package layouts.

> If you show people warnings about speeding with images of car crashes, the raw emotional impact of the imagery will be too severe for many people to process.

Participant responses were measured through their reported willingness to buy a tobacco product after seeing the warning. Physiological reactions to the warnings, such as pupil dilation, were also measured in some participants.

The team felt strongly that the study should allow all outcomes to play out. "We set up an experiment that was completely unbiased, so any hypotheses could be proven or disproven and we could let the data do the talking," said Professor Chakravarti.

## Don't scare people, shame them to encourage change

Interestingly, the findings revealed that different warnings affect consumers differently. Images eliciting emotions such as shame, anger, anxiety and distress were much more successful in reducing the likelihood of someone buying a tobacco product (down by about 82 per cent) than when they elicited emotions like fear and disgust, which reduced intention to buy by 66 per cent.

Professor Chakravarti believes these results are because shocking images - such as pictures of decaying lungs - can cause people to switch off. "When you use fear

you grab people's attention, but this impact is very short-lived and wears off quickly, as people cognitively shut off and don't process the arguments any further. However, if you scale back the image, people are less likely to shut off and are more likely to absorb the message."

> If we can identify which part of someone's brain lights up when they're processing information rather than asking them how they feel about it, that's the next frontier.

As a direct result of these findings, the EU published its revised Tobacco Products Directive and required all tobacco products in the EU to carry specific combined warnings from an approved list of 14 text warnings and 42 pictures. By May 2017 they further mandated that pictures were required to cover the top 65 per cent of all cigarette packets sold in the region.

Professor Chakravarti believes these findings can also play a role in other areas where the aim is to deter certain behaviour such as speeding or driving under the influence of alcohol. "Once again, if you show people warnings about speeding with images of car crashes, the raw emotional impact of the imagery will be too severe for many people to process."

## The next frontier

In the future, Professor Chakravarti hopes he will be able to assess the effectiveness of public health warnings using equipment such as eye trackers and brain scanners to measure physiological responses, rather than heavily relying on self-reported data.

"If we can identify which part of someone's brain lights up when they're processing information rather than asking them how they feel about it, that's the next frontier. These measures might simply confirm what people are stating but it will be helpful to have the extra information, especially when certain behaviours are deemed socially undesirable."

With new phenomena such as vaping becoming increasingly popular, unobtrusive measures such as eye trackers can help provide valuable data quickly and help researchers develop the most effective public health messages. ■

Professor Chakravarti's research features in a Research Excellence Framework (REF) 2021 impact case study, Improving public health messaging to reduce tobacco use in the European Union. Explore LSE's REF 2021 results in full.

Professor Amitav Chakravarti was speaking to Charlotte Kelloway, Media Relations Manager at LSE.