

<b>Institution:</b> The University of Bristol
<b>Unit of Assessment:</b> 4 – Psychology, Psychiatry and Neuroscience
<b>Title of case study:</b> Influencing international tobacco policy on standardised tobacco packaging
<p><b>1. Summary of the impact</b></p> <p>Ground-breaking experimental research at the University of Bristol assessing the effectiveness of standardised tobacco packaging legislation has been strongly influencing international tobacco policy and legislation since 2011. Work by scientists in the School of Experimental Psychology was the first to show, using direct, objective measures, that standardised tobacco packaging modifies relevant behaviours. Australia became the first country in the world to implement standardised packaging legislation in 2012 after reviewing the University of Bristol research in their High Court in response to legal challenges from the tobacco industry. That same year, the European Commission's update of the Tobacco Products Directive cited the same University of Bristol research to support the claim that standardised packaging would strengthen the effectiveness of graphic health warnings on tobacco products. The UK government has also used the University of Bristol research to inform the consultation on standardised packaging of tobacco products.</p>
<p><b>2. Underpinning research</b></p> <p>The underpinning research involved two main studies [1-2] carried out in the School of Experimental Psychology between January 2010 and April 2012. The research was conducted primarily by Marcus Munafò, Professor of Biological Psychology (2005 – present), Dr Ute Leonards, Reader in Neuropsychology (2003 – present) and Ms Olivia Maynard, PhD student (2010 – present), at the University of Bristol, in collaboration with Linda Bauld, Professor of Health Policy, at the University of Stirling. Munafò, Maynard and Bauld are members of the UK Centre for Tobacco and Alcohol Studies (UKCTAS), a UK Public Health Research Centre of Excellence. UKCTAS is currently conducting a wider research programme in the field of tobacco and alcohol with a focus on original research, policy development, advocacy and teaching. The University of Bristol's contribution in this regard has been pivotal: the expertise of Munafò and his colleagues lies in the use of eye-tracking technology to provide objective, quantifiable data that have supported the policy work, advocacy and teaching of the UKCTAS.</p> <p><b>Context</b></p> <p>Tobacco use is still the leading cause of preventable death. It causes 100,000 premature deaths in the UK every year, 700,000 in the European Union (EU) and five million worldwide. With two-thirds of current smokers having started smoking before the age of 18, preventing young people from starting is an important goal for public health. Tobacco industry documents indicate an awareness of the importance of the cigarette packaging in attracting young smokers, particularly in countries where tobacco marketing has been restricted, such as the UK. Qualitative studies have suggested that standardising cigarette packaging might be effective among young people in encouraging quitting and preventing the uptake of smoking. Standardised packaging would require all cigarettes to be sold in packs with a standardised shape, colour and method of opening - removing all branding and leaving only the brand name in a standard font and location.</p> <p>Research investigating the impact of standardised packaging has previously relied on measuring subjective attitudes to packaging, and as a result it has been criticised by the tobacco industry for lacking credibility. The research conducted at the University of Bristol is the first to use objective, bio-behavioural measures to investigate the behavioural impact of standardised packaging, introducing scientific credibility to this research, which has impacted on the industry and policy.</p> <p><b>Plain packaging directs attention toward health warnings in adults</b></p> <p>Munafò and his colleagues used eye-tracking technology to measure the eye movements of adults, and in 2011, they published results showing that non-smokers and weekly smokers paid more attention to health warnings on plain packaging compared with branded packaging [1]. However,</p>

daily smokers did not pay attention to health warnings regardless of the type of packaging.

### Plain packaging also influences attention of non-established adolescent smokers

In 2013, Maynard, Munafò and Leonards extended the 2011 study to look at adolescents aged 14-19 years. Once again, using eye-tracking technology, they found that young people experimenting with smoking and weekly smokers paid more attention to health warnings on plain packaging [2]. Non-smokers gave preferential attention to the health warnings, regardless of the type of packaging, and daily smokers, even if relatively new to smoking, ignored health warnings.

These results are relevant for public health, as increased attention towards health warnings might increase the likelihood of health warnings being read and understood, which could subsequently affect smoking behaviour. The research therefore suggests that legislation standardising cigarette packaging could be an effective tobacco control measure and has been cited to this effect.

## 3. References to the research

### Outputs

- [1] Munafò, M.R., Roberts, N., Bauld, L. & Leonards, U.(2011) 'Plain packaging increases visual attention to health warnings on cigarette packs in non-smokers and weekly smokers but not daily smokers', *Addiction*, 106 (8): 1505-1510. DOI: 10.1111/j.1360-0443.2011.03430.x
- [2] Maynard, O.M., Munafò, M.R. & Leonards, U.(2013) 'Visual attention to health warnings on plain tobacco packaging in adolescent smokers and non-smokers', *Addiction*, 108 (2):413-419. DOI: 10.1111/j.1360-0443.2012.04028.x

### Grants

- [3] Munafò, M.R. (2011-2013) *Effects of plain packaging on neural response to health warnings*, Action on Smoking and Health UK, Project Grant, £21,600.
- [4] Davey-Smith, G., Lawlor, D.A., Relton, C., Evans, D., Timpson, N.J., Munafò, M.R. MRC Integrative Epidemiology Unit (IEU). Medical Research Council MC\_UU\_12013/1-9 (2013-2018), University Unit, £10,560,000 (fEC). There is a standardised packaging workstream within this programme.

## 4. Details of the impact

Until now, research into the effect of plain packaging on smoking has been dominated by qualitative research, but Bristol's experimental approach has quickly gained traction because of its scientific credibility. This has been particularly important among policy-makers interested in the evidence supporting the implementation of standardised packaging. Experts estimate that standardised packaging might reduce adult smoking by 1%, and it could reduce the numbers of children trying smoking by 3% - the equivalent of 500,000 adults and 400,000 children in the UK (Pechey *et al.*, *BMC Public Health*, 2013, 13(1):18). These estimates represent what could be resounding benefits to public health. Early indications from Australia, where standardised packaging has recently been introduced, are that this is associated with lower smoking appeal, more support for the policy and more urgency to quit among adult smokers (Wakefield *et al.*, *BMJ Open*, 2013, 3:e003175).

### Guiding expert opinion in defence of global tobacco control policy

In December 2012, Australia set an international precedent by becoming the first country in the world to implement standardised packaging of tobacco products. Initially, the tobacco industry took aggressive legal actions against the legislation, but eventually Australia's High Court dismissed these constitutional challenges in August 2012. The Australian Government set up an Advisory Group of leading experts in tobacco control to advise on the issue, and one expert stated that the Bristol-based research was reviewed in the court cases and:

"has helped to guide expert opinion. The laboratory-based methodology and physiological measures used by Ms Maynard and Professor Munafò represents a particularly important contribution to the evidence base" [a].

The outcomes of these court cases were watched closely by other countries including New Zealand and Ireland, who have since announced plans to introduce standardised packaging, and the UK, Norway, Canada, India and Turkey who are reported to be considering the legislation as well. The Australia India Institute Taskforce on Tobacco Control used the research by Munafò and his colleagues to support their position that India could also introduce plain packaging legislation [b, cites 1]. The Taskforce presented the report to the New Delhi Parliament in 2012. In response, the joint secretary in the Ministry of Health stated that “plain packaging, particularly the Australian case study, can be an example for India” [c].

The research has also been used to inform tobacco policy in Europe. The European Commission Tobacco Products Directive (TPD) oversees the laws, regulations and administrative provisions concerning the manufacture, presentation and sale of tobacco products in Member States of the European Union. The European Commission released a revision of the TPD in December 2012 [d]. One of the five policy areas the revision focuses on is packaging and labelling, and both of the eye-tracking studies conducted here at Bristol are discussed as evidence in support of proposals for cigarette packaging regulation. The TPD will be influential in informing policy makers across Europe about tobacco control and will also set a precedent for international tobacco control policies for the next decade.

#### **Informing UK consultation on tobacco control policy**

The UK government conducted a public consultation on standardised tobacco packaging between April and August 2012. The research cited above [1-2] played an important role during the consultation period, in informing ministers and the public about the effectiveness of standardised packaging legislation. Prior to the consultation, Munafò met with the Cabinet Office Behavioural Insights Team to inform their response to the consultation, and Maynard and Munafò were invited to present their research results to members of the Tobacco Policy Team within the UK Department of Health. As part of the consultation process, the Department of Health and the Public Health Research Consortium commissioned a systematic review of the evidence for standardised tobacco packaging, which was published in April 2012 [e]. The review used the research conducted with adults [1] as evidence that standardised packaging increases the salience of health warnings on cigarette packs.

In response to the government consultation, Action on Smoking and Health (ASH), a campaigning public health charity, produced a template with evidence-based responses that organisations and individuals could use and adapt for their own responses [f]. This template referred to the work conducted in both underpinning studies [1-2 as cited in e]. This ASH document was supplied to over 190 health organisations, with very positive feedback [g] and was used by notable organisations such as the UK Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom [h]. The research was also cited directly in consultation responses by a number of organisations including ASH UK [i] and ASH Scotland [j] and the Tobacco Control Research Group at Bath University.

In May 2013, Maynard and Munafò presented their research to key policy-makers at a Parliamentary Office Science and Technology workshop at the Houses of Parliament. These activities continue to keep the issue of standardised packaging at the forefront of government debate.

#### **Impact on UK public opinion of standardised packaging legislation**

Critical to the government consultation on standardised packaging of cigarettes were the opinions and engagement of the public. Towards the end of the government consultation period, in August 2012, the research attracted considerable media interest following a press release associated with the publication of the most recent study [2]. The research was featured on the Six O'clock News on BBC 1, and Maynard was invited to conduct a number of radio interviews on local and international radio stations. These media activities were important in presenting the evidence to members of the public across the UK, enabling them to make informed contributions to the consultation.

In June 2013, upon the recommendation of the MP for Bristol West, Stephen Williams, also Chair of the Parliamentary Cross-Party Smoking and Health Group, the researchers were invited to discuss their findings on BBC Points West News (audience of ~276,000) and the BBC Sunday Politics programmes.

On July 12, 2013, the UK government announced that it will delay its decision on standardised packaging to wait until the emerging impact of the decision in Australia can be measured. This decision elicited some strong responses that referred to overwhelming evidence (including the underpinning research) that there are “simple ways to make [smoking] less appealing” and that the government’s shelving of the proposed legislation was “not because of a lack of evidence that plain packaging works” [k].

### 5. Sources to corroborate the impact

- [a] Associate Professor, School of Public Health & Health Systems, University of Waterloo.
- [b] Australia India Institute (2012) *Report of the Australia India Institute Taskforce on Tobacco Control: Plain Packaging of Tobacco Products*. ISBN: 978-0-9872398-3-9. <<http://www.aii.unimelb.edu.au/sites/default/files/Taskforce%20on%20Tobacco%20Control-Final.pdf>> [cites 1].
- [c] Stark, J. (5 Aug 2012) ‘India may adopt Australia’s plain packaging laws’, *The Sydney Morning Herald* <<http://www.smh.com.au/federal-politics/political-news/india-may-adopt-australias-plain-packaging-laws-20120804-23mm4.html>>
- [d] European Commission (December 2012) *Proposal for a Directive of the European Parliament and of the Council on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products*. COM (2012) 788 final, 2012/0366 (COD), Brussels, 19.12.2012. <<http://www.ipex.eu/IPEXL-WEB/dossier/document.do?code=COM&year=2012&number=0788>>
- [e] Moodie, C., Stead, M., Bauld, L., *et al.* (2012) *Plain tobacco packaging: A systematic review*, Public Health Research Consortium. <[http://phrc.lshtm.ac.uk/papers/PHRC\\_006\\_Final\\_Report.pdf](http://phrc.lshtm.ac.uk/papers/PHRC_006_Final_Report.pdf)> [cites 1]
- [f] Action on Smoking and Health (ASH) (2012) *Template response to government consultation on standardised packaging of tobacco products* <<http://moderngov.rotherham.gov.uk/mgConvert2PDF.aspx?ID=47214>> Uses Bristol research as it is cited in [e] to form evidence-based responses to the UK government consultation.
- [g] Chief Executive, Action on Smoking and Health.
- [h] UK Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom (2012) *UK Faculty of Public Health response to the Government consultation on standardised packaging of tobacco products*. Available upon request.
- [i] ASH (2012) *Response to government consultation on standardised packaging of tobacco products*, submitted 13<sup>th</sup> July 2012. <[http://www.ash.org.uk/files/documents/ASH\\_845.pdf](http://www.ash.org.uk/files/documents/ASH_845.pdf)> [cites 1,2]
- [j] ASH Scotland (2012) *ASH Scotland response to consultation on standardised packaging of tobacco products*, submitted August 2012. <<http://www.ashscotland.org.uk/media/4653/ASH%20Scotland%20response%20to%20consultation%20on%20standardised%20packaging%20August%202012.pdf>> [cites 1,2]
- [k] Chivers, T. (12<sup>th</sup> July, 2013) ‘The evidence is clear: plain packaging for cigarettes works. The Government’s backdown is sheer cowardice’, *The Telegraph* <<http://blogs.telegraph.co.uk/news/tomchiversscience/100226150/the-evidence-is-clear-plain-packaging-for-cigarettes-works-the-governments-backdown-is-sheer-cowardice/>>