



## The force is not with you

*Professor Theresa Marteau, Director of the Behaviour and Health Research Unit, ponders behaviour change.*

Smoking. Eating too much. Drinking too much. Moving too little. These four behaviours cause the majority of premature deaths worldwide. Enabling individuals to change these behaviours would avoid 40 per cent of cancers and 75 per cent of diabetes. Unfortunately, there is no one solution for changing these behaviours – but there are more and less effective ways. My research has helped identify a less effective way – providing people with personalised information about their level of risk – as well as more effective ways, namely changing environments to change behaviour.

Much of my work has focused on the question of whether being given a personal risk of diabetes, cancer and other disease based on genetic tests might prompt a change in behaviour to reduce those risks. What we have found is that while individualised risk information can alter a person’s perception of risk and their intention to change behaviour, on average it does not change their actual behaviour. Few of us would swim in waters signed as shark-infested, or, more prosaically, use a lift labelled: “It is inadvisable to use this lift if maintenance staff are not on duty”, as seen within our University. So, while humans are exquisitely sensitive to risk information concerning immediate threats to life and limb, we often discount the risk of future disease against current pleasures.

Formulating the reasons why communicating an individual’s risk does not generally change behaviour shifted my research away from information-based interventions aimed at motivating individuals to resist environments that readily cue unhealthy behaviour, towards less conscious routes to behaviour change involving redesigning environments to more readily cue healthier behaviour.

The herculean task now is to systematically describe the characteristics

of environments that shape our behaviour – for good and ill – including physical, digital, economic and social ones. At the Behaviour and Health Research Unit that I direct, our focus is upon the physical cues in our immediate environments that subtly shape behaviour. These include the design of cigarette packets, tableware and drinking glasses. The impact of some of these cues on our behaviour can be large and most often operate outside conscious awareness. For example, from the results of our systematic review of 61 experimental studies, we estimate that removing larger sized portions, packages and tableware would reduce the daily energy intake in UK adults by 16 per cent.

One barrier to applying the results of this research comes in the form of the ‘fundamental attribution error’. Put simply, we overestimate how much our behaviour

is under intentional control and underestimate how much is cued by the environment. Policymakers and the public are prone to this error, reflected in the discourse of personal choice and amplified by parts of the industries that profit from over-consumption of their products, with cries of ‘nanny state’ in the face of regulation in favour of environments that enable healthier behaviour.

Realising environments that enable healthier behaviour across populations – for example, through restricting the size of sugary drinks sold, standardising the packaging of cigarette packets or increasing the prices of alcohol – requires some level of public support. Evidence is emerging that public support for such interventions increases when a risk to health is perceived, the outcome is valued, an intervention is perceived as effective at achieving the valued outcome, and human behaviour is seen as shaped more by environments than by ‘free will’.

Ironically, this means that there is now a vital new role for effective communication about disease risk and its reduction, this time focused on increasing our support for interventions – often by government – to forcibly change environments to make easier the healthier behaviours that many of us prefer but still find difficult to achieve. How to increase public demand for such interventions is a research question to which my group and others in Cambridge are now turning.

Having eschewed research on the communication of risk as a poor means for changing behaviour, I now see it as core. Without public demand, other interests will shape our environments. With public demand we have a sporting chance of implementing what we now know is key to healthier populations: environments – physical, digital, economic and social – that readily enable healthier behaviours.

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# Contents



18



28

## 02 LETTERS

### Campendium

- 07 **DON'S DIARY**  
Dr Fumiya Iida talks robots and media.
- 08 **MY ROOM, YOUR ROOM**  
Dame Barbara Stocking  
(Murray Edwards, New Hall 1969).
- 11 **SOCIETY**  
The Cambridge University  
Expeditions Society.
- 13 **BRAINWAVES**  
Professor Theresa Marteau ponders  
the challenge of behaviour change.

### Features

- 14 **DEAR MOTHER**  
The forgotten art of the letter home.
- 18 **THE BIG SLEEP**  
Dr Brigitte Steger examines  
the Japanese art of inemuri.
- 24 **LOOKING UP**  
When Professor Didier Queloz spotted  
a strange light emitting from 51 Pegasi  
he had to investigate.
- 28 **AT HOME AND ASTRAY**  
Dr Philip Howell explains how  
dogs became man's best friend.
- 36 **FOLK STORY**  
In 1954, four undergraduates  
kick-started a musical revolution.

### Extracurricular

- 43 **REALITY CHECKPOINT**  
The English Faculty Courtyard.
- 44 **SHELFIE**  
Professor Tim Lewens.
- 45 **CAMBRIDGE SOUNDTRACK**  
Iestyn Davies (St John's 1999).
- 47 **UNIVERSITY MATTERS**  
University Director of Sport,  
Nick Brooking.
- 48 **CROSSWORD**