THE
BEHAVIOURAL
INSIGHTS TEAM.

EASY

ATTRACTIVE

SOCIAL

TIMELY

EAST
Four simple ways to apply behavioural insights

Owain Service, Michael Hallsworth, David Halpern,
Felicity Algate, Rory Gallagher, Sam Nguyen, Simon Ruda, Michael Sanders
with Marcos Pelenur, Alex Gyani, Hugo Harper, Joanne Reinhard & Elspeth Kirkman.

Contents

Preface

One of the key objectives of the Behavioural Insights Team at its creation in 2010 was to spread the understanding of behavioural approaches across the policy community. Alongside the policy work and trials conducted by the Team over the last three years, we have conducted many seminars, workshops and talks with policy makers, academics and practitioners. From these many sessions, together with our trials and policy work, has emerged a simple, pragmatic framework to help think about behaviour change.

In the early years, we often used the MINDSPACE framework, and indeed some of the team were centrally involved in developing it.[1] We still use this framework. But we found in seminars that its nine elements were hard for busy policy makers to keep in mind (itself reflecting 'cognitive chunking'). At the same time, we found in our day-to-day trials and policy work that some of the most reliable effects came from changes that weren't easily captured by MINDSPACE, or indeed by much of the academic literature. For example, we have often found that simplifying messages, or removing even the tiniest amount of 'friction' in a process, can have a large impact. For these reasons, we wanted to develop a shorter, simple mnemonic — the EAST framework.

The EAST framework was developed by the Behavioural Insights Team from early 2012. After initial testing in seminars given by members of the team with UK Civil Servants, the first public 'outing' of EAST in its final form was in a short series of lectures I gave in Harvard and Washington later that year. Since then, we have refined and developed some of the core concepts and ideas, based on new findings and feedback from those we have tested EAST with. I would stress that, like most of what BIT does, it is very much the work of the team, and many have contributed to it – not least our friend and colleague Richard Thaler whose mantra is to 'make it easy'.

We hope you find this guide helpful. Getting familiar with the EAST framework won't turn you into the world's leading expert on behavioural insight. There are more complex frameworks and typologies, and many subtle and fascinating effects that EAST does not cover. But if even a small percentage of policies and practices are adapted as a result, EAST should lead to services that are easier and more pleasant for citizens to use, and more effective and cheaper too.

David Halpern
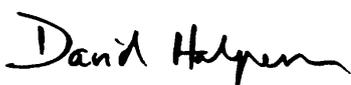
Chief Executive,
The Behavioural Insights Team

Executive Summary

If you want to encourage a behaviour, make it Easy, Attractive, Social and Timely (EAST). These four simple principles for applying behavioural insights are based on the Behavioural Insights Team's own work and the wider academic literature.

There is a large body of evidence on what influences behaviour, and we do not attempt to reflect all its complexity and nuances here. But we have found that policy makers and practitioners find it useful to have a simple, memorable framework to think about effective behavioural approaches.

With this in mind, the principles from EAST are:

1. Make it Easy

- *Harness the power of defaults.* We have a strong tendency to go with the default or pre-set option, since it is easy to do so. Making an option the default makes it more likely to be adopted.

- *Reduce the 'hassle factor' of taking up a service.* The effort required to perform an action often puts people off. Reducing the effort required can increase uptake or response rates.

- *Simplify messages.* Making the message clear often results in a significant increase in response rates to communications. In particular, it's useful to identify how a complex goal can be broken down into simpler, easier actions.

> *Example: Auto-enrolment into pension schemes*
>
> In the first six months after employees in large firms were automatically enrolled into pension schemes, participation rates rose from 61 to 83%.

2. Make it Attractive

- *Attract attention.* We are more likely to do something that our attention is drawn towards. Ways of doing this include the use of images, colour or personalisation.

- *Design rewards and sanctions for maximum effect.* Financial incentives are often highly effective, but alternative incentive designs — such as lotteries — also work well and often cost less.

Example: Drawing the attention of those who fail to pay road tax

When letters to non-payers of car tax included a picture of the offending vehicle, payment rates rose from 40 to 49%.

3. Make it Social

- *Show that most people perform the desired behaviour.* Describing what most people do in a particular situation encourages others to do the same. Similarly, policy makers should be wary of inadvertently reinforcing a problematic behaviour by emphasising its high prevalence.

- *Use the power of networks.* We are embedded in a network of social relationships, and those we come into contact with shape our actions. Governments can foster networks to enable collective action, provide mutual support, and encourage behaviours to spread peer-to-peer.

- *Encourage people to make a commitment to others.* We often use commitment devices to voluntarily 'lock ourselves' into doing something in advance. The social nature of these commitments is often crucial.

Example: Using social norms to increase tax payments

When people were told in letters from HMRC that most people pay their tax on time, it increased significantly payment rates. The most successful message led to a 5 percentage point increase in payments.

4. Make it Timely

- *Prompt people when they are likely to be most receptive.* The same offer made at different times can have drastically different levels of success. Behaviour is generally easier to change when habits are already disrupted, such as around major life events.

- *Consider the immediate costs and benefits.* We are more influenced by costs and benefits that take effect immediately than those delivered later. Policy makers should consider whether the immediate costs or benefits can be adjusted (even slightly), given that they are so influential.

- *Help people plan their response to events.* There is a substantial gap between intentions and actual behaviour. A proven solution is to prompt people to identify the barriers to action, and develop a specific plan to address them.

Example: Increasing payment rates through text messages

Prompting those owing Courts Service fines with a text message 10 days before the bailiffs are to be sent to a person's home doubles the value of payments made, without the need for further intervention.

In order to apply these insights in practice, the Behavioural Insights Team has developed a methodology that draws on experience of developing major strategies for the UK Government, a rich understanding of the behavioural literature, and the rigorous application of tools for testing 'what works'.

The EAST framework is at the heart of this methodology, but it cannot be applied in isolation from a good understanding of the nature and context of the problem. Therefore, we have developed a fuller method for developing projects, which has four main stages:

1. Define the outcome

Identify exactly what behaviour is to be influenced. Consider how this can be measured reliably and efficiently. Establish how large a change would make the project worthwhile, and over what time period.

2. Understand the context

Visit the situations and people involved in the behaviour, and understand the context from their perspective. Use this opportunity to develop new insights and design a sensitive and feasible intervention.

3. Build your intervention

Use the EAST framework to generate your behavioural insights. This is likely to be an iterative process that returns to the two steps above.

4. Test, learn, adapt

Put your intervention into practice so its effects can be reliably measured. Wherever possible, BIT attempts to use randomised controlled trials to evaluate its interventions. These introduce a control group so you can understand what would have happened if you had done nothing.

The team's recent experience shows the potential for these ideas, and the methods for applying them, to be incorporated into government actions. We are publishing this paper as a guide for policy makers, in the UK and overseas, to draw on this thinking with the ultimate aim of helping people to make better choices for themselves and society.

Introduction

This paper sets out four simple principles for influencing behaviour — make it Easy, Simple, Attractive and Timely (EAST). The EAST framework has been developed by the Behavioural Insights Team from its experience of applying behavioural insights over the past three years. EAST therefore complements the existing MINDSPACE report by focusing more on how to apply behavioural insights in practice.[2]

The paper does not seek to be comprehensive. Rather, its aim is to show how some of the most relevant behavioural insights can be applied to policy challenges. Many of these insights can be combined. For example, our interventions in Jobcentres combine all elements of the EAST framework, by making it easy (cutting down the process), attractive (personalising job advice), social (introducing commitment devices), and timely (making sure a work-focused interview happens on day one). Others focus on a particular aspect of EAST, such using social norms to encourage people to pay their tax debts.

Despite the success of these interventions, when applying behavioural insights we need to recognise that context matters. Something that works well in one area of policy might not work quite so well in another. Similarly, some behavioural effects can have unintended consequences if misapplied. For this reason, this paper also contains a number of 'Behavioural Pitfall' boxes, which show a range of different ways in which the misapplication of behavioural insights might result in perverse effects. For example, Behavioural Pitfall 2 is to inadvertently reinforce a negative behaviour by using social norms that suggest that the 'problem behaviour' is relatively widespread (for example by attempting to discourage people from turning up to appointments late by emphasising how widespread this problem has become).

Since small changes in context can have a dramatic impact on the effectiveness of policies, the Behavioural Insights Team advocates rigorous testing and trialling of new interventions, ideally through randomised controlled trials. These enable policy makers to compare the effects of the intervention against what would have happened in its absence (or if an alternative method had been used).[3] The team also advocates carrying out fieldwork to understand how users experience services and, where possible, co-design interventions with the people who deliver and use them.

These two methods - applying policy interventions informed by the growing body of behavioural research, together with rigorous testing and trialling based on a rich understanding of the context in which a policy is being delivered — are the hallmarks of the Behavioural Insights Team's methodology. We think that they should become more routine aspects of the policy maker's tool kit.

1. Make it Easy

Most of us have been in situations in which we had every intention of doing something, but never quite got around to doing it. These might be relatively small things, like tidying your home or switching your energy supplier to get a better deal. Sometimes it can be for those really important things in our lives, like starting a pension plan, making a will, or applying to university.

The lesson that comes through strongest from the behavioural literature and our own work is that small, seemingly irrelevant details that make a task more challenging or effortful (what we call 'friction costs') can make the difference between doing something and putting it off – sometimes indefinitely.

Therefore, the first principle is to consider how to make it easier for someone to do something, be it live more healthily or pay their taxes on time. Some ways to 'make it easy' include:

- *Harness the power of defaults*
- *Reduce the 'hassle factor' of taking up a service*
- *Simplify messages*

1.1 Harnessing the power of defaults

We have a strong tendency to stick with the 'default' option, which is the outcome that occurs if we do not choose otherwise. Understanding the default and how it can be changed can significantly improve uptake of a service.

Some of the most famous policy examples from the behavioural economics literature relate to changing the default option. For example, when individuals are automatically enrolled onto pension schemes but can choose to opt out, they are much more likely to end up with a pension plan than if they have to actively opt in (see Box 1.1).

Similarly, organ donation schemes can be set to automatically enrol people. Or tax systems can be put in place that automatically deduct individual's income tax without an individual having to take any action (as in the UK's Pay-As-You-Earn system). In these examples the default option can be a very powerful tool for encouraging different outcomes. But because of the power of these particular policy tools, they will also require careful consideration of what might be acceptable politically and to the public at large. In England, for example, we have an organ donation scheme that requires people to give their active consent.

While the above defaults relate to the way that whole systems are designed and operate, many defaults are subtler in nature. Indeed, every policy area will have many default settings and options that can be set to support a particular outcome.

These include, for example, the information that is requested first in a form (information up front will draw most attention); the size of plates in hotel buffets (smaller plates result in less food consumed and less waste); whether heating systems need to be turned off or automatically switch themselves off at particular points in the day.

We believe that policy makers have not — yet — given sufficient attention to these default settings, and how they can be harnessed for the good of society and individuals. In the private sector, much attention is paid to how defaults might be used. Here are a few examples:

- Most gyms in the UK will ask you to pay through monthly automated transfers from your bank account so that the default is that you continue paying.

- Social networking sites have default settings around information sharing and privacy, which many users never fully examine or change.

- Mobile phone settings are configured in a particular way when you buy them, and most will remain set in that way.

- Many consumers of energy, broadband and telephony services stay with the same provider, and continue paying the 'default' tariff, which might be much higher than one that they could switch to with another supplier.

Box 1.1: Pension defaults

Studies in the US, Chile, Mexico, Denmark, and Sweden show that automatically enrolling individuals onto retirement plans and allowing them to opt out (rather than expecting them to opt in to existing systems) is a highly effective way of increasing pension savings — as well as being popular amongst employees.[4]

In October 2012 UK employers started automatically enrolling their workers into a pension. The scheme started with the largest UK employers (250 or more workers) and by 2018 will cover all employers. Initial results show that the overall participation rate rose from 61% to 83% and 400,000 more people now have a pension.[5]

61%   **83%**

Opt in   Opt out
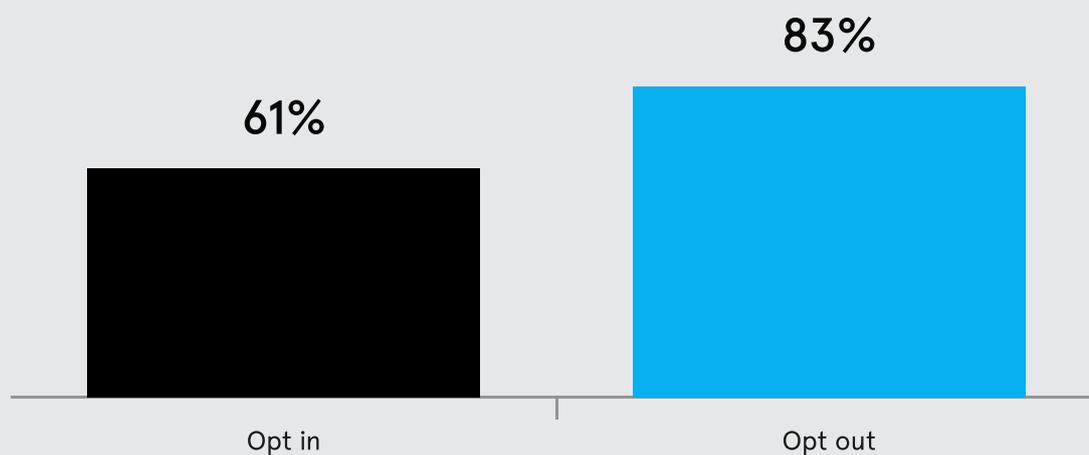
In all of these areas and many more, there is much potential to consider how the options presented are currently configured, and whether the *de facto* default is in the public's or individual's interests. Appropriately, there has been much debate about who should set defaults, and how. The use of behavioural insights does not eliminate the need for vigorous democratic debate. Indeed, establishing public preferences and permissions is key to selecting defaults in the first place (as it was for adopting an opt out pensions default in the UK).

1.2 Reducing the 'hassle factor' of taking up a service

When it is not possible to change the default so no action is required, policy makers can still reduce the effort required to perform an action. The main way of doing this is to reduce the costs or 'friction' associated with acting. Here are a few examples:

- Sending taxpayers directly to a form, rather than a webpage that contains the form, increases response rates by four percentage points (see Box 1.2).

- University attendance amongst under-represented groups rose by eight percentage points when forms were filled in and submitted on behalf of the applicant (see Box 1.3).

Of course, if reducing hassle costs makes an action more likely, then increasing these costs has the opposite effect. This is well-known in the field of crime prevention, which often focuses on ways of increasing hassle to deter opportunistic crime (for example, locking windows and building higher fences). But policy makers should recognise how even small increases in required effort can have major effects. A study found that deaths from paracetamol poisoning fell by 43% after new legislation required larger portions to be presented in blister packs (resulting in 765 fewer deaths between 1998 and 2009).[6] It appears that the extra effort required to release each pill individually was enough to discourage the self-harm attempt altogether.

Box 1.2: Increasing response rates by changing the default web-link

The Behavioural Insights Team has run a series of trials with HMRC that sought to improve tax collection rates by making it easier for individuals to pay. One of the simplest interventions involved testing the impact of directing letter recipients straight to the specific form they were required to complete, as opposed to the web page that included the form.

This change only slightly reduces the difficulty of responding. Yet we found that this simple act of making the action easier had an unexpectedly large impact. Sending individuals directly to the form increased response rates from 19% to 23%.

% Response rate to letters directing people to webpage vs form

19.2%   Webpage (n=3,215)

23.4%   Direct to form (n=5,215)
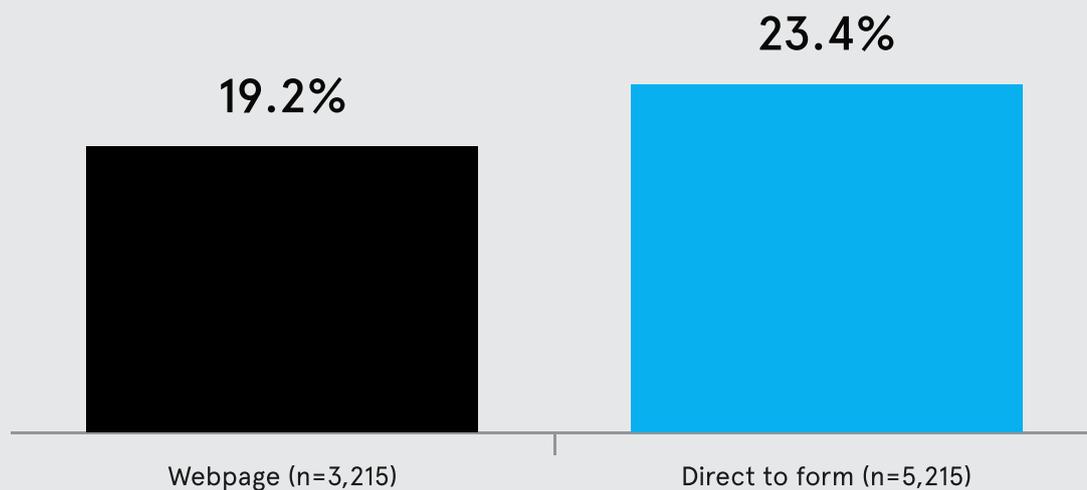
Both public and private systems can be re-designed to reduce the burden on users – and the people operating them. Redesign does not need to mean additional expense; it may be about realising how a particular aspect of the service, which can be easily removed, is actually limiting overall effectiveness. In this sense, thinking about hassle factors can be highly cost-effective.

Box 1.3: Simplifying the university application process

Process simplifications have recently been shown to help under–represented groups go to university, in particular by making it easier for potential applicants from low-income groups to apply for financial assistance.[7]

This change involved providing personal assistance to individuals (parents of potential university applicants or the applicants themselves), which included automation and streamlining of parts of the process and testing this against no help and the provision of information alone (with no streamlining or automation). Applicants whose parents received the support were eight percentage points more likely to have attended university in the year following the intervention. In contrast, simply providing information did not increase attendance.

Impact of application assistance on university attendance

| 34% | 33% | 42% |
| Control Group (n=398) | Information (n=80) | Information & Auto Submission (n=390) |
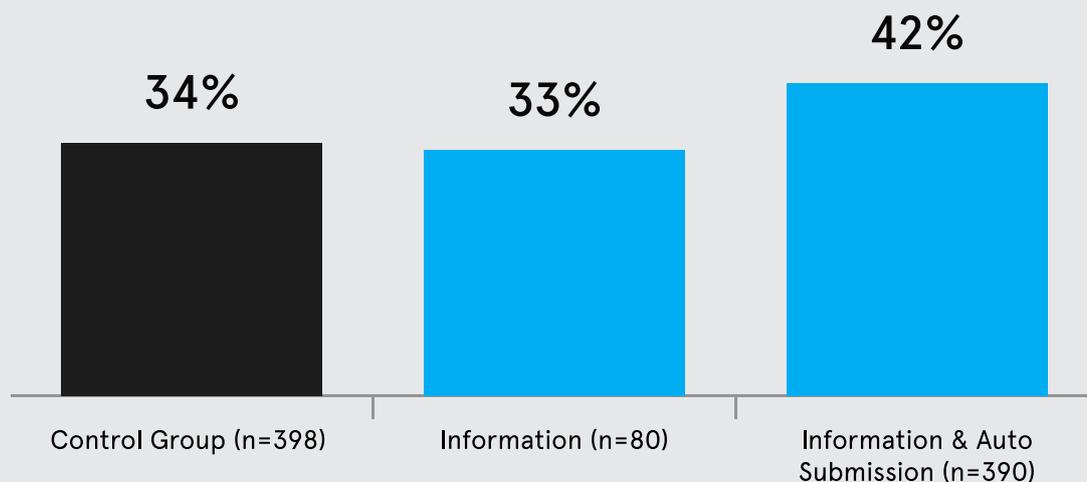
Many other opportunities to benefit from reducing hassle factors are yet to be fully explored, such as making it easier for consumers to switch suppliers (see Box 1.4 below).

Box 1.4: Making it easy to switch suppliers

Many markets are getting more complex: there are more than 6,000,000 mobile phone contracts available, and the number of energy tariffs in the UK has risen to over 300. In April 2011, the Behavioural Insights Team and the Department for Business, Innovation and Skills (BIS) launched 'midata', a programme to give consumers access to their personal consumption data in portable electronic format. This programme was backed by enabling legislation in the 2012 Enterprise Act.

Midata will enable consumers to use these data to make better choices for themselves. It will also make it easier to help consumers to get better deals, such as switching energy suppliers. The example below shows an early midata prototype that enables users to access their personal consumption data on their mobile phone, which they can then use to switch energy suppliers, without having to type in lots of information about typical monthly usage and type of contract.

Scan your bill with midata-enabled QR code

Simply switch the tariff that is best for you
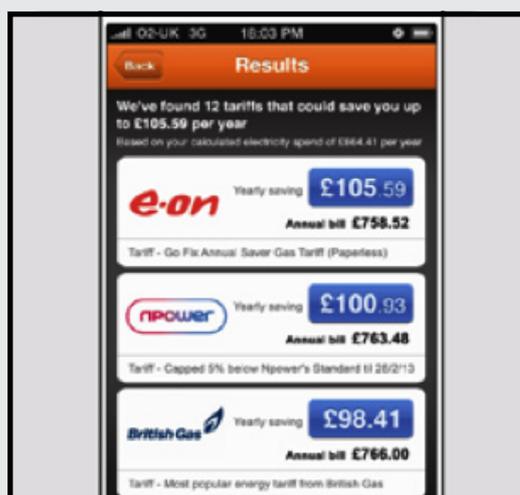
1.3 Simplify messages

The Behavioural Insights Team has conducted dozens of trials with Government departments that examine ways of increasing response rates to forms or letters. Making a letter from HMRC or the DVLA really easy to understand often results in a 5% or 10% increase in response rates – usually because the main request has been made clearer. For complicated services that require thousands or millions of communications every year, this kind of increase in response rates can mean large cash and time savings, including saving confused citizens the hassle of follow-up phone calls and letters.

Health and healthcare also offers good examples of the benefits of dealing with complex information efficiently:

◆ Reducing the potential for hospital prescribing errors by simplifying the forms used (see Box 1.5).

◆ Developing and discussing a clear self-care plan with patients during hospital discharge reduced readmission rates by 30% over the following month, compared to usual discharge procedures. This approach has been shown to work in both acute care and nursing homes.[8]

◆ Using a 'fast and frugal tree' to reduce the number of factors that clinicians have to consider significantly increases the accuracy of predicting heart attacks, compared to more complex systems that try to account for many risk factors.[9]

Reducing prescription errors

Prescribing errors affect an estimated 50% of admissions in hospitals using paper-based prescription charts (Lewis et al. 2009). There are concerns that such forms lead to medication errors by hindering clear communication between professionals. For example, it may be impossible to distinguish between milligrams and micrograms when written out by hand in a hurry.

A study by Imperial College London, funded by the Behavioural Insights Team, sought to reduce these errors by redesigning forms to make them clearer and simpler (King et al. 2013). As the chart below shows, the microgram/milligram problem was addressed by creating distinct options that simply had to be circled. In simulation testing, the new charts were found to significantly improve correct dose entries, supporting information, and provision of contact information. If adopted more widely, improvements like these are likely to lead to reduced medical errors and better patient outcomes for little cost.

The Team has identified five main lessons from its simplification work:

- Make sure that the key message is presented early, ideally in the first sentence or subject line;

- Keep language simple;

- Be specific about recommended actions;

- Provide a single point of contact for responses;

- Remove all information that is not absolutely necessary for performing the action.

Our work has shown that it's especially useful to identify how a complex goal (e.g. 'stopping smoking') can be broken down into simpler, easier actions (e.g. ordering a quit kit). This is based on the insight that it is easier to affect change through simple steps ('stages of change') and that we learn by using simple 'chunks' of information.[10] For example, the goal of eating more healthily was broken down into the simpler task of 'eating your five a day'. Not only are such messages easier to understand, but they also appear achievable. Simple, discrete actions can then be fused together to form more complex ones, which in turn become easier to perform – just as, when learning to drive a car, the discrete actions of 'ignition', 'clutch', 'handbrake' become 'start the car'. Policy makers need to identify how the desired action can be boiled down to specific, simple steps.

2. Make it Attractive

The private sector is particularly adept at making things more attractive. Whether it is an offer in a supermarket, the way in which an online retailer tailors its advice to you based on recent purchases, or the free gift you receive with a new kitchen, we have all bought things because they were made more attractive to us.

We think that the public sector can also find ways to make its services more attractive. Some of these are relatively intuitive (such as personalising messages); others are more sophisticated (such as reframing the way in which incentives are presented). Fundamentally, though, making an action attractive is about two main things: drawing attention to it, and making the action more appealing. In other words:

- *Attract attention*
- *Design rewards and sanctions for maximum effect*

While we treat these goals separately, they often support one other: the prize in a lottery is both eye-catching and appeals to our tendency to over-weight small probabilities, for example.

2.1 Attract attention

Behavioural scientists use the term 'salience' to describe the way in which people are more likely to respond to stimuli that are novel, simple and accessible.[11] In other words, we are more likely to do something that our attention is drawn towards.

There are many ways to attract attention. One option is a more cognitive approach that finds new ways of highlighting the consequences of the behaviour, making the costs and benefits salient. But we are also attracted by many other (less direct) factors, such as the feelings and associations triggered by how an object or idea is presented. Examples include:

- Putting a handwritten post-it note request on envelopes, which increased response rates to a survey by the Irish Revenue from 19.2% to 36.0% after 15 working days.[12]

- Showing the nutritional value of food through a simple colour-coded system, to draw on our instinctive responses to certain colours (e.g. red).[13]

- Including the image of the recipient's car in letters to people who have not paid their vehicle tax to increase payment rates (see box below).

- Media campaigns that have an emotional impact, such as HIV awareness campaigns of the 1980s; smoke detector installation campaigns of the 1990s; or anti-smoking campaigns of the 2000s.

Box 2.1: Attracting the attention of owners of untaxed vehicles

The Behavioural Insights Team worked with the DVLA to test the efficacy of different messages upon individuals who fail to tax their vehicles. It is estimated that there are around 250,000 unlicensed vehicles in Great Britain, representing around £40m in lost revenue, so this is a significant problem.[14] We tested the original DVLA letter against a new letter with simpler, harder-hitting messages (such as 'Pay Your Tax or Lose Your [Make of Vehicle]').

Simplifying the letter does not seem to have had an impact for this group, perhaps indicating the clarity of the original letter. What does seem to work well, though, is including an image of the vehicle within the letter, which attracts the attention of recipients and makes the idea of losing their vehicle more salient. Note that this image not only attracts attention, but also involves a strong element of personalisation (see section below), as drivers are shown an image of their own car.

DVLA relicensing rates

| 40% | 42% | 49% |
| Original letter | New letter | New letter + image |
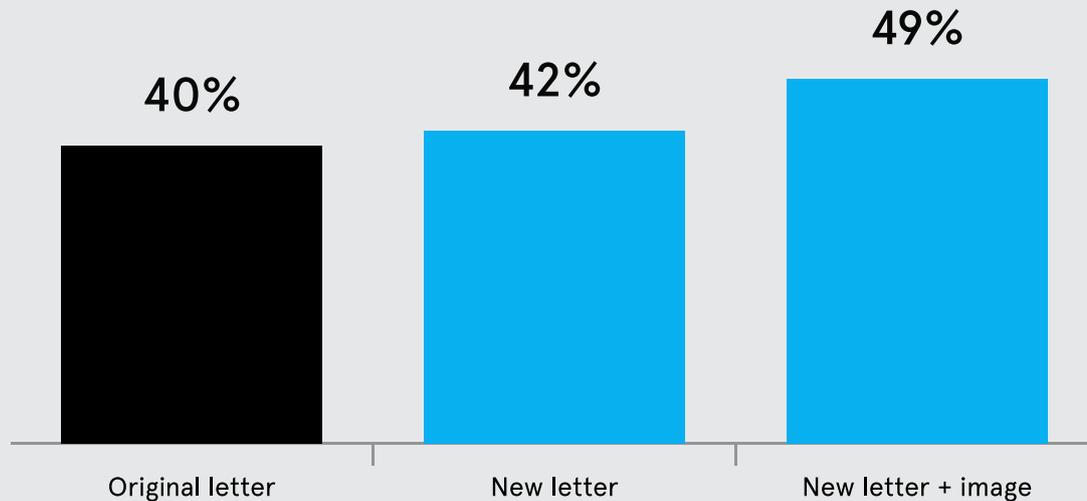
We think there is particular scope for attracting attention through personalisation. Governments have, for a long time, emphasised the desire to create more 'personalised' services.[15] But only recently has the behavioural impact of tailoring the messages sent by government and others started to be quantified.

We all develop strategies for noting information that may be relevant, and our reaction to names offers a good example. As certain names (like our own) take on significance for us, our attention is drawn to them quickly and effortlessly when they occur.[16] At the same time, personalised messages make it easier for the recipient to imagine the costs or benefits of a particular action — in other words, 'what this means for me'. When a message deals with possible negative consequences, personalisation may make those consequences seem more likely by conveying that government has accurate and detailed records (and will act on them).

Although personalised messages will usually require slightly more work on the part of the sender compared to a more generic message, the increasing power of data analytics means that sophisticated segmentation is becoming cheaper and easier.

Examples of the power of personalisation encountered by the Behavioural Insights Team include:

- Simply adding someone's name to an otherwise generic text message increased the amount of money paid in a trial conducted with HM Courts Service (see Box 4.1).

- Using personalised emails, rather than generic messages, significantly increased the proportion of people who gave a day of their salary to a good cause, as part of a trial with a major investment bank (see Box 2.2).

- Tax letters that ensured that doctors knew that they were being focused on as a distinct group, rather than as generic taxpayers, considerably increased response rates (see Box 2.3).

Box 2.2: Giving a day's salary

The Behavioural Insights Team ran a trial with a large investment bank to test different ways of encouraging people to donate a day's salary to charity.[17] The control group received generic emails and leaflets encouraging people to participate. This approach was tested against a range of new interventions that included: offering people sweets branded with a charitable giving message; and making the email messages more personalised.

Personalisation and the use of sweets represent the two dimensions of Make it Attractive: attract attention and design rewards effectively. They were found to be highly effective and cheap ways of increasing uptake – and showed an even greater impact when they were combined. (The giving of sweets also incorporates a social element of 'reciprocity', as explained in the next section.)

% Giving one day's salary

Control group	Sweets	Personal email	Sweets + personal
5%	11%	12%	17%
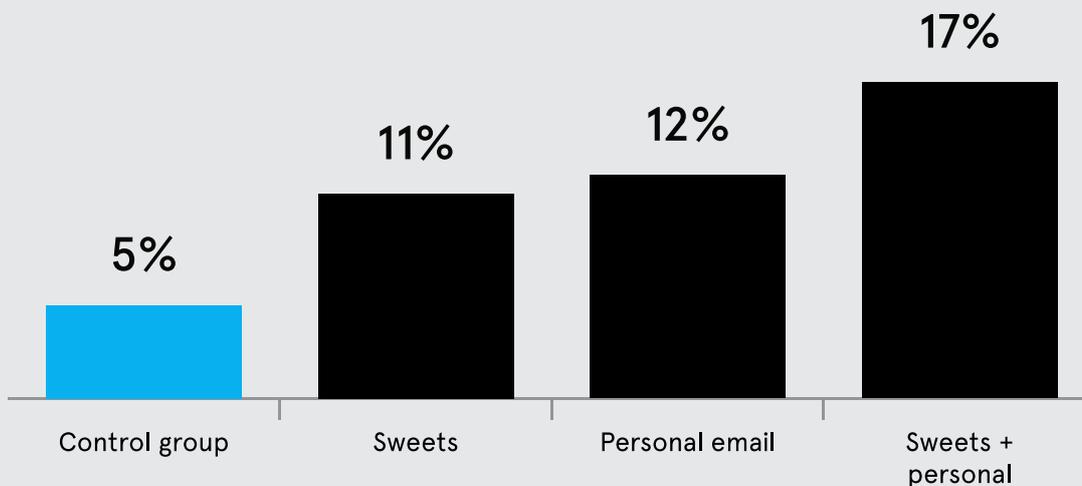
Box 2.3: Increasing response rates of doctors by attracting
the attention of a specific group

The Behavioural Insights Team ran a trial with HMRC to test the effectiveness of different letters aimed at encouraging doctors to pay any outstanding tax liabilities. In November 2011, around 3,000 doctors were sent one of four different types of letters.

One group received a generic HMRC letter, of the kind anyone (regardless of their profession) would receive. The second group received letters in the style that HMRC might usually send to a specific group, emphasising that it was a campaign focused on doctors. The third was a much simpler letter — being shorter and more direct in tone. It also suggested that failure to come forward was previously treated as an oversight, but would now be treated as an active choice by the recipient. The fourth was identical but contained an additional moral message (which pointed out that a recent poll showed that most people trust their doctor to tell the truth).

Simply emphasising that the letters were targeting a particular group through a specific campaign had a considerable impact — raising response rates by more than five times. Simplifying the message also had a strong effect above and beyond the focus on the specific group.

% Response rates of doctors to HMRC letters

| Generic letter	Traditional style medics	Simplified message ('We know' + 'Oversight')	Simplified + moral messages
3.8%	21.1%	35.3%	35.3%
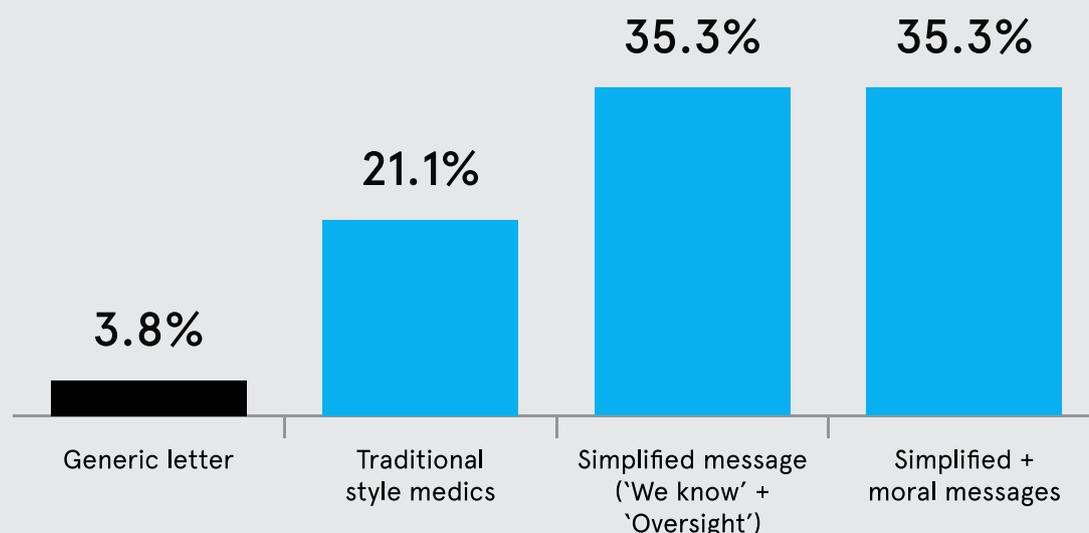
Box 2.4: Using a clear call to action stamp to improve payment rates of fines

BIT is working with New South Wales' Department of Premier & Cabinet and Office of State Revenue to run trials to improve payment rates across a range of fines, debts and taxes.

A number of fines trials involved testing the use of a 'stamp' to provide a clear call to action for recipients. One of these trials involved 'Enforcement Orders', which are issued to those people who have failed to respond to a Penalty Notice and Penalty Reminder Notice for fines ranging from traffic and parking infringements to civil disorder offences.

A red 'Pay Now' stamp was printed in a prominent position on letters in the trial group, alongside a number of other changes to make the messaging more salient. Over a sample size of 48,445 letters, there was a 3.1 percentage point increase in payment rate in the trial letters compared to the standard notice (see graph below). When rolled out to scale, this translates to AUD$1.02 million in additional payments for the NSW Government, as well as 8,800 fewer vehicle suspensions, which has wider socio-economic benefits for the community.

Enforcement orders trial

	14.7%	17.8%
Payment rate	Control	Trial
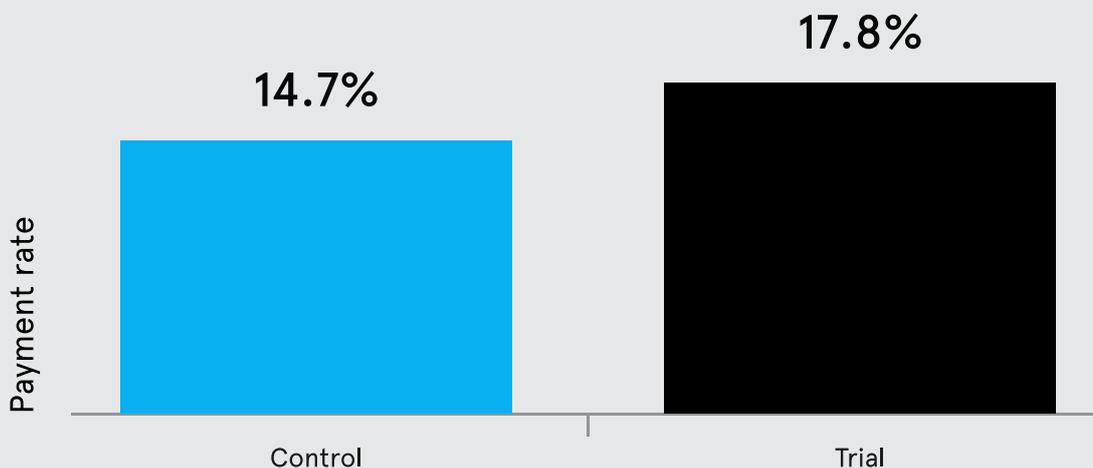
2.2 Design rewards and sanctions for maximum effect

It is no secret that individuals are more likely to undertake a particular action if they have an incentive to do so. Governments have often used financial incentives to motivate behavioural change, both in the form of taxes and fines to discourage particular activities (for example, taxing cigarettes), and tax subsidies and grants to encourage others (for example, to encourage saving or insulation).

There is good evidence that financial incentives work in many instances. However, the Behavioural Insights Team believes that there are many alternative ways of structuring financial incentives to maximise their effectiveness. These include:

- The use of lotteries. We have a tendency to focus more on the size of the prize at stake, rather than our chances of winning it. Therefore, rather than rewarding everyone equally (e.g. £100 for anyone takes up a scheme), it may be cheaper and more effective to reward fewer people with a much larger reward (see Box 2.5 on electoral registration).

- Focusing on the scarcity of a product or service. Robert Cialdini has pointed out that we are much more attracted to something if we think supplies are limited. A famous example is that sales of beans increased after a sign saying "Maximum five per customer" was introduced. Policy makers could point out where an offer is only available for a certain time, only open to certain people, and where there is competition amongst these people for places.

- Drawing attention to self-image. We have a powerful desire to maintain a positive self-image. Therefore, the potential gain from feeling or looking good can be a powerful incentive. Note that this desire may not be conscious. For example, a US study showed that more people voted if they were asked "How important is it to you to be a voter in the upcoming election?" as opposed to "How important is it to you to vote in the upcoming election?" The success of the first message came through relating the action to a person's essential qualities and self-image.[18]

- 'Gamifying' activities. The advent of new technologies, particularly the use of mobile phone apps, has seen a rapid increase in 'gamification' — using games to engage users in achieving objectives. The incentives here are often virtual (competition against others in your social network), but can also take the form of tangible rewards – for example the Incentives for Singapore Commuters scheme rewards commuters for moving from peak to off-peak trains.

Box 2.5: Using a lottery to increase electoral participation rates

Lotteries or prize draws can be highly cost-effective ways of incentivising people, since individuals tend to focus more on the size of a prize than their chances of winning it. Traditional incentives or subsidies, by contrast, are usually divided up between many people, which means there is not a single large amount to attract attention.

The Behavioural Insights Team ran a randomised controlled trial with a local authority to test the efficacy of using lotteries to increase electoral registration rates. There was a 3.3% increase in registration rates when the prize was £1,000, and a 4.2% increase when the prize was £5,000.

Electoral registration lottery
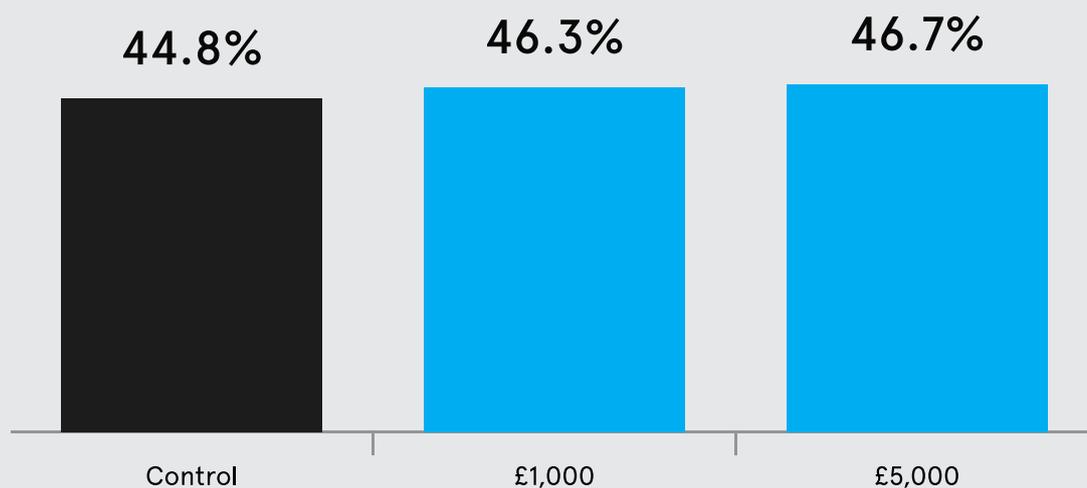
The lottery is a good illustration of how prize draws can increase registration rates in more cost-effective ways than the alternative of knocking on people's doors.

There is also a case for considering 'incentives' more broadly that we normally do. The *processes* for carrying out a behaviour can make it more or less attractive, quite apart from the end reward on offer. For example, it has been shown people are more honest when responding to survey questions about their drinking through text messages than a phone interview.[19] But the most attractive process may not be obvious: in fact, the researchers thought a text message would be less attractive, because it leaves a persistent record of the answer. Again, this shows the importance of testing, learning, and adapting.

Behavioural Pitfall 1: When financial incentives backfire

While financial incentives can encourage a behaviour, they can also backfire. Offering money can undermine the other reasons that people may have for acting a certain way. When, for example, residents of a small Swiss town were asked if they would agree to a nuclear waste facility being built nearby, just over half agreed. This is despite a third of them believing that at least some residents would die from contamination as a result.[20]

The academics conducting the study then asked the same question, with one difference. They said that the Swiss Parliament would compensate local residents for accepting the facility (the amount offered varied between $2,175 and $6,525). Now, when the residents were asked this question, acceptance levels fell from over 50.8% to 24.6%. What had previously been seen as a matter of civic duty had been transformed into a simple issue of taking money. Adding a financial incentive had damaged, not enhanced, the residents' intrinsic motivation. Financial incentives should therefore be used with care.

3. Make it Social

Humans are social animals. We are heavily influenced by what those around us do and say. We reduce our energy consumption when we know that others in similar households use less energy than we do. We are more likely to take the stairs rather than the lift when our colleagues do the same.

We pay a premium for products or services that have been endorsed by other people, which is why online rating systems are so successful.[21] And when we have told someone else that we are going to do something, we feel much more obliged to see it through.

These social influences often go unnoticed. Knowing how they operate can help policy makers design more effective interventions (and work out pitfalls to avoid). To incorporate social factors we should:

- *Show that most people perform the desired behaviour*
- *Use the power of networks*
- *Encourage people to make a commitment to others*

3.1 Show that most people perform the desired behaviour

Social norms are the values, actions and expectations of a particular society or group. Social norms offer (often implicit) guides to our behaviour.[22] 'Descriptive norms', which make people aware of what most other people are doing, can reinforce individuals' underlying motivations.

Behavioural science offers many examples of how social norms have been effective in encouraging recycling, energy and water efficiency, and reducing littering.[23] Examples of trials that demonstrate this in practice include:

- The Behavioural Insights Team and HMRC have run a series of trials where including factual statements that most people had already paid their tax increased tax payment rates (see Box 3.1).[24]

- The Behavioural Insights Team ran a trial with the Co-op Legal Services showing that explaining that many people like to give money to charity in their wills increased donation rates from 9% to 13% (see Box 3.2).

- A series of trials run by the energy company OPower in the US have shown that comparing household energy use to an efficient neighbour can reduce overall energy usage by 2-4%.[25]

Box 3.1: Social norms to increase tax payments

The Behavioural Insights Team and HMRC tested various social norm messages against a control letter (which contained no social norm) in letters to 100,000 Self Assessment tax debtors.[26] In the graph below, the 'local norm' letters pointed out that the great majority of people in the recipient's local area had paid on time (but the area was not referred to by name); the 'debt norm' pointed out that most people with a debt like theirs had already paid. The 'local and debt norm' combined these two messages.

As the graph shows, the messages became more successful as they featured more specific norms. The message that combined the local and debt norm increased payment rates by five percentage points (15% in relative terms) and led to £1.2m more being paid in the first month than the control. Overall, the use of these and similar messages brought forward £210m of tax revenue in the 2012/13 financial year. HMRC and the Behavioural Insights Team were awarded the 2013 Civil Service Award for Innovative Delivery for this work.

% paying after 23 days

33.6%	35.8%	36.6%	38.6%
Control (8,558)	Local Norm (8,403)	Debt Norm (8,779)	Local + Debt Norm (8,643)
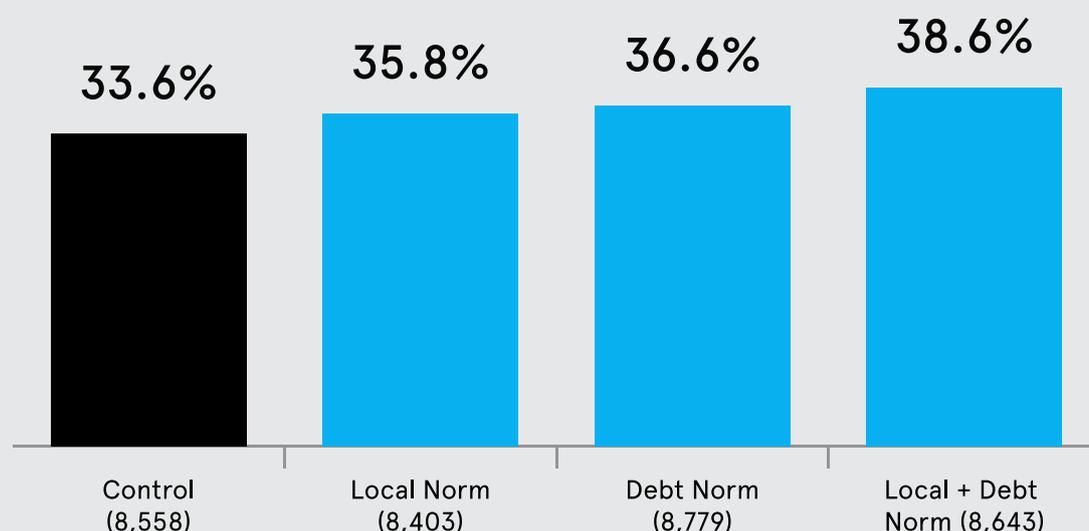
*Box 3.2: Encouraging charitable giving in wills*

The Behavioural Insights Team partnered with Co-operative Legal Services to test whether social norm messages in telephone scripts could be used to encourage people to donate more to charity in their wills.[27]

When customers rang to book a will-writing appointment, they were randomly assigned to a will-writer, who would write their will with them over the phone. Customers were either:

- Not asked if they would like to donate money to charity in their wills (this is the control condition);

- Asked the simple question 'Would you like to leave any money to charity in your will?' (we call this the 'Just Ask' condition); or

- Told that 'Many of our customers like to leave money to charity in their will'. Hey were then asked 'are there any causes you're passionate about?' (we call this the 'Social Passion Ask' condition).

In the 'Just Ask' group, 10% of customers chose to leave a gift to charity in their wills. But in the 'Social Passion Ask' group, donation rates rose threefold to 15%, illustrating the power of social norms.

Furthermore, the average donation among people in the 'Social Passion Ask' group is twice as large (£6,661) than those in the control (£3,300) or 'Just Ask' group (£3,110).

Proportion leaving a legacy gift

5.0%	10.4%	15.4%
Control	Just ask	Passion ask
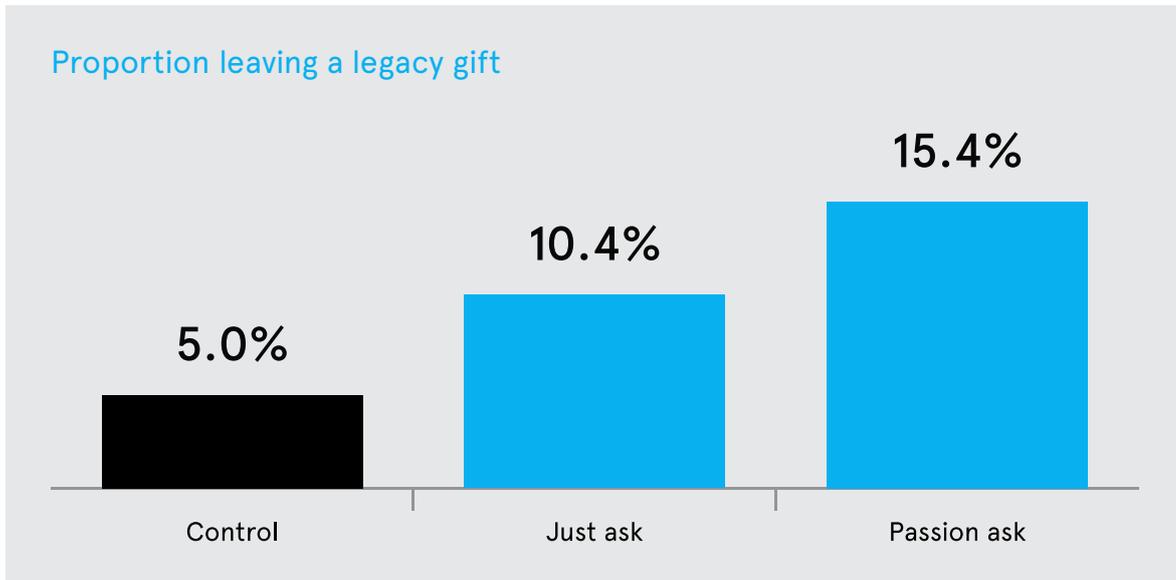
Behavioural Pitfall 2: When social norms backfire

Policy makers should be wary of inadvertently reinforcing a negative social norm by emphasising the prevalence of an undesirable behaviour. In their well-intentioned desire to highlight important issues, policy makers can sometimes inadvertently communicate that the 'problem behaviour' is relatively widespread. This signals to people that, even if we don't like or approve of the behaviour, lots of other people are doing it. The result can be an increase in the problem behaviour. Robert Cialdini, Professor of Psychology and Marketing at Arizona State University, calls this inadvertent signaling the "big mistake" authorities make.[28]

3.2 Use the power of networks

We know that giving information about social norms in the aggregate can be powerful. However, we are also embedded in a network of social relationships, and those we come into contact with have a powerful influence on our behaviour.

Most of these networks develop organically and, once established, they are likely to develop their own dynamics. In particular, we know that people have a strong instinct for reciprocity and mutual support, so these may well develop within the network.[29] When networks already exist, the main role for government and other organisations is likely to be supportive, for example by:

- Protecting the integrity of consumer feedback and other private sector online comparison sites. Organisations like TripAdvisor, Yelp and eBay have successfully allowed product and service evaluations to be distributed through a network of consumers. The increased feedback influences providers to improve their offer, since higher ratings translate into higher rewards.[30]

- Supporting collective purchasing and collaborative consumption. The *Which?* Big Switch created a network of people who wanted to find a better energy deal: 287,365 people signed up and over 37,000 people switched to a better deal with an average saving of £223 a year.

- Providing structures to let people direct their natural instinct for reciprocity. Reciprocity messages are helping to add 100,000 people to the Organ Donor Register every year (see Box 3.3). Similarly, Care 4 Care is a network built around reciprocity: it allows people who help elderly others to 'bank' that time so they get it back in the form of care for themselves when they get old.[31]

Finally, networks also allow behaviours to spread. For example, a US study found that visiting a house to encourage someone to vote meant they were 10% more likely to do. This shows the power of influence. However, the people who lived at the same address who did not answer the door were around 6% more likely to vote as well. This shows the power of networks: a significant proportion of the 'influence' was passed on via a social network.[32]

Box 3.3: Encouraging people to join the organ donor register using reciprocity

The Behavioural Insights Team recently collaborated with the Department of Health, the NHS, the DVLA and the Government Digital Service on a trial to increase organ donation.[33] When people renew their car tax online, they receive a message asking if they want to join the organ donor register.

For one month in 2013, eight different messages were introduced to encourage sign up, and visitors were randomly allocated to each. Since over 1 million people visited the site during the month, this represented one of the largest randomised controlled trials in the public sector.

The most successful variant will add around 100,000 extra organ donors per year relative to the control. It asked 'If you needed an organ transplant, would you have one? If so, please help others' (labelled as 'Would you?' in the graph below). This message draws on reciprocity, the inherent desire that we have for fairness and to give back to others within our social milieu when we have received something ourselves. As Behavioural Pitfall 4 (see box in Chapter 5) explains, however, one of these messages (a social norm message with a picture of a crowd, labelled here as 'People') performed less well than the control.

Percentage of people registering as organ donors, by variant of message
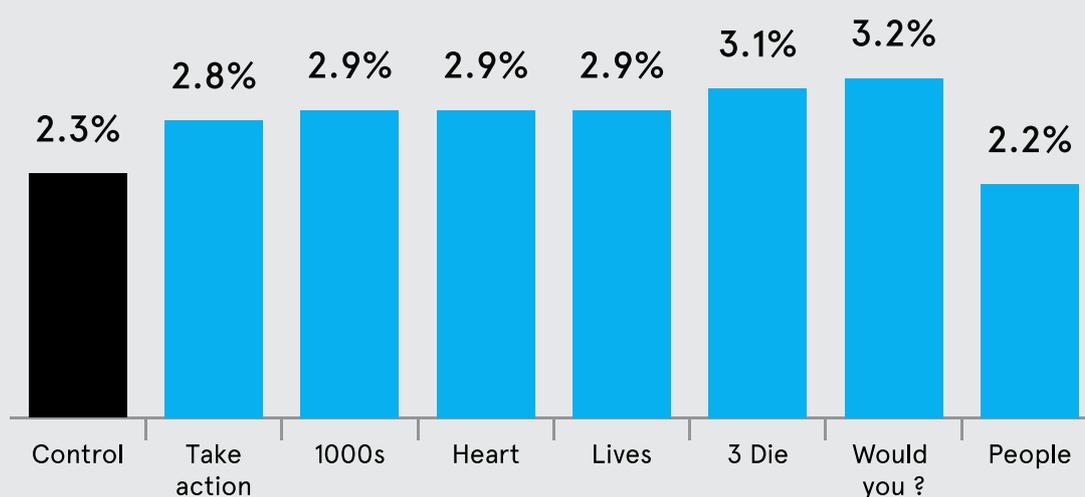
The power of social networks is well-known but under-used. We believe that governments looking to engender widespread change should not focus solely on individuals, but consider their networks as well.

3.3 Encourage people to make a commitment to others

There is often a gulf between what we state we want to do and what we actually end up doing. The most obvious example is smoking: 68% of smokers want to quit, but only 26% attempt to do so in any year.[34]

We often recognise this gap between intentions and actions ourselves, and voluntarily try to 'lock ourselves' into doing something in advance (often by increasing the costs of failure, like choosing a savings account with a penalty for early withdrawal). In other words, we raise the stakes to stop ourselves giving up later. In the behavioural literature, these attempts are called 'commitment devices'.

There are many ways commitments can be strengthened, such as defining the outcome clearly, so there is little room for reinterpretation later. But we think that the social nature of commitments is crucial.

The easiest way to 'raise the stakes' is to make your commitment in public, or to another person (ideally, someone whose respect you value). This is clearly seen in the case of perhaps the oldest commitment device, marriage, where people are gathered together to increase the weight of the vows being made. Technology now offers new ways of publicising and socialising our commitments through websites such as stickK.com, which encourages people to make binding commitments with financial punishments for failure.

There are many examples of the power of commitment devices. For example:

- The Behavioural Insights Team developed an intervention with Jobcentre Plus that introduced commitment devices between job seekers and their advisors. Job seekers were asked to write down commitments to job-seeking activities for the coming week. A randomised controlled trial showed that the intervention significantly increased off-flow rates from benefits (see Box 3.4).

- The Behavioural Insights Team and HMRC ran a trial to test the effect of different language in letters requesting tax returns to be filed. We found that by strengthening the tone of the commitment (from 'thank you for agreeing' to 'you agreed'), response rates rose from 21% to 25%.

- A randomised controlled trial conducted in the Philippines showed that enabling savers to restrict their right to withdraw money until they reached either a specific month or a savings target (which the individual was free to choose) increased their savings (see Box 3.5 below).

Box 3.4: *Helping people back to work using commitment devices*

The Behavioural Insights Team has been running a range of trials with Jobcentre Plus. The longest-running intervention draws on different elements of the EAST framework, including:

- Make it Easy, by removing unnecessary process (cutting down form filling);

- Make it Attractive, by assigning personal advisors to each individual (so that the job seeker no longer meets the job advisor that happens to be next in the queue); and

- Make it Timely, by making sure that jobseekers have discussions on day one about getting back into work (enabled by cutting down a lot of the up-front process).

The most innovative part of the trial involves the introduction of commitment devices (Make it Social), which require the jobseeker to make commitments to the job advisor about what they are going to do in the next week. They write their commitments down in front of the job advisor, who then follows up whether they were successful. The job seekers are encouraged to make the commitments unambiguous by specifying when and where they are going to perform the action. The early results from the trial showed a significant increase in those off benefits at 13 weeks. We will be publishing these findings later in 2014.

The Behavioural Insights Team has applied this thinking within the Team itself by introducing a commitments board. Team members can voluntarily write personal pledges on the board, with commensurate rewards or penalties if they fail. The board has so far helped team members save more money, exercise more and even eat fewer puddings in the staff canteen.

Box 3.5: Using commitment devices to encourage saving in the Philippines

A randomised controlled trial in partnership with a rural bank in the Philippines showed that offering a commitment savings account successfully prompted a lasting change in savings behaviour.[35]

The commitment account offered to a random sample of customers enabled them to restrict their right to withdraw money until they reached either a specific month or a savings target (which the individual was free to choose), but offered only the same interest rate as the bank's existing savings account.

Those in the untreated control group increased their savings by a modest 8% on average in the first six months and to a 12% overall increase after one year. Those receiving a visit to encourage them to save more increased their savings by 37% in the first six months, but then ran their savings down somewhat. Those offered the commitment account, however, continued substantially to increase their savings, leading to an average increase of 82% overall at the end of the first year.

Percentage change in savings levels relative to baseline

	6 months			12 months	
8%	37%	47%	12%	25%	82%

■ Control   ■ Encouragement   ■ Commitment
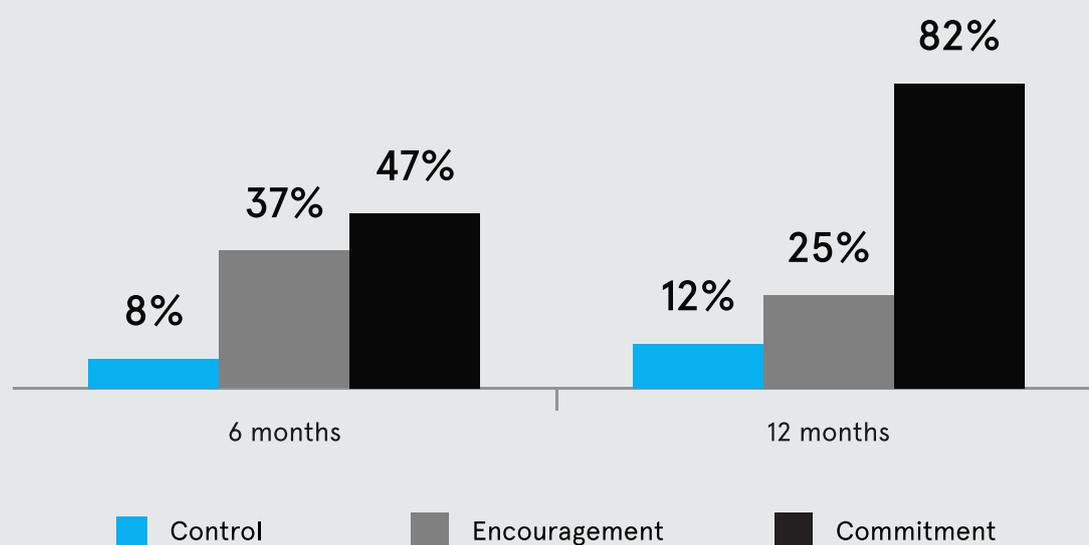
4. Make it Timely

We respond differently to prompts depending on when they occur. For example, we are particularly likely to change our habits during periods of transition — after we move house, get married, have a child or lose a close relative.[36] Moreover, our decisions, thoughts and behaviour are often influenced by the ideas, objects and people we experience from moment to moment.[37] For example, people's ratings of their life satisfaction are significantly affected by the questions that have just been asked.[38]

Timing is an often overlooked aspect of the policy-making process. While policy makers know intuitively that timing is important, they rarely consider it a crucial part of policy design. We think that it should be. More generally, we think that more attention needs to be paid to the various ways that policies are implemented; these are not "mere details", since we know that they greatly influence how people react. We think policies will be more effective if they:

- *Prompt people when they are likely to be most receptive*
- *Consider the immediate costs and benefits*
- *Help people plan their response to events*

4.1 Prompt people when they are likely to be most receptive

Timing matters. The same offer made at different times can have drastically different levels of success. The behavioural literature explains this by showing that people's priorities and moods are greatly affected by the context — whether they realise it or not. For example:

- Sending people text message prompts to pay their court fines 10 days before bailiffs were due to arrive increases payment rates by two to three times, as shown in a trial run by the Behavioural Insights Team and the Courts Service (see Box 4.1).

- Asking people to leave a legacy gift in their wills at the moment that they are writing their wills is a highly effective way of increasing charitable donations (see Box 3.2).

- Presenting persuasive messages when people have just used the toilet made them more likely to wash their hands. The study was conducted in motorway service stations and measured the amount of soap dispensed. The most effective messages increased the amount of soap used by 12%.[39]

Government should therefore seek to understand how different conditions or situations may affect responses, and select timings accordingly. Sometimes the factors may be expected or obvious; sometimes they will require more time to understand, and may involve in-depth work with service providers and users. There is also a case for deliberately testing whether intervening at one point or another (for example, a particular day of the week) brings better results.

Box 4.1: Timing text message prompts to increase payment of court fines

The Behavioural Insights Team ran a trial with Her Majesty's Courts Service to test whether well-timed text messages might increase fine payment rates.[40][41] The key moment was identified as the one which offers a final opportunity to pay before a distress warrant is issued for bailiffs to recover goods up to the value of the fine.

Some individuals received no text (though they had received final reminder letters from the Courts Service). Everyone else received one of four different types of text message. Some received a standard text stating that if they failed to pay, a warrant would be issued to bailiffs. Others included the amount the person owed, and/or the name of the individual (testing the hypothesis, given above, that a personalised message is likely to be more effective). The chart below shows the results for two different trials (the light blue bars representing the second running of the trial).[42]

The results show that a well-timed text message is a highly effective way of increasing response rates. Simply introducing a standard text message doubles the value of payments made; personalising the message significantly increases them further.

In particular, we should consider the major moments of change that we experience in our lives. We are more likely to change their habits and behaviours during periods of transition, which disrupt and reshape our existing patterns. These may include having a child, going to school or University, moving home, and experiencing bereavement.[43]

Often, these periods involve some form of interaction with public bodies. The public sector may therefore have the opportunity to promote a change (e.g. energy-saving behaviours when moving house) or prevent a change (e.g. helping to ensure a recently bereaved elderly person does not become socially isolated). These 'life moments' deserve more attention from policy makers.

Box 4.2: *Prompting honesty by asking people to sign up front*

Prompts can also influence behaviour by making certain ideas or concepts salient at particular moments. For example, a large-scale field experiment has shown that moving signature boxes from the end of a form to the beginning can significantly increase honest reporting.[44] The results showed that customers reported having driven around 10% more miles (in other words, they were more honest) when they signed their name before filling in the form, rather than after. This shows the power of asking someone to make an honest declaration at one point rather than another: the study's authors argue that signing our name activates our sense of reputation and duty for a brief period, even if we are not aware of it.

On average, the difference amounted to 2,428 miles per car. The authors estimate the per-mile cost of car insurance in the United States to be between four and ten cents, suggesting a minimum of $97 average difference in annual insurance premiums per car between customers depending on whether they signed at the top or bottom of the form.

Number of miles declared

Bar chart — Thousands of miles

- Signature at bottom: 23.3
- Signature at top: 26.1
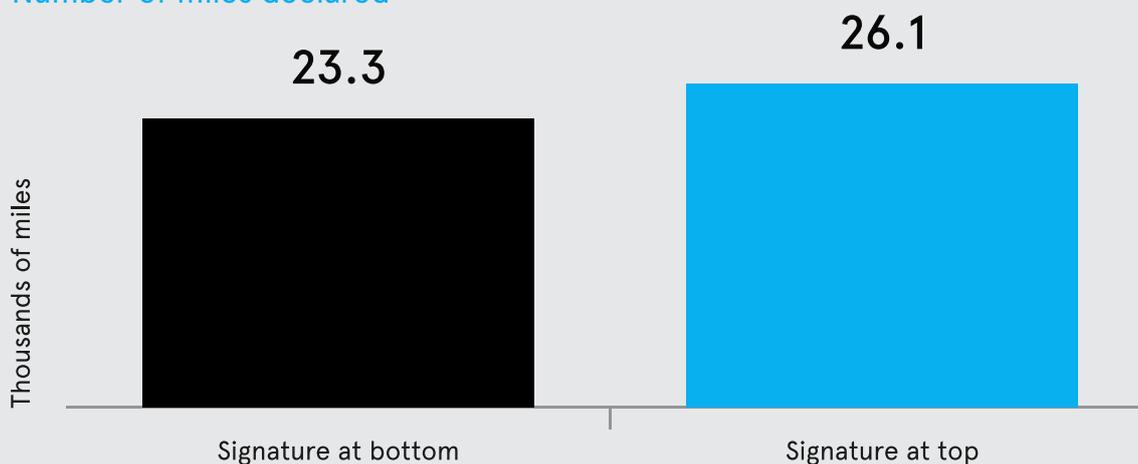
4.2 Consider the immediate costs and benefits

We are disproportionately more motivated by costs and benefits that take effect immediately than those delivered later. This emphasis of the short-term at the expense of the long-term is often called 'present bias', and it comes about because the present is tangible but the future is abstract and hypothetical.[45] When buying a car, we often focus on the upfront costs and neglect the running costs of the vehicle. This means we can lose out overall because we have neglected costs or benefits that take effect further down the line.

Unfortunately, some of the trickiest problems that governments have to grapple with are vulnerable to present bias, and the procrastination and impulsivity it can cause. Many policy problems impose immediate costs for individuals but generate benefits which are felt in the long term, or vice versa. Examples include:

- Saving for your pension or possible social care (costs up front, benefits long term);

- Insulating your home (costs up front, benefits long term);

- Eating unhealthy but tasty food (benefits up front, costs long term).

Given that the present exerts so much influence on our choices, policy makers should pay it particular attention. Will the immediate effect of the behaviour be perceived as a profit or loss? Can the available resources be used to place some kind of incentive upfront, however small, since it will have a disproportionate impact? Equally, can an instant cost be introduced, even nominal, to reflect longer-term costs and problems?

The Save More Tomorrow scheme used this insight to increase savings. The scheme, developed by Richard Thaler and Shlomo Benartzi, encourages individuals to increase payments to their pension plans at some point in the future, rather than today. The immediate costs, which are the main stumbling block, become delayed and therefore less painful (see Box 4.3). From a 'timely' perspective it is also interesting to note that, after being given the choice of when to start saving, the overwhelming majority of people chose a January start date.

Box 4.3: How asking people to 'save more tomorrow' can be more effective than asking people to 'save more today'

The 'Save More Tomorrow' scheme shows how going with the grain of people's instincts can help them to save more in the long term.[46] Every low saver within a company was recommended by a financial advisor to increase their contributions straight away. Some people took this advice (the black group in the graph below). Others (represented in blue below) did not — mainly because they felt, at that time, that they could not afford to do so.

As an alternative, the researchers then asked this second group to increase their payments next year, and the year after that by a specified percentage ('Save More Tomorrow'). After two years this group had already overtaken those that took the financial advisors' advice. Notice that, for the black group, the increased payments has become the new 'default' (see Make it Easy), while a constant increase in savings has become the default for the Save More Tomorrow group.

Save more tomorrow savings rates

Year	Blue (Save More Tomorrow)	Black (Took advice)
1998	3.5%	4.4%
1999	6.5%	9.1%
2000	9.4%	8.9%
2001	11.6%	8.7%
2002	13.6%	8.8%

■ Took financial advisor's advice   ■ Did not take advice, but were encouraged to 'Save More Tomorrow'
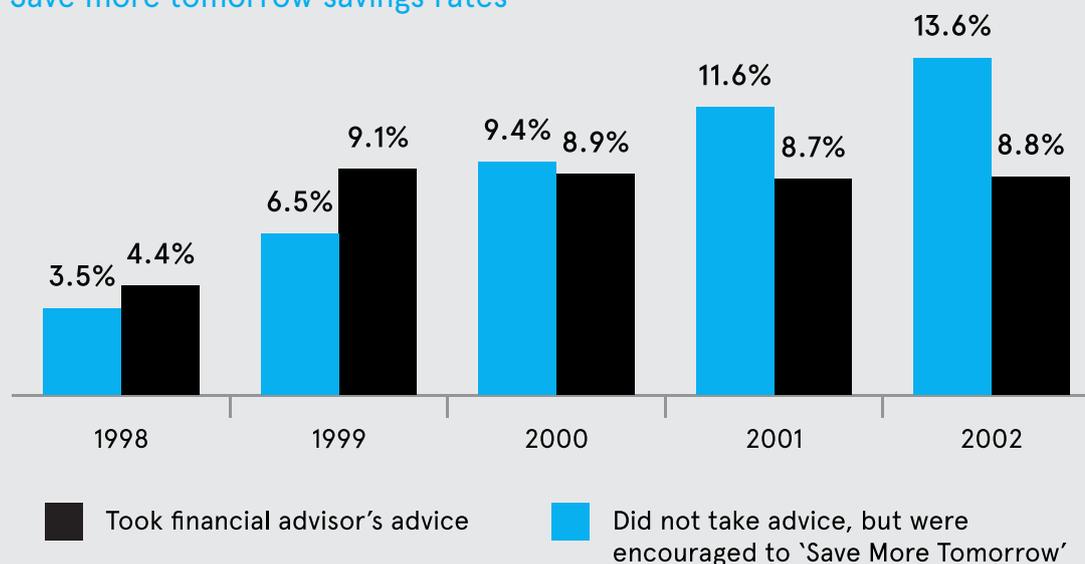
Another simple example is to bring forward distant costs into the present. For example, a Norwegian experiment, currently being replicated by the Department of Energy and Climate Change (with support from BIT) in the UK, found that consumers were significantly more likely to buy energy efficient (but more expensive) appliances when the projected lifetime costs were simply displayed at the point of purchase.[47] Similar arguments apply for green and other taxes and costs intended to shape behaviour.

4.3 Help people plan their response to events

We know that making a plan means people are more likely to achieve a future goal.[48] This is particularly true if the plan breaks down a complex goal into manageable actions. But we also know that plans fall through: there is often a gap between intentions and actual behaviour.[49] So how can people be helped to fulfil their goals?

One solution to this problem is to help people make concrete, specific plans. One way this has been demonstrated is by simply asking people to write down their plan. For example, encouraging employees due for vaccinations to write down the time and the date of the appointment increased vaccination rates by 4.2 percentage points.[50] Similar effects are seen by prompting people to write down (on a sticky note provided) the date of a colonoscopy appointment and the name of the doctor who is to carry it out.[51]

An even better approach is to identify any barriers you are likely to encounter, and then plan how to overcome them.[52] For example, if the goal is to lose weight, one may identify the temptation of the canteen desserts as a barrier. A simple (but specific) plan might then be: 'When in the canteen, I will always go to the checkout next to the pieces of fruit'.[53]

This 'implementation intentions' approach is successful because it is timely: it recognises the power of the situation to lead us astray from our goals. Advance planning helps people respond 'in the moment' in a way that moves them closer to their goal, rather than away from it.

To implement these ideas, policy makers could: identify points when people are likely to set particular goals; highlight common barriers to achieving them; and show the plans others have used to overcome these barriers. This approach will be particularly effective for goals which require repeated actions to achieve a future payoff, like saving and eating healthily.

5. Applying behavioural insights

The Behavioural Insights Team has developed a methodology that draws on experience of developing major strategies for the UK Government, a rich understanding of the behavioural literature, and a rigorous application of tools for testing 'what works'.

The application of the EAST framework is at the heart of this methodology. But the EAST framework cannot be applied in isolation from a good understanding of the nature and context of the problem. Therefore, we have developed a fuller method for implementing BIT projects.

Our approach starts with establishing clarity of purpose (Step 1: Define the outcome). We then look to develop a rich understanding of the experience of service users and providers (Step 2: Understand the context). Only then is it possible to consider how insights from the behavioural sciences, as set out in the EAST framework, might apply to the problem at hand (Step 3: Design the intervention). The final step is to test the intervention, so that we can understand its impact – and adapt future approaches accordingly (Step 4: Test, learn, adapt).

Behavioural Pitfall 3: Why 'behaviour' is different from intentions, beliefs, or attitudes

It is important to recognise that changing behaviour is different from changing people's intentions, beliefs, or attitudes. These factors will often shape our behaviours, but not necessarily directly and in ways that we might expect.

When asked to report their past behaviour, people often make errors. The 2008 Physical Activity and Fitness Survey both asked people how much exercise they did, and measured (with accelerometers) how much they actually did. As the chart below shows, there was a considerable gap between the two: (continued on next page).[54]

Behavioural Pitfall 3: Why 'behaviour' is different from intentions, beliefs, or attitudes (continued)

Percentage of people meeting minimum recommendations of physical activity
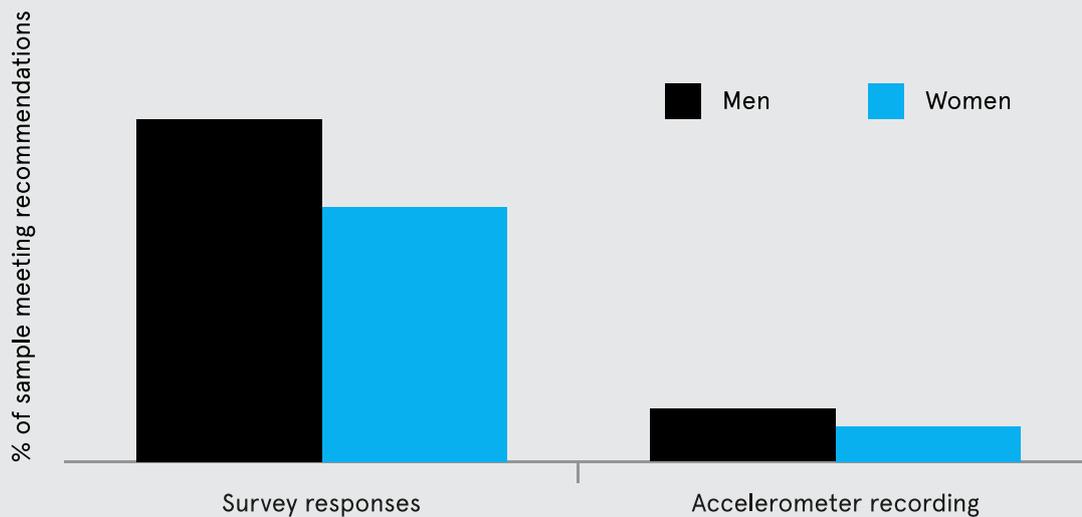
At the same time, people often state an intention to do something that they do not follow through on (the 'intention-behaviour gap'). A large proportion of people who respond positively when asked if they intend to exercise fail to actually do so.[55]

Similarly, individuals often do not fulfil their predictions about how they will react. One report, for example, found that individuals thought that they would not be affected by social norm messages in letters from HMRC.[56] But when the Behavioural Insights Team tested similar messages, they found large, significant increases in response rates.[57] In all kinds of areas of interest to public policy makers (for example race relations[58] and climate change[59]) we find a similar distinction between what people say they believe and how they act in practice.

What is important, then, is to focus on, and objectively test, what affects people's behaviours, and to be cautious about using associated intentions or attitudes as a measure of success.

Step 1: Define your outcome

| 1 Define the outcome | 2 Understand the context | 3 Build your intervention | 4 Test, learn & adapt |

The first step is to be really clear about the outcome of the project or policy. Wherever possible, this should be a quantifiable change in behaviour. A clear outcome is essential to create an effective intervention because it drives the design of the intervention. Questions to consider include:

- What is the key metric that would demonstrate success? Can you use routinely collected data? (In our work on employment we used the existing performance indicator that Jobcentre Plus already uses — the off-flow rates from benefits).

- How large an improvement would be needed to justify doing the project in the first place? A lot of this will depend upon a basic understanding of costs and benefits (e.g. a zero-cost intervention will justify a smaller improvement), but also what sample size is required to demonstrate the effectiveness of the intervention.

- During what time period would we hope to see the improvement? Knowing whether it is reasonable to see an instant change or a longer term response will help define what kind of project you eventually run.

The important thing is to ask constantly: what change are we trying to achieve?

Step 2: Understand the context

| 1 Define the outcome | 2 Understand the context | 3 Build your intervention | 4 Test, learn & adapt |

The second component is to understand the system from the user's and provider's perspective. All too often, decisions are made in the absence of a good understanding of how the service in question is used or administered.

This is a problem, for three main reasons. First, we know that context matters — apparently small details can have a large effect on behaviour. Looking carefully at the context can identify excellent insights into what points of a process are affecting behaviour.

Second, we need to ensure that any new intervention does not place an unsustainable burden on the people providing a service.

Third, the people involved in a service (both providers and users) often have valuable insights in their own right. People may mis-predict how a hypothetical change might affect their behaviour, but they will often see problems and opportunities that are hard to detect from central government — especially in contexts that they are very familiar with.

A BIT project will always include a phase of visiting the situations and people involved in the behaviour. This methodology draws from social anthropology (in particular, the field work undertaken by ethnographers) and the 'design thinking' model, whose exponents seek to understand the context of a problem prior to designing solutions.[60]

What this means in practice will depend on the nature of the system and the outcome set in Step 1. But here are a few examples:

- A BIT team accompanied bailiffs on 6am home visits and spent time with Fine Support Officers in the Courts Service to understand better the fine enforcement system in place. The team observed that final reminder letters were often going unread. This led to a series of trials with the Courts Service which showed that sending a simple text message doubled the size of payments made, compared to just issuing a letter.

- A BIT team spent several weeks in Jobcentres, observing interviews between job seekers and job advisors and understanding better how decisions are taken within Jobcentres. Amongst other things they found that job seekers were required to sign nine different forms in their first half an hour interview. One of the interventions that BIT developed involved reducing the numbers of forms from nine to two, so that the job seeking conversation can begin straight away.

- Before making the case for new kinds of energy switching services as part of the Consumer Empowerment Strategy, members of the team tested a range of existing services, in order to understand better why only 17% of people switch every year. Several members of the team switched their supply in the process (eventually).

The key point in this process is not to jump to policy conclusions, but to understand better what the key constraints and opportunities might be within the existing system. An open mind is essential during this phase of the project. Indeed, it is usually best if the intervention has been 'co-designed' with the organisations that have deep experience of the area.

Step 3: Build your intervention

1 Define the outcome	2 Understand the context	3 Build your intervention	4 Test, learn & adapt

The EAST framework comes in at Step 3, where the intervention or policy is created. EAST can be used to structure ideas generation ("How could we make this action as easy as possible?"), or it can be used to conduct a quicker 'sense check' of a policy from a behavioural perspective ("Have we made this action as easy as possible?"). This stage can make use of both EAST and MINDSPACE. While MINDSPACE is a summary of a range of behavioural effects, EAST provides a short set of action-orientated principles for busy policy makers.

The first three steps described above – until you start to test and trial your intervention (Step 4) – are not strictly linear. They can have many iterations and feedback loops. The experience of building the intervention may lead you to reconsider the feasibility of the outcome you defined, for example. New information may change how the costs and the benefits stack up. The key is to maintain a balance between being strategic and opportunistic.

Step 4: Test, learn, adapt

1 Define the outcome	2 Understand the context	3 Build your intervention	4 Test, learn & adapt

Finally, most BIT interventions will use a 'randomised controlled trial' (RCT) to test whether the intervention is having the intended effect. BIT considers RCTs to be an essential part of its methodology. RCTs are what enable the team to show the efficacy of the behavioural insights that they apply to public policy, so that we can estimate wider impacts and cost effectiveness; test acceptability; and adapt future interventions accordingly.

What makes RCTs different from other types of evaluation is the introduction of a randomly assigned control group, which enables you to compare the effectiveness of a new intervention against what would have happened if you had changed nothing (or used an alternative method). A control group eliminates many problems of comparison that normally complicate the evaluation process. For example, if you introduce a new 'back to work' scheme, how will you know whether those receiving the extra support would have found a job anyway?

In the fictitious example below in Figure 1, we can see that those who received the back to work intervention ('INTERVENTION') were much more likely to find a job than those who did not. Because we have a control group, we know that it is the intervention that achieves the effect and not some other factor (such as generally improving economic conditions). With the right academic and policy support, RCTs can be much cheaper and simpler to put in place than is often supposed (and quicker to demonstrate results).

Population is split into two groups by random lot

Outcomes for both groups are measured

= looking for work   = found work
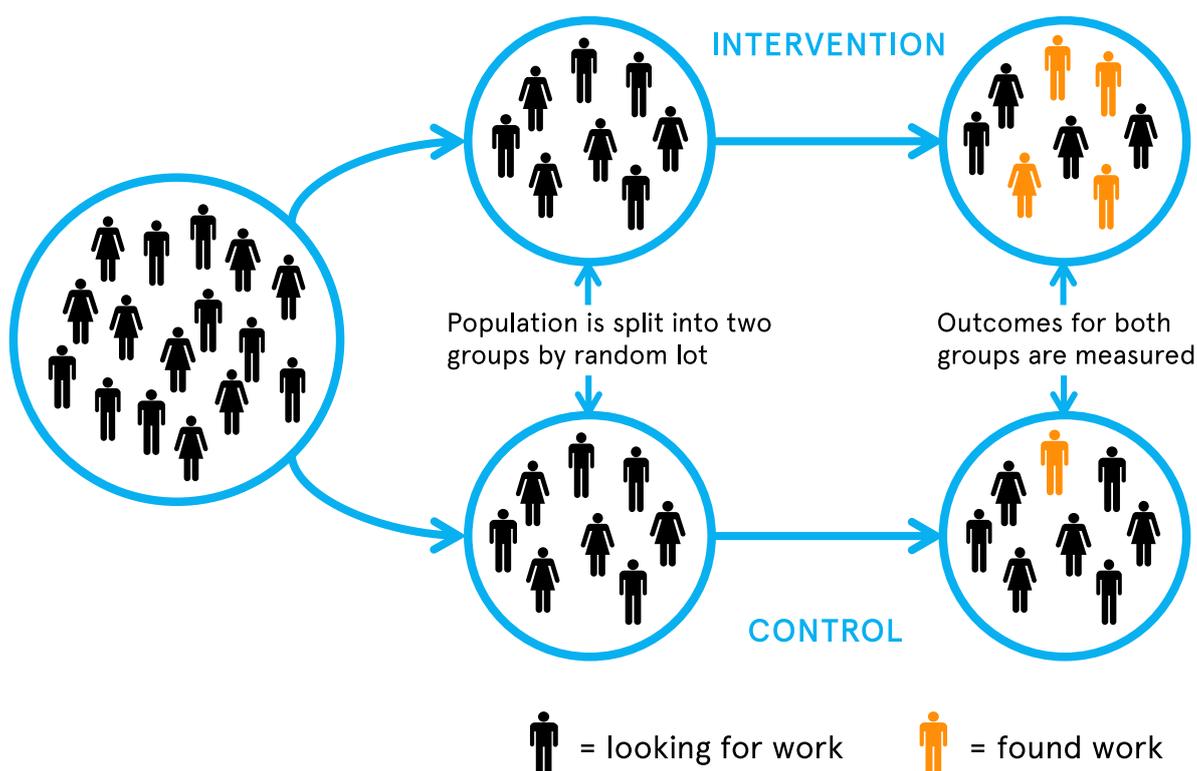
By enabling us to demonstrate just how well a policy is working, RCTs can save money in the long term — they are a powerful tool to help policy makers and practitioners decide which of several policies is the most cost-effective, and also which interventions are not as effective as might have been supposed. Doing this is especially important in times of shrinking public sector budgets. For more details on running RCTs, see our report 'Test, Learn, Adapt'.

This method — applying policy interventions informed by the growing body of behavioural research and a sophisticated understanding of the situation in the field, combined with rigorous testing and trialling — are the hallmarks of the Behavioural Insights Team's methodology. We think that they should become more routine aspects of a policy maker's toolkit.

Behavioural Pitfall 4: Assuming which interventions will work

As EAST shows, there are certain general principles that reliably influence behaviour. But behaviour is complex, and we know that context matters greatly. Therefore, we can never be entirely certain that a particular intervention is going to work — even if there are good reasons to think it will.

Box 3.3 sets out the results of the recent trial to increase organ donation, run by the Behavioural Insights Team, the Department of Health, and the Government Digital Service. One of the successful messages was a social norm — pointing out that every day thousands of people who saw this page signed up. As the graph below shows, the message significantly increased registrations.

Two other options included an image as well as this message: one had the message plus the NHS organ donation logo; the other had the message plus a picture of a group of people. There are good reasons to think that adding these images would reinforce the message and increase its impact.

Indeed, when we presented the eight messages to 55 health experts, 22% thought the norm and picture would be most effective; 13% thought the norm and logo would be; and no one voted for the norm message alone.

Although the social norm message increased registration rates, the logo had no additional impact, while including the picture actually performed worse than no message at all – wiping out all the effects of the social norm. We would not have known about this unexpected negative effect if we had not tested it.

Percentage of people registering as organ donors, by variant of message
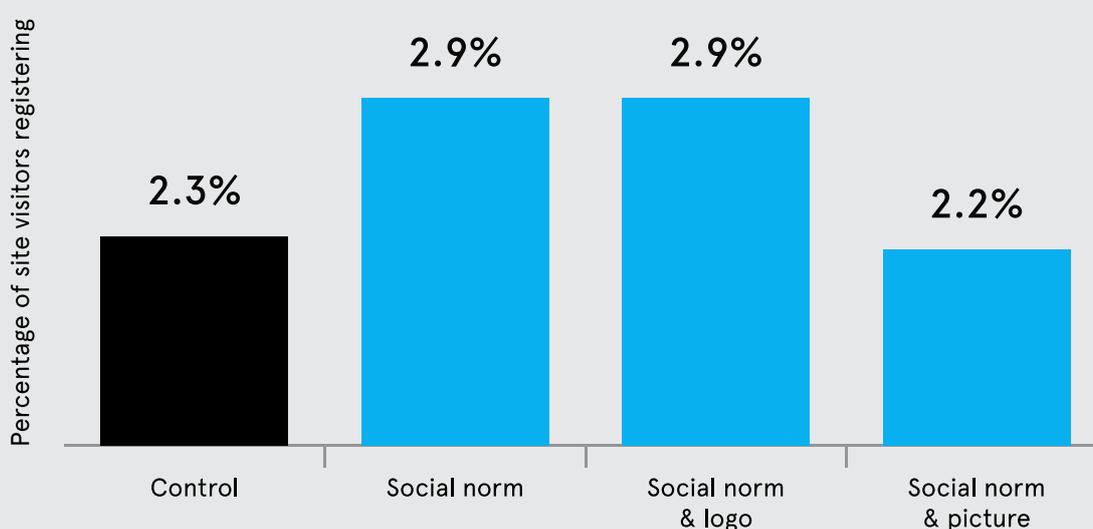
6. Conclusion

UK policy makers increasingly apply behavioural insights. The Behavioural Insights Team has now worked on most areas of domestic public policy, and many departments have developed their own expertise in this field. The Civil Service Reform Plan states that all policy makers should be able to apply behavioural insights, at least at a basic level, and these approaches are now integrated into training and development provision.[61] In addition, many other countries are now applying behavioural insights to their own policy issues.

We have created the EAST framework to help respond to this growing interest and to help develop policies that improve the situation of individuals and society in general. The EAST framework is explicitly designed for applying insights in practice, and should be used alongside the existing MINDSPACE and Test, Learn, Adapt resources. However, given the complexity of behaviour, we also urge policy makers to get the advice of experts and academics on what has the best chance of success – and how success can best be measured.

Looking to the future, we think that applying behavioural insights should increasingly deal with three main issues:

- *Replication.* We should not assume that the first result we obtain will necessarily hold true in the future (although we have found that this is often the case). Therefore, there is a need to assess whether an intervention produces similar results in different settings.

- *Segmentation.* Not everyone reacts the same way to an intervention. The results given in this paper are headline figures showing average effects. As data capabilities improve, it will become increasingly easy to understand how different groups react. Tailoring interventions for maximum effect adds another dimension for performance improvement.

- *Complexity.* BIT initially focused on relatively simple 'one-off' behaviours, mainly because they were easiest to measure. However, as our work in Job Centres shows, we are now developing more complex interventions to address more complex behaviours.

BIT intends to be at the forefront of these developments. In February 2014, we established BIT as a social purpose company that will continue to fulfil our existing mission of advancing the public good. For more information, visit www.behaviouralinsights.co.uk

1   Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev, I. (2010). "MINDSPACE: Influencing behaviour through public policy" Institute for Government and Cabinet Office.

2   *Ibid.*

3   For a guide to running randomised controlled trials to test the efficacy of new interventions, see Behavioural Insights Team (2012). "Test, Learn, Adapt: Developing Public Policy Using Randomised Controlled Trials" Cabinet Office.

4   Madrian, B. C. & Shea, D. F. (2001). The power of suggestion: Inertia in 401(k) participation and savings behavior. *The Quarterly Journal of Economics*, 116(4), 1149-1187. Choi, J. J., Laibson, D., Madrian, B. C. & Metrick, A. (2004). Employees' investment decisions about company stock. *NBER Working Paper No. 10228.* Choi, J. J., Laibson, D., Madrian, B. C. & Metrick, A. (2004). For better or for worse: Default effects and 401(k) savings behavior. NBER Working Paper No. 8651. Choi, J. J., Laibson, D., Madrian, B. C. & Metrick, A. (2002). Defined contribution pensions: Plan rules, participant decisions, and the path of least resistance. *NBER Working Paper No. 8655*. Beshears, J., Choi, J. J., Laibson, D., Madrian, B. C. (2009). The importance of default options for retirement saving outcomes: Evidence from the United States. *NBER Working Paper No. 12009.*

5   HMG (2013). Automatic enrolment opt out rates: findings from research with large employers. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/227039/opt-out-research-large-employers-ad_hoc.pdf

6   Hawton, K., Bergen, H., Simkin, S., Dodd, S., Pocock, P., Bernal, W. & Kapur, N. (2013). Long term effect of reduced pack sizes of paracetamol on poisoning deaths and liver transplant activity in England and Wales: interrupted time series analyses. *BMJ: British Medical Journal*, 346(403).

7   Bettinger, E. P., Long, B. T., Oreopoulos, P. & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: Results from the H&R block FAFSA experiment, *The Quarterly Journal of Economics*, 127(3), 1205-1242.

8   Jack, B. W., Chetty, V. K., Anthony, D., Greenwald, J. L., Sanchez, G. M., Johnson, A. E., ... & Culpepper, L. (2009). A reengineered hospital discharge program to decrease rehospitalization: A randomized trial. *Annals of Internal Medicine*, 150(3), 178-187; Berkowitz, R. E., Fang, Z., Helfand, B. K., Jones, R. N., Schreiber, R., & Paasche-Orlow, M. K. (2013). Project ReEngineered Discharge (RED) lowers hospital readmissions of patients discharged from a skilled nursing facility. *Journal of the American Medical Directors Association*, 14(10), 736-740.

9   Gigerenzer, G. (2008). *Gut feelings: Short cuts to better decision making*. London: Penguin Group.

10   Gobet, F., Lane, P., Croker, S., Cheng, P., Jones, G., Oliver, I. & Pine, J. (2001). Chunking mechanisms in human learning. *TRENDS in Cognitive Sciences*, 5(6), 236-243.

11   Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev, I. (2010). "MINDSPACE: Influencing behaviour through public policy" Institute for Government and Cabinet Office

12   Irish Revenue (2013). "Survey of Small and Medium Sized Business Customers" http://www.revenue.ie/en/about/publications/business-survey-2013.pdf

13   Mehta, R., & Zhu, R. J. (2009). Blue or red? Exploring the effect of color on cognitive task performances. *Science, 323*(5918), 1226-1229.

14   Behavioural Insights Team (2012). "Applying Behavioural Insights to Reduce Fraud, Debt and Error" Cabinet Office

15   See, for example, Modernising Government Secretariat (1999). "Modernising Government"; Cabinet Office (2008) "Excellence and Fairness: Achieving World Class Public Services"; *"Modern Public Service", speech by David Cameron 17 January 2011 at:* https://www.gov.uk/government/speeches/prime-ministers-speech-on-modern-public-service

16   Some argue that this happens within the first year of life. See Newman, R.S. (2005). The cocktail party effect in infants revisited: Listening to one's name in noise. *Developmental Psychology*, 41(2), 352–362.

17   Behavioural Insights Team (2013). "Applying Behavioural Insights to Charitable Giving" Cabinet Office

18   Bryan, C. J., Walton, G. M., Rogers, T., & Dweck, C. S. (2011). Motivating voter turnout by invoking the self. *Proceedings of the National Academy of Sciences, 108*(31), 12653-12656.

19   Conrad, F. & Schober, M., *Annual Meeting of the American Association for Public Opinion Research*, 2012. http://ns.umich.edu/new/releases/20394-omg-texting-ups-truthfulness-new-iphone-study-suggests

20   Frey, B. S. & Oberholzer-Gee, F. (1997). The cost of price incentives: An empirical analysis of motivation crowding-out. *The American economic review*, 87(4), 746-755.

21   Luca, M. (2011). Reviews, Reputation, and Revenue: The Case of Yelp.com. *Working Paper 12-016*.

22   Elster, J. (1989). Social norms and economic theory. *Journal of Economic Perspectives*, 3(4), 99-117.

23   Schultz, P. W., Nolan, J. M., Cialdini, R. B., Goldstein, N. J. & Griskevicius, V. (2007). The constructive, deconstructive and reconstructive power of social norms. *Psychological Science*, 18(5), 429-434.

24   Hallsworth, M., List, J. A., Metcalfe, R. D. & Vlaev, I. (2014). The behavioralist as tax collector. *NBER Working Paper no. 20007*.

25   Allcott, H. (2011). Social Norms and Energy Conservation. *Journal of Public Economics*, 95(9-10), 1082-1095. Ayers, I. (2009). Evidence from two large field experiments that peer comparison feedback can reduce residential energy usage. *Working Paper No. 15386*. Cooney, K. (2011). Evaluation Report: Opower SMUD Pilot, Year 2.

26   Hallsworth, M., List, J. A., Metcalfe, R. D. & Vlaev, I. (2014). The behavioralist as tax collector. *NBER Working Paper no. 20007*.

27   Behavioural Insights Team (2013). "Applying Behavioural Insights to Charitable Giving" Cabinet Office.

28   Cialdini, R. B. (2003). Crafting normative messages to protect the environment. *Current Directions in Psychological Science*, 12(4), 105-109.

29   Axelrod, R. (1984). *The evolution of cooperation*. New York: Basic Books. Halpern, D. (2005). Social capital.

30   Luca, M. (2011). Reviews, Reputation, and Revenue: The Case of Yelp.com. *Working Paper No. 12-016*.

31   http://care4care.org/

32   Nickerson, D.W. (2008). Is voting contagious? Evidence from two field experiments. *American Political Science Review* 102(1), 49–57.

33   Behavioural Insights Team, Department of Health, Driver and Vehicle Licensing Agency & NHS Blood and Transplant (2013). "Applying Behavioural Insights to Organ Donation" Cabinet Office

34   Office for National Statistics (2008/09). "Opinions Survey Report No. 40. Smoking-related Behaviour and Attitudes"

35   Ashraf, N., Karlan, D. & Yin, W. (2006). Tying Odysseus to the mast: Evidence from a commitment savings product in the Philippines. *The Quarterly Journal of Economics*, 121(2), 635-672.

36   Thompson, S., Michaelson, J., Abdallah, S., Johnson, V., Morris, D., Riley, K., & Simms, A. (2011). 'Moments of change' as opportunities for influencing behaviour: A report to the Department for Environment, Food and Rural Affairs. Defra, London.

37   Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev, I. (2010). "MINDSPACE: Influencing behaviour through public policy" Institute for Government and Cabinet Office

38   Deaton, A. (2012). The financial crisis and the well-being of Americans: OEP Hicks Lecture. Oxford Economic Papers, 64(1), 1-26.

39   Judah, G., Aunger, R., Schmidt, W.-P., Michie, S., Granger, S. & Curtis, V. (2009). Experimental pretesting of hand-washing interventions in a natural setting. *American Journal of Public Health*, 99(S2), S405–S411.

40   Behavioural Insights Team (2012). "Applying Behavioural Insights to Reduce Fraud, Debt and Error" Cabinet Office.

41   Haynes, L., Green, D. P., Gallagher, R., John., O. & Torgerson, D.J. (2013). Collection of delinquent fines: An adaptive randomized trial to access the effectiveness of alternative text messages.

42   The 'no text' condition was not included in the second trial. The average figures presented here include zero values.

43   For an interesting summary of some of the theoretical evidence relating to behaviour change relating to life moments and exogenous shocks, see: Thompson, S., Michaelson, J., Abdallah, S., Johnson, V., Morris, D., Riley, K., & Simms, A. (2011). 'Moments of change' as opportunities for influencing behaviour: A report to the Department for Environment, Food and Rural Affairs. Defra, London.

44   Shu, L. L., Mazar, N., Gino, F., Ariely, D., & Bazerman, M. H. (2012). Signing at the beginning makes ethics salient and decreases dishonest self-reports in comparison to signing at the end. *Proceedings of the National Academy of Sciences, 109*(38), 15197-15200.

45   Zauberman, G., Kim, B. K., Malkoc, S. A. & Bettman, J. R. (2009). Discounting time and time discounting: Subjective time perception and intertemporal preferences. *Journal of Marketing Research* 46(4), 543-556.

46   Benartzi, S. (2012). *Save more tomorrow*. London: Penguin Books.

47   http://www.greenudge.no/en/media/bedre-informasjon-gir-miljbevisste-kunder/

48   Locke, E. A. & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey." *American psychologist,* 57(9), 705.

49   Webb, T. L. & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin, 132*(2), 249-268.

50   Milkman, K. L., Beshears, J., Choi, J. J., Laibson, D. & Madrian, B. C. (2011). Using implementation intentions prompts to enhance influenza vaccination rates. *Proceedings of the National Academy of Sciences. 108*(26), Sciences. 108(26), 10415-10420.

51   Milkman, K. L., Beshears, J., Choi, J. J., Laibson, D. & Madrian, B. C. (2012). Following through on good intentions: The power of Planning Prompts. *Working Paper No. 17995*.

52   There is now much evidence that this approach, called "implementation intentions", works across many different types of behaviour: it has helped people exercise more, reduce snacking, and persist with tasks. Gollwitzer, P. M. & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. *Advances in Experimental Social Psychology, 38*, 69-119.

53   Implementation intentions have been shown to increase the healthiness of eating. Verplanken, B. & Faes, S. (1999). Good intentions, bad habits, and effects of forming implementation intentions on healthy eating. *European Journal of Social Psychology*, 29(5-6), 591-604.

54   Data taken from https://catalogue.ic.nhs.uk/publications/public-health/surveys/heal-surv-phys-acti-fitn-eng-2008/heal-surv-phys-acti-fitn-eng-2008-rep-v1.pdf

55   Rhodes, R. E. & Bruijn, G. J. (2013). How big is the physical activity intention–behaviour gap? A meta-analysis using the action control framework. *British Journal of Health Psychology, 18*(2), 296-309.

56   Hall, S., Leary, K. & Branson, C. (2012). Qualitative research to explore tax credits customers' renewal behaviour. *IPSOS Mori Social Research Institute*. At: http://www.hmrc.gov.uk/research/report186.pdf

57   Behavioural Insights Team (2012). "Applying Behavioural Insights to Reduce Fraud, Debt and Error" Cabinet Office

58   Shelton, J. N., Richeson, J. A. & Dovidio, J. F. (2013). Biases in interracial interactions. In E. Shafir (Ed.), *The behavioural foundations of public policy*. Princeton: Princeton University Press.

59   Blake, J. (1999). Overcoming the 'value-action gap' in environmental policy: Tensions between national policy and local experience. *Local Environment, 4*(3), 257-278.

60   Bason, C. (2010). *Leading public sector innovation*. Policy Press.

61   *The Civil Service Reform Plan*, Cabinet Office, June 2012. The Plan states: To ensure that civil servants are well equipped to use new policy tools, and in line with the commitment to learning and development laid out later in the plan, all policy makers will be expected to undertake at least five days a year of continuing professional development to ensure they have the right skills, including in new areas such as behavioural sciences.