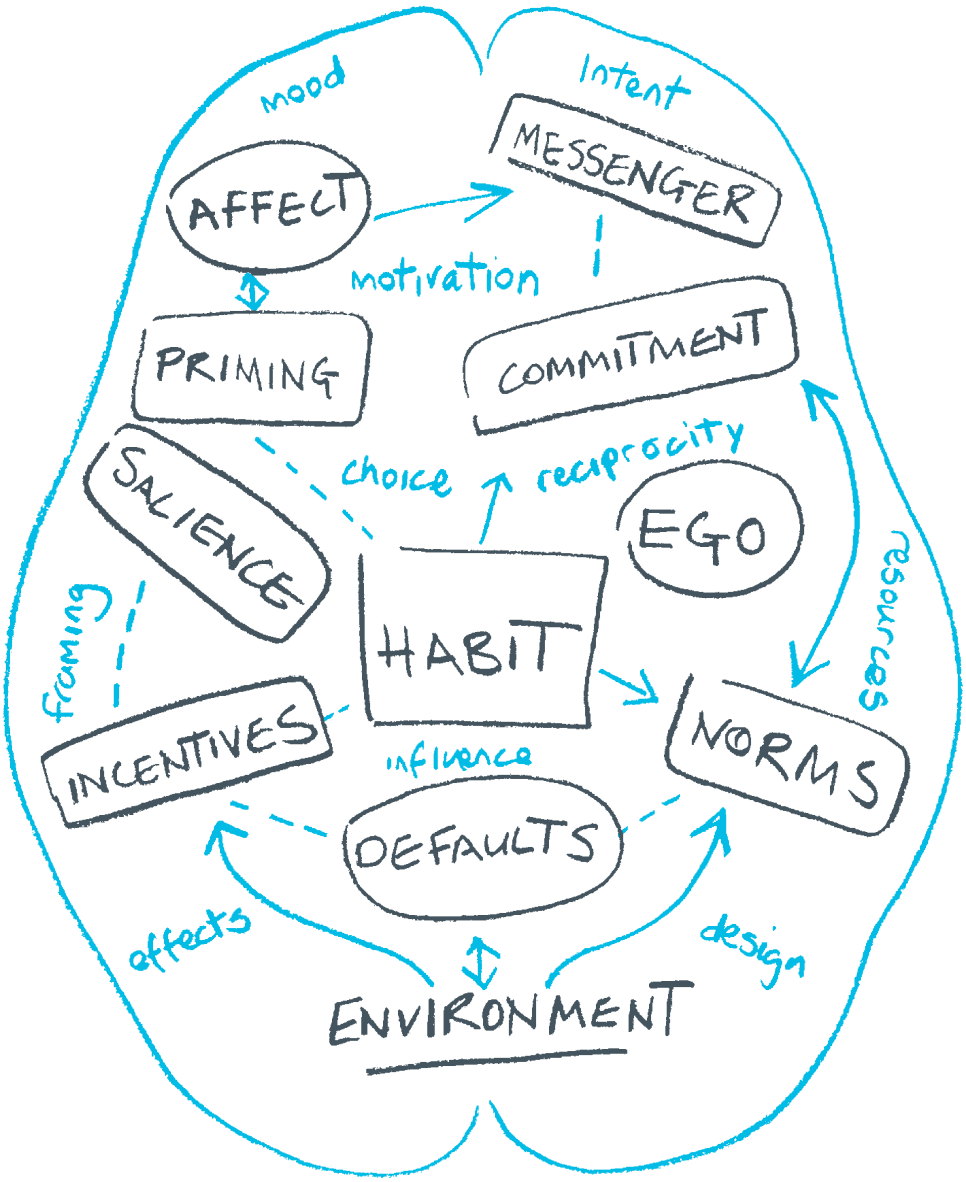
Cabinet Office

INSTITUTE FOR GOVERNMENT

MINDSPACE

Influencing behaviour through public policy



THE PRACTICAL GUIDE

About the authors

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This report represents a truly collaborative effort between the five of us and, in the economists' tradition, we are listed alphabetically.

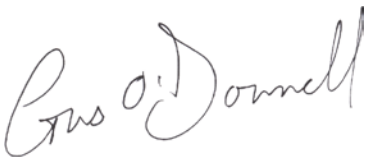
This paper sets out the practical elements of the full MINDSPACE report, which is available at www.instituteforgovernment.org.uk

Foreword

Influencing people's behaviour is nothing new to Government, which has often used tools such as legislation, regulation or taxation to achieve desired policy outcomes. But many of the biggest policy challenges we are now facing – such as the increase in people with chronic health conditions – will only be resolved if we are successful in persuading people to change their behaviour, their lifestyles or their existing habits. Fortunately, over the last decade, our understanding of influences on behaviour has increased significantly and this points the way to new approaches and new solutions.

So whilst behavioural theory has already been deployed to good effect in some areas, it has much greater potential to help us. To realise that potential, we have to build our capacity and ensure that we have a sophisticated understanding of what does influence behaviour. This report is an important step in that direction because it shows how behavioural theory could help achieve better outcomes for citizens, either by complementing more established policy tools, or by suggesting more innovative interventions. In doing so, it draws on the most recent academic evidence, as well as exploring the wide range of existing good work in applying behavioural theory across the public sector. Finally, it shows how these insights could be put to practical use.

This report tackles complex issues on which there are wide-ranging public views. We hope it will help stimulate debate amongst policy-makers and stakeholders and help us build our capability to use behaviour theory in an appropriate and effective way.





Sir Gus O'Donnell

Cabinet Secretary and
Head of the Home Civil Service

Sir Michael Bichard

Executive Director,
Institute for Government

1. Behaviour change and policy

The vast majority of public policy aims to shape and facilitate our behaviour. As citizens, communities and policymakers, we want to stop 'bad behaviours': people vandalising our cars, stealing our possessions, or threatening our children. We want to encourage 'good behaviours': volunteering, voting, and recycling. We even sometimes want a little help ourselves to 'do the right thing': to save a little more, eat a little less, and exercise a little more – though we may be ambivalent about how much we want the state to intervene in these behaviours.

We may not agree on how we would like policymakers to change our behaviour. But whether we like it or not, the actions of policy-makers, public service professionals, markets and our fellow citizens around us have big, and often unintended, impacts on our behaviour. 'Doing nothing' is rarely a neutral option.

There is increasing understanding about the factors that shape our behaviour

Over the last decade, 'behavioural economics', which seeks to combine the lessons from psychology with those from economics, has moved from a fringe activity to one that is increasingly familiar and accepted.[1] More generally, there is increasing understanding across the behavioural sciences about the factors that shape and affect our behaviour, in contrast – or complement – to legal and regulatory instruments conventionally used to compel us to behave in particular ways.

Drawing on the most recent evidence, the full report sets out the most robust effects that influence individual behaviour; demonstrates how these have been, or could be, applied to major policy issues; and considers the practical implications and political concerns about applying these methods. By applying these advances to the real challenges that government and communities face today, it tries to answer the 'so what?' question for policy-makers.

This short version selects elements that are of most practical use to policy-makers. It complements the Government Social Research guide to Behaviour Change (which outlines various models for understanding and applying different models of behaviour) and the Central Office of Information's Communications and Behaviour Change (which focuses specifically on the implications for Communications).[2]

Changing behaviour

Broadly speaking, we can focus on 'changing minds' or 'changing the context'

In broad terms, there are two ways of thinking about changing behaviour. The first is based on influencing what people consciously think about. We might call this the 'rational' or 'cognitive' model. Most traditional interventions in public policy follow this model. The presumption is that citizens and consumers will analyse the various pieces of information from politicians, governments and markets, the numerous incentives offered to us and act in their best interests (however they define their best interests, or - more paternalistically - however policymakers define them).

The contrasting model of shaping behaviour focuses on the more automatic processes of judgment and influence. This shifts the focus of attention away from facts and information, and towards altering the context within which people act. We might call this the 'context' model of behaviour change. The context model recognises that people are sometimes seemingly irrational and inconsistent in their choices, often because they are influenced by surrounding factors. Therefore, it

focuses more on 'changing behaviour without changing minds'. This route has received rather less attention from researchers and policymakers.

This report focuses on the more automatic or context-based drivers of behaviour, including the surrounding 'choice environment'.

The limits to information

Simply providing information often has modest and sometimes even unintended impacts

Giving out information has become a prominent part of the policy-maker's tool kit, and its importance is set to increase further.[3] Across the world, policy-makers are giving citizens more and more information about the performance of schools, hospitals and other public services, to be mashed and re-circulated in a myriad of innovative and personalised ways.

The increased availability of information has significant effects, most of them positive. For example, despite initial controversies, the wider availability of information on surgical survival rates has been shown to drive up outcomes.[4] The release of public data could lead to a significant increase in economic growth.[5] And information is obviously important in its own right, as it leads to more fully informed consumers and citizens - even if the information has no direct effect on behaviour.

But we also know that providing information *per se* often has surprisingly modest and sometimes unintended impacts when it attempts to change individuals' behaviour. For example, one meta-analysis of pro-environmental behaviours reported that at least 80% of the factors influencing behaviour did not result from knowledge or awareness.[6] In terms of policy-making, initial studies suggest that the introduction of calorie labelling in New York created no discernable change in consumption.[7]

Value for money

The money government spends trying to change behaviour will be maximised if it draws on evidence of how people actually behave

'Behaviour change' is often seen as attractive because it appears to offer similar or better outcomes at less cost. The obvious rationale for this view is that, since government spends a considerable amount of money on influencing behaviour, its success in doing so will be maximised if it draws on robust evidence of how people actually behave.

Perhaps the strongest argument for cost-effectiveness is that, quite simply, there is no neutral option for government interventions – government influences behaviour no matter what it does, and therefore it's likely that this ever-present behavioural dimension can be harnessed at little additional cost.

The structure of this report

This practical guide covers:

- Part 2 highlighting a cluster of the most robust effects that have been repeatedly found to have strong impacts on behaviour. We discuss these effects according to the acronym MINDSPACE (**M**essenger, **I**ncentives, **N**orms, **D**efaults, **S**alience, **P**riming, **A**ffect, **C**ommitment and **E**go).
- Part 3 demonstrating how MINDSPACE could be applied in practice. Building on work by DEFRA, we show that there are six main actions that need to be taken: Explore, Enable, Encourage, Engage, Exemplify and Evaluate. We explain each of these actions and give a worked example that shows the application of the framework to a policy problem.
- Part 4 considering the wider democratic and political implications of applying behavioural theory to policy.
- Part 5 which contains case studies of policies that have shaped behaviour by drawing on MINDSPACE effects.

2. MINDSPACE: A user's guide to what affects our behaviour



The elements described here are those that we consider to be the most robust effects that operate largely, but not exclusively, on automatic effects. They illustrate some of the main ways that individuals, communities and policy-makers can influence behaviour. We do not claim to cover all of the possible effects on behaviour, and we do not deal with more traditional interventions that rely on legislation and regulation.

We outline nine robust influences on human behaviour and change. These principles are underpinned by considerable research from the fields of social psychology and behavioural economics. They are therefore presented as the most robust effects that policy-makers should understand and, if appropriate, use. However, this abridged version can only give a short summary of these effects, and we recommend turning to the full report for more details.

We have arranged the effects according to the acronym **MINDSPACE.**

Messenger	we are heavily influenced by who communicates information
Incentives	our responses to incentives are shaped by predictable mental shortcuts, such as strongly avoiding losses
Norms	we are strongly influenced by what others do
Defaults	we 'go with the flow' of pre-set options
Salience	our attention is drawn to what is novel and seems relevant to us
Priming	our acts are often influenced by sub-conscious cues
Affect	our emotional associations can powerfully shape our actions
Commitments	we seek to be consistent with our public promises, and reciprocate acts
Ego	we act in ways that make us feel better about ourselves

Messenger

We are heavily influenced by who communicates information

Our response to a message depends greatly on the reactions we have to the source of that information. We are affected by the perceived authority of the messenger (whether formal or informal): we are more likely to act on information if experts deliver it, but also if the messenger has demographic and behavioural similarities to ourselves. We are also affected by the feelings we have towards the messenger, so that someone who has developed a dislike of government interventions may be less likely to listen to messages they perceive have come from 'the government'.

Incentives

Our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses

The impact of incentives clearly depends on factors such as the magnitude and timing of the incentive. However, behavioural economics suggests other factors that affect how individuals respond to incentives. The five main insights are: we dislike losses more than we like gains of an equivalent amount; we judge the value of money according to narrow reference points; we allocate money to different mental budgets, and are reluctant to move money between them; we over-estimate the likelihood of small probabilities; and we usually prefer smaller, more immediate payoffs to larger, more distant ones – but we don't differentiate between medium and long-term rewards. Finally, there is the danger that paying people to undertake an activity may reduce feelings that the activity is worthwhile in itself, making them less likely to do it for free in the future.

Norms

We tend to do what those around us are already doing

Social and cultural norms are the behavioural expectations, or rules, within a society or group. Norms can be explicitly stated ('No Smoking' signs in public places) or implicit in observed behaviour (shaking the hand of someone you meet for the first time). People often take their understanding of social norms from the behaviour of others, which means that they can develop and spread rapidly through social networks or environmental clues about what others have done (e.g. litter on the ground).

Some social norms have a powerful automatic effect on behaviour (e.g. being quiet in a library). Behavioural interventions using social norms have been successful in a number of areas, and most are based on telling people what other people do in a similar situation.

Defaults

We 'go with the flow' of pre-set options

Many decisions we take every day have a default option, whether we recognise it or not. Defaults are the options that are pre-selected if an individual does not make an active choice. Defaults exert influence because individuals have an in-built bias to accept the default setting, even if it has significant consequences. Many public policy choices have a no-action default imposed when an individual fails to make a decision. This default setting is often selected through natural ordering or convenience, rather than a desire to maximise benefits for citizens. Restructuring the default option can influence behaviour without restricting individual choice.

Salience

Our attention is drawn to what is novel and seems relevant to us

Our behaviour is greatly influenced by what our attention is drawn to.[8] In our everyday lives, we are bombarded with stimuli. As a result, we tend to unconsciously filter out much information as a coping strategy. People are more likely to register stimuli that are novel (messages in flashing lights), accessible (items on sale next to checkouts) and simple (a snappy slogan).

Simplicity is important here because our attention is much more likely to be drawn to things that we can understand – to those things that we can easily encode. And we are much more likely to be able to encode things that are presented in ways that relate more directly to our own personal experiences than to things presented in a more general and abstract way.

Priming

Our acts are often influenced by sub-conscious cues

Priming is about how people's behaviour is altered if they are first exposed to certain sights, words or sensations. In other words, people behave differently if they have been 'primed' by certain cues beforehand. Priming seems to act outside of conscious awareness, which means it is different from simply remembering things. The discovery of priming effects has led to considerable controversy that advertisers – or even governments - might be able to manipulate us into buying or doing things that we didn't really want.

Subsequent work has shown that primes do not have to be literally subliminal to work, as marketers have long understood. In fact, many things can act as primes, including words, sights and smells. The effect of priming is real and robust; what is less understood is which of the thousands of primes we encounter each day have a significant effect on the way we act.

Affect

Emotional associations can powerfully shape our actions

Affect (the act of experiencing emotion) is a powerful force in decision-making. Emotional responses to words, images and events can be rapid and automatic, so people can experience a behavioural reaction before they realise what they are reacting to. Moods and emotional reactions can precede and override more 'rational' or cognitive decision-making, resulting in decisions that appear contrary to logic or self-interest. For example, people in good moods make unrealistically optimistic judgements; those in bad moods make unrealistically pessimistic ones.

Commitment

We seek to be consistent with our public promises, and reciprocate acts

We tend to procrastinate and delay taking decisions that are likely to be in our long-term interests.[9] Many people are aware of their will-power weaknesses and use commitment devices to achieve long-term goals. It has been shown that commitments usually become more effective as the costs for failure increase: for example, making commitments public, so breaking the commitment leads to reputational damage. Even the very act of writing a commitment can increase the likelihood of it being fulfilled, and commitment contracts have already been used in some public policy areas.[10] Finally, we have a strong instinct for reciprocity, which means that, for example, accepting a gift acts as a powerful commitment to return the favour at some point – hence the popularity of free samples in marketing.

Ego

We act in ways that make us feel better about ourselves

We tend to behave in a way that supports the impression of a positive and consistent self-image. When things go well in our lives, we attribute it to ourselves; when they go badly, it's the fault of other people, or the situation we were put in – an effect known as the 'fundamental attribution error'.[11] We think the same way for groups that we identify with, to the extent that it changes how we see the world.[12]

We also like to think of ourselves as self-consistent. So what happens when our behaviour and our self-beliefs are in conflict? Often it is our beliefs that get adjusted, rather than our behaviour.[13] It has been shown that once people make initial small changes to their behaviour, the powerful desire to act consistently emerges – the initial action changes their self-image and gives them reasons for agreeing to subsequent requests. This challenges the common belief that we should first seek to change attitudes in order to change behaviour.

3. Applying MINDSPACE to policy-making

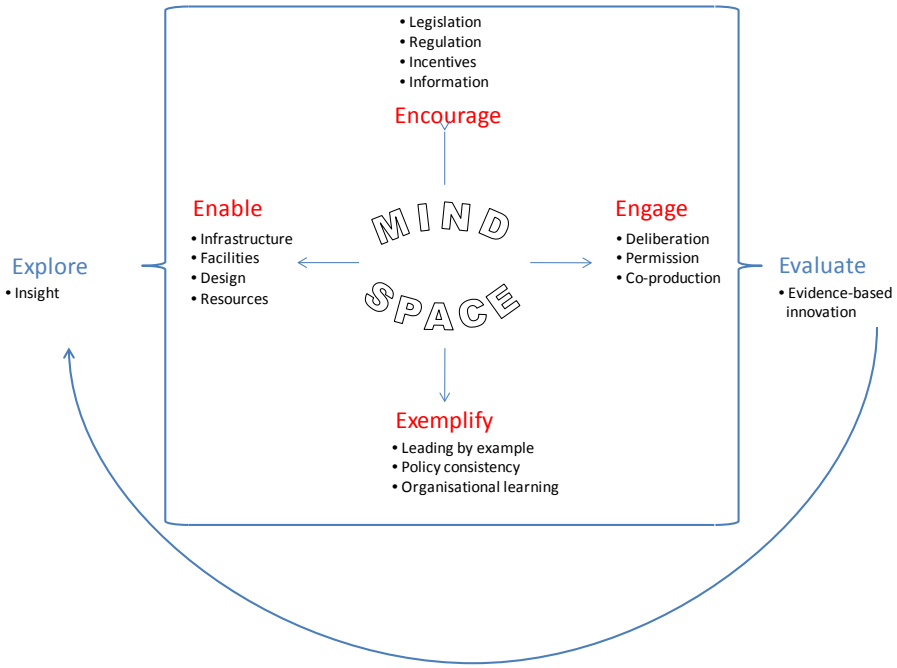
This section explains how policy-makers can put MINDSPACE into practice, using a simple structured process.

Traditional ways of changing behaviour, such as legislation, regulation, and incentives, can be very effective. MINDSPACE does not attempt to replace these methods. Rather, it extends and enhances them, adding new dimensions that reflect fundamental, but often neglected, influences on behaviour.

Similarly, applying MINDSPACE in practice builds on existing methods of changing behaviour. To illustrate this, we have drawn on the "4Es" policy framework, originally developed by DEFRA, which has been applied in various behaviour change strategies.[14] The 4Es are four actions that should underpin government's, professionals' or communities' attempts to change behaviour: Enable, Encourage, Engage and Exemplify. We have added two supporting actions: Explore, which takes place before policies are implemented, and Evaluate, which judges the success of the policy.

In basic terms, MINDSPACE represents the tools for changing behaviour, and the 6 Es constitute the framework within which they can be applied. Bringing these considerations together into a coherent narrative will allow policy-makers to turn theory into practice and develop policy that goes with the grain of people's behaviour (see diagram).

The diagram below shows how the various actions fit together, but it does not offer a comprehensive overview of every element of the policy-making process. Rather, it highlights areas which need extra attention, or a modified approach, in order to change behaviour effectively.



1. Explore

Understanding whose behaviour you are changing

Any attempt to change behaviour needs to understand the behaviour it wishes to change. MINDSPACE explains the robust effects that underpin human behaviour, derived from our increasing understanding of how contextual cues affect us. However, our behaviour is also affected by a more conscious and considered understanding of our needs, desires and priorities. Recognising these various influences is crucial, given the complex environment in which people make decisions.

In response, the discipline of 'Customer Insight' has developed to understand people's experiences, beliefs, needs or desires.[15] It allows a more nuanced understanding of how MINDSPACE can be applied in practice: for example, by indicating which MINDSPACE effects may be most appropriate for particular groups. The policy-maker can therefore draw on both the rich material from insight techniques and the generalisable effects of MINDSPACE.

Key questions for policy-makers

- Whose behaviour are you attempting to influence?
- How do attitudes and motivations vary between the different groups concerned?
- How are you combining Insight with the MINDSPACE effects?
- Does your team have the capacity to draw on both Insight and behavioural theory?

2. Enable

Start from 'where people are'

Government needs to "enable" behaviour change by recognising the practical and structural barriers that people face. Policy-makers should remember that the contexts in which people find themselves shape the options that are available to them and affect their ability to select these options. Attempts to encourage behaviour change that do not recognise these contextual factors are likely to breed frustration only. For example, there is little point attempting to encourage people to wash clothes at 15°c if most people's washing machines do not have this option. Government can help people surmount these barriers, but only if they are recognised.

Any attempt to encourage new behaviours needs to consider the wider context and choices available to people, rather than focusing narrowly on the desired behaviour. Are there underlying, compelling reasons why people will not be able to change their behaviour? What can be done about them? The effects in MINDSPACE are powerful and are likely to handle most of the "heavy lifting" in behaviour change – but the very choices that exist are an important factor in themselves.

Key questions for policy-makers

- How does the wider context in which people act constrain or encourage the change you seek?
- What are the effective choices available to different sections of society?
- How do the choices that government presents affect behaviour?

3. Encourage

Applying MINDSPACE to change behaviour

Broadly speaking, Encourage covers the policies and government actions that (directly or indirectly) try to change how people act. The 6Es diagram features the main 'traditional' attempts to influence behaviour - legislation, regulation, incentives, and information – many of which are effective.

MINDSPACE can add a lot to these policies. But that does not mean that "behaviour change" can be understood as simply a novel alternative to, say, legislation. As noted before, the majority of what government does is intended to change behaviour in some way. Rather, civil servants need to better understand the *behavioural dimension* of their policies and actions. MINDSPACE can help them do so in three different ways:

- **Enhance.** MINDSPACE can help policy-makers understand how current attempts to change behaviour could be improved – for example, how the impact of incentives can be enhanced by a better understanding of how people respond.
- **Introduce.** Some of the elements in MINDSPACE are not used extensively by policy-makers, yet may have a considerable impact. For example, there is room for more innovative use of social norms and commitment devices in policies.
- **Reassess.** Government needs to understand the ways it may be changing the behaviour of citizens unintentionally. It is quite possible that the state is producing unintended – and possibly unwanted – changes in behaviour. The insights from MINDSPACE offer a rigorous way of assessing whether and how government is shaping the behaviour of its citizens.

Key questions for policy-makers

- Can you introduce any new elements from the MINDSPACE framework?
- How does MINDSPACE enhance your existing attempts to change behaviour?
- Do you need to reassess your existing actions using MINDSPACE?

4. Engage

Facilitating public debate and gaining approval

Behaviour change can be controversial, involve difficult tradeoffs, and concern areas where government legitimacy is controversial. These questions are both tricky and of general concern to the public. Therefore, new methods of engaging the public may be needed to explore what actions are acceptable or to gain explicit permission for a proposed change in behaviour. COI have recently published a guide to *Effective public engagement* that offers helpful guidance in this area.[16]

Key questions for policy-makers

- Are you seeking permission for a policy or new perspectives on a behaviour change issue?
- Are the consequences of your policy so wide-reaching or so potentially controversial that a deliberative forum or poll may be needed?
- If so, how are you going to take the results of the event into account?

5. Exemplify

Changing government's behaviour

In most behaviour change interventions, exemplifying desired changes is important for two main reasons. First, because the actions of high-profile representatives of government send implicit messages about behaviours it condones. If government is not displaying the behaviours it is encouraging in others, this will act against people's desire for reciprocity and fairness (see 'Commitment'), while inviting charges of hypocrisy. Second, government policy should not give mixed messages about whether certain types of behaviour are encouraged or not. Just as individuals seek consistency (as shown in 'Ego' effects), there needs to be consistency in the behaviour of government and its representatives.

MINDSPACE suggests a third dimension: its principles can be applied to improve the process of policy-making. In other words, government attempts to change its own behaviour. Does the status of the messenger sometimes outweigh the strength of the message? Do loss aversion and mental accounting prevent innovative reallocation of budgets?[17] This is particularly resonant in the current economic climate and the state of the public finances.

Furthermore, MINDSPACE could be applied to the process of achieving organisational change in government. There are some obvious 'easy wins' here, such as lowering the default temperature in buildings to meet SOGE emissions targets, or using Ego effects to lift employee engagement.

Key questions for policy-makers

- Are the actions and policies of government consistent with the change you are seeking?
- How could MINDSPACE be applied to improve the way you and your team make policy?
- How could MINDSPACE be used to help achieve organisational change in government?

6. Evaluate

Working out what works

Some of the factors that influence behaviour are fairly obvious and easy for government to influence; others are more elusive and require tradeoffs. And while the evidence for the effects in MINDSPACE is very strong, it can be unclear how the various effects will interact in specific cases. Behaviour change policy needs to understand the complex range of factors that affect behaviour, and good evaluation is a crucial way of doing so.

Although there will always be a healthy tension between evidence-based policy and innovation-based policy, our collective mission should be evidence-based innovation. In other words, we should take what we know to be robust phenomena across a range of contexts and give them the best shot of success where the evidence base does not exist.

Key questions for policy-makers

- How will you evaluate the results of your intervention?
- What measures will you put in place to ensure this evaluation is robust enough to provide convincing evidence?
- Is there an opportunity for academic collaboration?

Applying the framework in practice

How can policy-makers apply this framework in practice? Below we give a hypothetical example of how it can all come together. This is a short and stylised example for illustration only: more details and examples are given in the full report.

A local authority has identified that it has unusually high rates, compared with comparable areas, of both teenage pregnancies and STDs. They have been set a challenging LAA target for National Indicator 112 (PSA 24) 'Under 18 Conception Rate', but their performance indicators are not moving. How can MINDSPACE offer a new approach?

Explore

The Local Authority brings together key figures from the PCT, local schools and the local community to assess levels of interest and current local strategies. This starts to identify ideas about what might be going wrong in the local area, and establishes common interests and resources to explore the issue further.

Insight research is commissioned locally involving focus groups and some one-to-one interviews (given the personal nature of the subject). This research explores the thoughts, feelings and pressures on teenagers (including teenage parents) and their parents. Evidence is also drawn from the new 'What works?' data bank of previous evaluations and international evidence funded by several large central government departments.

Insight found that one of the weaknesses of information and leaflets was that it concentrated on facts and figures about sex and STDs rather than the more potent influences on behaviour such as self-image and social pressure (Ego and Norms). For example, young people often felt unsure about how widespread sexual activity was, and those who were engaging in early sex felt uncomfortable about the reaction of their partner if they insisted on contraception, since it might imply they were already promiscuous or that it somehow implied they didn't trust their partner. It was also found that many young people did not relate to national-level statistics and figures.

Ironically, the local practice of having previous teenage parents come and talk to children in schools about why they regretted getting pregnant so young was found to have the exact reverse effect on many young people. It helped them imagine themselves in that situation (Salience), made it seem more normal (Norms), and the young mothers themselves seemed rather impressive and grown-up (Messenger).

Finally, it turned out that a major driver of early sexual activity, and indeed lower educational attainment and behavioural problems in the classroom, turned out be rooted in self-image. Many young people felt caught in a frustrating dynamic of 'being treated like a child at home and school', and, in a slightly jumbled way, felt that sex was a route to being respected and treated as an adult (Ego).

Enable

For the most part, lack of information about safe sex was not fund to be a major barrier, but there was evidence that there were some specific gaps in knowledge, such as some practical aspects of birth control use and a lack of understanding of the long-term effects of certain STDs. Sex guidance and information was therefore updated. Supply of contraception was felt to be a barrier to some at-risk younger groups, and dispensers were added in school toilets – within cubicles rather than in more public areas to avoid unwanted social pressures.

Encourage

Salience and Norms

Recognising the importance of self-esteem rather than facts, leaflets and classes were changed to focus much more heavily on how other people, including peers and the other sex, felt about birth control. In order to make statistics more Salient, a local survey of relationships and sexual behaviours was organised by parents and a local school nurse. Students found the results from the local survey far more salient, and it also served to break the taboo of younger age sex and relationships. Many young people were surprised to find out that far fewer of their peers were having sex than they thought, which they felt removed pressure on them (Norms).

Messenger

Schools also took a new approach to visits: rather than inviting *just* teenage mothers in to talk, they set up a panel of five former pupils to talk about their lives and relationships. Just like the teenage parents, they were articulate and impressive – but, of course, most of those who left school were not teenage parents. A typical panel of 20-something ex-students had three who were not parents, of whom one was recently married, one was in a long-term relationship, and one who had recently broken up. The fourth was also recently married and had just had a child. The fifth, on some of the panels, had been a teen parent. In other words, various 'alternative futures' were made Salient, while it was clear that the dominant Norm was not being a single mother.

Commitment

Some schools and parents experimented with 'compacts' – students would actually make a pledge with themselves as part of PHSE classes that, if they were in a relationship, they would agree with their partner to use birth control (Commitment). Though some felt these 'compacts' were embarrassing, many subsequently felt that they were glad that they had done so.

Engage

Many of the elements of the Borough's programme on teenage sexual behaviour were controversial. Engaging with parents, professional and children was an important part of getting 'permission' for the programme. The local authority had to stress the scale of the problem in the area (although not so much to teenagers, to prevent an undesirable social norm), and the difficulties that can ensue from teenage pregnancy. The engagement itself helped to raise the profile of the issue and increased the acceptability of talking about sex and relationships in the area, thereby creating a self-reinforcing social norm.

Exemplify

In this instance, the local authority recognised that it would find it difficult to exemplify actions that lead to lower teenage pregnancy. Therefore, it mostly restricted its activities to ensuring that it was giving a consistent message on the desirability of teenage pregnancy in all its areas of activity. In terms of policy-making, it was recognised that the Commitment to reach a certain LAA target had encouraged the local authority to think differently. In addition, a local health worker gave a hard-hitting presentation to the local authority's team on the real emotion and social problems teenage pregnancy was creating in the local area (Salience and Affect). As a result, the Default approach to information provision had been shifted from 'neutrality' to 'socially situated' – unless decided otherwise, all information would be geared towards affecting self-esteem issues and social pressures felt by teenagers.

Evaluate

There were various elements to the programmes that were tried in the area. Schools and communities tended to use slightly different combinations. The evaluation used this variation in interventions to test the relative efficacy of different aspects of the programme. Outcome variables included levels of STDs, teen pregnancy rates, and a repeat of the local survey on sexual behaviours.

4. Key Issues

Potential for controversy

Policy-makers know that attempts to change citizens' behaviour may well be controversial. This is particularly true given the emergence of new evidence about how people act, and new ways of applying this evidence.

Framing is crucial when engaging the public with behaviour change

The most obvious point to remember is that framing is crucial when attempting to engage the public with behaviour change. As Gillian Norton has pointed out, 'talking about behaviour change is a sure fire way of making sure it doesn't happen'.[18] Across government, many of our interviewees have argued that 'behaviour change' is an unhelpful term. "Behaviour", in particular, has negative and paternalistic associations.

Of course, there are good reasons why public acceptability should not be the only condition for going forward with behaviour change. Richard Reeves has recently proposed tests of legitimacy, autonomy and effectiveness for health-related behaviour change.[19] Furthermore, it may be that government needs to take a lead on issues despite public opposition, since these public attitudes may actually shift in response to the introduction of the policy.

Judging potential acceptability in practice

There are three factors that are particularly useful for understanding controversy around behaviour change:

Who the policy affects

- We generally accept that the state has greater scope for changing the behaviour of some citizens more than others. Children, the mentally ill and (more controversially) those suffering from addictions are usually seen as not wholly capable of making effective decisions about their own welfare.
- Any behaviour change that will affect a group in particular is likely to require careful justification – there may be particular controversy if the behaviour concerned is seen as integral to a group's identity or culture.
- Recent political discourse has emphasised the principle of 'something for something': those who receive certain benefits from state action should act in certain ways, which may require changes in behaviour.[20] However, when government acts on this principle it may give rise to controversy.

What type of behaviour is intended

- Behaviour may lead to benefits or harms that affect ourselves or others. Generally speaking, there has been more of a consensus on interventions to promote safer communities (reducing harm to others) than to encourage healthier lifestyles (especially if framed as promoting benefits to oneself).
- If the harm is seen to be more distant from the individual (for example, if it affects future generations), it may be seen as a less pressing case for changing behaviour. Making the desired behaviour change clear, salient and justified can balance out people's tendency to care less about "distant" harms. The availability and prestige of evidence and experience may be crucial factors in doing so.

- When actions affect individuals, we need to consider whether *self-harm* is really present. A key challenge is to identify when 'bad behaviours' as defined by policymakers really do reduce people's wellbeing – for example, people often really enjoy fatty foods and consumption of alcohol.[21]
- Not only does behavioural economics reveal that we are not rational, it also notes that we recognise this fact ourselves: we know that we are not good at resisting temptation. In these cases, government action can be seen to augment our freedom by acting as 'surrogate willpower'. But if our intentions are unformed, conflicted, mutable, and varying in intensity, then policymakers may need to use new methods of engaging people to discover and inform their intentions.
- If intentions are unclear, there is a temptation that government will assume what citizens' "real" intentions are; and this is something that many thinkers and citizens find unpalatable.[22] Most people agree that government should preserve people's "right to be wrong" (depending on the harms to others); being able to identify what it would be rational for a person to do does not necessarily allow you to interfere with that person's irrational action.[23]

How the change will be accomplished

- MINDSPACE effects depend at least partly on automatic influences on behaviour. This means that citizens may not fully realise that their behaviour is being changed – or, at least, how it is being changed. Therefore, there may be little opportunity for citizens to opt-out or choose otherwise; the concept of "choice architecture" is less use here. Any action that may reduce the "right to be wrong" is likely to be controversial. This suggests a greater need for citizens to approve the use of the behaviour change – perhaps using new forms of democratic engagement.
- People are likely to be less suspicious of effects if they are already familiar with them – for example, most people are acquainted with the principle of a default setting. But even the less familiar effects, such as priming, may be present in everyday life. For example, simply asking people how likely they are to perform a task in the future increases the likelihood that they will, yet it is a fairly common action and so people are more likely to see it as innocuous.[24] As always, framing is crucial.
- Closely related to familiarity is whether the effect can be easily understood if explained. For example, most people can grasp the idea that certain actors are more persuasive than others (messenger). On the other hand, the workings of social norms and (especially) priming are complex, difficult and often counter-intuitive.

Policy-makers can apply the criteria of 'Who, What, and How' to predict whether certain behaviour changes are likely to be controversial. To give a simple and hypothetical example, consider how Acceptable Behaviour Contracts (ABCs) as currently in use could be made less acceptable by changing each one of three factors.

- **Who.** ABCs were originally introduced for 10 to 17 year olds. We generally are more tolerant of changing children's behaviour because they may not be fully aware of their roles and responsibilities in society. ABCs are increasingly applied to adults, and there are grounds for this being more controversial. In the event, the move has attracted little controversy because the harms of anti-social behaviour are seen as the same regardless of who causes them. But consider the controversy if ABCs had targeted particular groups of adults: *Single Parent* Acceptable Behaviour Contracts, for example.

- **What.** Suppose these adult ABCs were applied to a different policy issue, perhaps that of healthy eating. Those who are overweight commit, with certain penalties, to eating a certain amount every day. Now the behaviour change aims to increase personal benefits, rather than reducing harms, which is likely to be more controversial – especially if adults are the recipients.
- **How.** Even though these 'Acceptable Eating Contracts' would be very controversial, they still act within conscious control – people know they have signed up to them. Consider if the means of behaviour change acted mostly outside conscious awareness. Suppose the government used channels such as posters, labelling or certain turns of phrase to 'prime' people to eat healthily.[25] This role for government would be unfamiliar for people and may trigger charges of manipulation.

The value of thinking this way is that policy-makers can identify potential ways of assuaging controversy, should they decide to proceed. For example, if the "Who" dimension is controversial, then more assurances of equity and tolerance may needed; if "What", then the quality and impact of evidence should be stressed; if "How", then the methods may need to be demystified and more explicit approval gained for using such methods.

Nevertheless, risks will always remain. It is very difficult to anticipate how policies will be framed by the media and perceived by the public: some aspects of a policy may be strongly supported while others reviled. Indeed, this type of public debate may be a healthy and necessary part of government's use of behaviour change; it may spark democratic engagement and lead to a clearer sense of the proper role of the state.

5. Case studies

The full report provides ten case studies; we have selected two for this abridged report.

Case study 1: Reducing gang violence in Strathclyde

The policy issue

The latest British Crime Survey (BCS) reports that violent crime has fallen by 49% since 1995, with provisional data showing 648 murders recorded by the police (the lowest in 20 years). The use of knives in all violent crime has remained fairly stable over the last decade.[26] Although gun crime remains very rare, the number of recorded crimes involving firearms (excluding air weapons) doubled between 1998/9 and 2006/7.[27] And there is considerable public concern about knife and gun crime: 93% of BCS respondents thought knife crime had risen nationally, with 86% thinking the same for gun crime.[28]

Many of these concerns have related to the activities of 'gangs'. It is extremely difficult to measure gang membership, but a 2004 Home Office study estimated that 6% of young people aged 10-19 belonged to a delinquent youth group.[29] Offending rates were significantly higher for members of these groups than for non-members, and 51% claimed to have taken illegal drugs with other members.[30]

Using norms and messengers to change behaviour

It has been shown that people are strongly influenced by the behaviour of others, particularly by those who are similar to themselves. If delinquent behaviour is seen as 'normal' and widely practised by peers, this creates a strong attraction for gang members to join in and conform to the norm.

Scotland's Violence Reduction Unit has taken an innovative approach to tackling Glasgow's gang culture, which is founded on turning the power of social norms *against* gangs. Previous initiatives – including foot patrols and crackdowns on knife crime – had achieved only short-term success.[31] Then Scotland's Violence Reduction Unit turned to a US programme called the Cincinnati Initiative to Reduce Violence (CIRV). A central plank of CIRV's approach is to make one gang member's actions affect all his/her peer group. So, if a gang member commits a murder, then the entire gang is targeted for offences: drug activities, weapon possession, and parole and probation violation. In other words, punishment is replicated in the same way as the delinquent behaviour was – through the social norm of gang membership.

The American programme adopts other tactics for 'changing operative norms regarding violence'. Gang members were summoned to face-to-face forums as a condition of their parole. One purpose of these forums was to show how the gang's 'rules' or 'code' was based on illusion and rarely operated in reality. The other main purpose was to draw on wider social norms, by getting members of local communities, victims' relatives and ex-offenders to speak about the impact of the gangs' violence on their area.

The messages have proven most effective when coming from figures that gang members may respect, or to whom they can relate – as when the mother of a dead

gang member warned: 'If you let yourself get killed, your mother will be standing here. She will be me.'[32] As one of the American scheme's architects has noted, 'We're finding all of this matters more if you can find someone who is close to the offender, who they respect, who will reinforce these values.'[33] This points again to the power of the 'Messenger' effect, explained above.

Evaluation

There have been a series of gang violence initiatives, all based on a similar model from the United States. One of the first programmes, Ceasefire, has been well evaluated. When first launched in Boston in 1996, an evaluation for the US National Institute of Justice found that the intervention reduced the average number of monthly youth homicides by 63%.[34]

A more recent evaluation of a programme based on the Boston project found that shootings and killings dropped between 41% and 73% in Chicago and Baltimore; declines of between 17% and 35% were attributable to Ceasefire alone.[35] In Cincinnati, gang-related homicides fell by 50% in the first nine months.[36] These improvements appear to be enduring – once a new social norm has been embedded, it becomes self-sustaining.

Scotland's Violence Reduction Unit secured £1.6million of funding for their own CIRV (Community Initiative to Reduce Violence) project in 2008, which has brought together workers from many different agencies (including housing, education, social work and justice). The first face-to-face forum was only held in October 2008, with the first year's results published at the end of 2009.[37] The Home Affairs Select Committee recently praised Scotland's Violence Reduction Unit's 'innovative' strategy in its report on knife crime.[38]

Case Study 2: Using defaults in an opt-out system for private pensions

The policy issue

As the Pensions Commission made clear, the current system of pensions is insufficient and 'will deliver increasingly inadequate and unequal results'. Not only are private pension contributions failing to rise as expected, but increasing life expectancy will create pressures that cannot be alleviated by raising the pension age alone.[39] There are currently around 7 million people in the UK who are not saving enough to generate the income they are likely to want in retirement.[40]

Using defaults to change behaviour

The Commission pointed out that 'initiatives to stimulate personal pension saving have not worked', and pointed to 'the limited impact of providing better information and generic advice'.[41] Indeed, in 2003 an estimated 4.6 million employees had not joined employer-based pension seems to which they had access.[42] Strictly speaking, this failure is irrational, since joining such a scheme would bring considerable benefits to these employees.

There are many reasons for the low level of pension saving. Joining a scheme requires an active decision, but people often display inertia when confronted with such decisions. For example, many banks and credit cards tempt people to open accounts with attractive introductory offers, knowing that they will fail to move even when these offers elapse.[43] The problem is especially acute for pensions because they deal with a far-off future scenario: since people find it difficult to imagine old age, the decision to act does not seem to be a high priority and apparently can always be deferred.[44] Finally, people are more likely to defer decisions that are complex and confusing, and thus require significant mental effort – like selecting a pension scheme.

Information provision alone fails because people may not act on this information, for all the reasons given. In the words of one interviewee, 'we know

we should be contributing to a pension plan, but it's never the right day to start'.[45] In such a situation, should government just compel people to save more? The Pensions Commission noted that 'while many people say they want to "have to save", many respond adversely to the idea of compulsory savings'.[46] How, then, should government take stronger action without removing freedom? The answer from behavioural economics: use people's inertia to actually *encourage* saving.

Currently, the onus is almost always on employees to make the effort to join their company's pension plan or buy a personal pension. In other words, the 'default' option when employees join a company is for them not to join. The concept adopted by the Pensions Commission was to change this default: employees would automatically join the pension plan, but still have the opportunity to opt-out if they wish. Changing the default means that inertia is now working *in favour* of savings – but preserving an opt-out means that the government avoids introducing a compulsory saving system. The reform also introduces a compulsory "matching" contribution from the employer, obliging them to contribute to an employee's pension (unless the employee opts out).

It is an attractive position that has been labelled 'libertarian paternalism'.[47] Indeed, one interviewee explained that having a simple and intuitive governing concept like 'changing the default' has helped maintain focus and momentum during the long process of implementing the Commission's findings. Nevertheless, having a compelling theory alone is rarely enough when creating policy; a crucial factor in gaining support for an opt-out default was the compelling evidence of its effects in real life.

To take one of many examples, a study assessed the changes in pension uptake when a large US corporation switched their default from active to automatic enrolment. As the graph below shows, enrolment increased significantly after the change in default.[48] Interestingly, introducing automatic enrolment also eliminated most of the previous differences in participation due to income, sex, job tenure and race – the increase in take-up was particularly large for low and medium income workers.

The graph below shows pension participation rate by years worked in the company. For employees hired prior to automatic enrolment, participation increases with tenure. But the highest participation rates are for the employees hired under automatic enrolment.

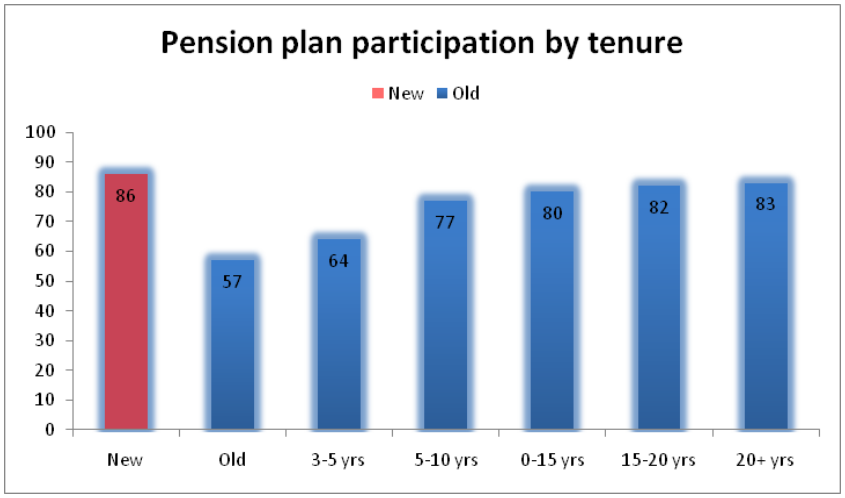


Figure 8: Change in enrolment in pension plan, by length of employment[49]

As well as sound theory and strong evidence, the movement to joining by default, with an opt-out, was aided by support from stakeholders: for example, pension providers can gain business and cut marketing costs, while small businesses' pension contributions are in line with their employees' desire to save. As a consequence, the Pensions Act 2008 requires employers to

automatically enrol all eligible workers over the age of 22 into the relevant workplace pension (with minimum total contributions of 8% of salary) from 2012.[50]

Evaluation

Naturally, an evaluation of this policy does not exist as this change in the default does not come into force until 2012. Nevertheless, the practical steps of translating an interesting concept into practice are worth reflecting on. Changing default settings may be easy on a small scale and in informal contexts, but there are challenges when national governments are required to legislate:

- The power of inertia means that the nature of the default pension fund needs to be chosen very carefully. As a result, the Personal Account Development Authority has just consulted on developing guidelines that will be used as investment principles for the fund managers of the proposed National Employment Savings Trust.[51]
- The use of legislation to compel employer contributions means that the Pensions Regulator will need to take on considerable new powers to ensure employers are complying with the new arrangements.
- Finally, the setup needs to reflect the motivations of the different parties. For example, the question of who provides the opt-out (i.e. who the messenger is) needs to recognise that employers may have an incentive to encourage employees to opt out.

Changing defaults is seen as a relatively cheap way of encouraging beneficial behaviours. Of course, this depends on a) costs associated with the actual change of the default; and b) the costs arising from more people choosing the new default option. In terms of changing the default, the DWP has estimated there will be a one-off transition cost of £0.3 billion.[52]

The average monetised costs and benefits of people choosing the new default are roughly equal at approximately £15 billion a year, although they accrue to different parties (combined individual and employer contributions are offset by £15 billion of higher income for individuals in retirement). However, the DWP believes that there will be additional non-monetised benefits of £40 billion of social welfare benefit over 43 years (as a result of smoothing citizens' income over their lifetime), as well as a long-term increase in UK incomes due to additional savings.[53]

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[1] See, for example: Prime Minister's Strategy Unit (2004) *Personal Responsibility and Behaviour Change*; New Economics Foundation (2005) *Behavioural Economics: Seven Principles for Policy Makers*; Lewis (2007) *States of Reason: Freedom, responsibility and the governing of behaviour change;* Social Market Foundation (2008) *Creatures of Habit? The Art of Behavioural Change*; Thaler and Sunstein (2008) *Nudge: Improving decisions about health, wealth and happiness*, Policy Studies Institute (2009) *Designing policy to influence consumers*.

[2] Darnton (2008) *Practical Guide: An overview of behaviour change models and their uses*. London: Government Social Research; Central Office of Information (2009) *Communications and Behaviour Change*; Cabinet Office (2009) *Guide to Segmentation*. At: http://www.cabinetoffice.gov.uk/public_service_reform/innovation/segmentation.aspx

[3] Cabinet Office (2008) *Power of Information Task Force: Final Report*; HM Government (2010) *Putting the Frontline First: Smarter Government.*

[4] Bridgewater, Grayson, Brooks, Grotte and Fabri et al. (2007) Has the publication of cardiac surgery outcome data been associated with changes in practice in northwest England: an analysis of 25,730 patients undergoing CABG surgery under 30 surgeons over eight years. *Heart* 93(6):744-8.

[5] HM Government (2010) *Putting the Frontline First: Smarter Government*, p.26.

[6] Kollmuss and Agyeman (2002) Mind the Gap. *Environmental Education Research* 8(3): 239-260.

[7] Elbel, Kersh, Brescoll and Dixon (2009) Calorie labelling and food choices: A first look at the effects on low-income people in New York City. *Health Affairs*. 28(6): w1110-w1121; Downs et al. (2009) Eating by the Numbers. *New York Times*, 12th November. Downs reports that a third study, conducted by the New York City Department of Health and Mental Hygiene, may show reductions in calorie consumption, although the data had not yet been published.

[8] Kahneman and Thaler (2006) Anomalies: Utility Maximisation and Experienced Utility. *Journal of Economic Perspectives* 20(1): 221-234.

[9] O'Donoghue and Rabin (1999) Doing it Now or Later. *The American Economic Review,* 89(1):103-124.

[9] Cialdini (2007) *Influence: The psychology of persuasion*. New York: HarperBusiness, Revised Edition.

[10] Cialdini (2007) *Influence*, pp.67-85.

[11] These are known as *attribution biases*, and they share the common tendency to over-value dispositional (i.e. personality-based) explanations for the observed behaviours of others, while under-valuing situational explanations for those behaviours. For example, *self-serving bias* occurs when people attribute their successes to internal/personal factors but attribute their failures to situational factors beyond their control. Miller and Ross (1975) Self-serving biases in the attribution of causality: Fact or fiction? *Psychological Bulletin* 82:213-225. Ross (1977) The intuitive psychologist and his shortcomings: Distortions in the attribution process. In Berkowitz (ed.) *Advances in experimental social psychology* 10:173–220. New York: Academic Press.

[12] Hewstone, Rubin and Willis (2002) Intergroup bias. *Annual Review of Psychology*, 53: 575-604.

[13] Festinger (1957) *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press. This class of effects is often referred to as cognitive dissonance.

[14] The framework was originally developed in the context of changing behaviour for sustainable development. See: DEFRA (2008) *A Framework for Pro-environmental behaviours*, p.53. We also draw on some of the modifications suggested by Lewis (2007) *States of Reason*. London: IPPR.

[15] Cabinet Office Delivery and Transformation Group (2007) *Establishing an effective Customer Insight Capability in Public Sector Organisation*s, p.4.

[16] COI and Cabinet Office (2009) *Effective public engagement: A guide for policy-makers and communications professionals.* Available at: http://coi.gov.uk/documents/guidance/effective-public-engagement.pdf

[17] Applied this way, MINDSPACE can trigger a process of 'double loop learning' – that is, learning about *how an organisation learns*, rather than just solving problems in accepted ways. See: Argyris and Schön (1978) *Organizational learning: A theory of action perspective*, Reading, Mass: Addison Wesley.

[18] Kerswell and Goss (eds.) (2009) *Challenging Behaviour*, p.30. London: Solace Foundation Imprint.

[19] Reeves (2009) *A Liberal Dose? Health and Wellbeing – the Role of the State*.

[20] One of the "responsibilities" in the draft NHS Constitution states that 'You should recognise that you make a significant contribution to your own, and your family's, good health and well-being, and take some personal responsibility for it.' Department of Health (2009) *The NHS Constitution*, p.9. See Brown (2009) *Personal Responsibility*, Chapter 7.

[21] This point is made at greater length in Reeves (2009), p.22.

[22] Most famously, Sir Isaiah Berlin argued against this way of thinking in his 1958 essay 'Two Types of Liberty', in Berlin (2002) *Liberty*. Oxford: Oxford University Press.

[23] See: Swift (2007) *Political Philosophy: A beginner's guide for students and politicians*, p.84. Cambridge: Polity.

[24] Morowitz et al. (1993) Does measuring intent change behaviour? *Journal of Consumer Research* 20:46-61; Sherman (1980) On the self-erasing nature of errors of prediction. *Journal of Personality and Social Psychology* 39:340-350.

[25] There are very good reasons for rejecting any such actions out of hand, but this is not to say they would not work, if considered acceptable. Although it sounds far-fetched, priming for improved health has repeatedly shown to produce results in laboratory settings, as explained above. Of course, applying this in the real world would be more complex. See: Bargh (2006) What have we been priming all these years? On the development, mechanisms, and ecology of nonconscious social behaviour. *European Journal of Social Psychology* 36:147-169.

[26] Home Office (2006) *Violent Crime Overview, Homicide and Gun Crime 2004/2005.* Home Office Statistical Bulletin 02/06.

[27] Home Office (2007) *Homicides, Firearm Offences and Intimate Violence 2005/2006*. Home Office Statistical Bulletin 02/07.

[28] Walker et al. (eds.) (2009) *Crime in England and Wales 2008/9, Volume 1*, p.6, p.10. There is some evidence from NHS hospital episode statistics that 'assault by a sharp object' admissions increased by 30% between 1997 and 2005. Maxwell et al. (2007) Trends in admissions to hospital involving an assault using a knife or other sharp instrument, England, 1997-2005. *Journal of Public Heal*th 29(2):186-198, 187.

[29] Sharp et al. (2004) *Delinquent youth groups and offending behaviour: Findings from the 2004 Offending, Crime and Justice Survey*, p.v.

[30] Sharp et al. (2004), p.vi.

[31] Knight (2009) How to really hug a hoodie. *Prospect Magazine*, Issue 164, 24th October.

[32] Knight (2009) How to really hug a hoodie. *Prospect Magazine*, Issue 164, 24th October.

[33] Skogan, et al. (2008) *Evaluation of Ceasefire Chicago: Executive Summary*, p.1. Northwestern University. A graph of results can be seen at http://www.ncjrs.gov/pdffiles1/nij/188741.pdf.

[34] Kennedy et al. (2001) *Reducing Gun Violence: The Boston Gun Project's Operation Ceasefire*, p.58. US Department of Justice.

[35] Skogan, et al. (2008) *Evaluation of Ceasefire Chicago: Executive Summary*, p.1. Northwestern University.

[36] Knight (2009) How to really hug a hoodie. *Prospect Magazine*, Issue 164, 24th October.

[37] See www.actiononviolence.com.

[38] Home Affairs Select Committee. (2009) *Knife Crime*, para 171.

[39] Pensions Commission (2005) *Executive Summary.*

[40] DWP (2008) *Royal Assent – Workplace Pension Reform – 15 Key Facts*. At: http://www.dwp.gov.uk/docs/key-facts-royal-assent.pdf

[41] Pensions Commission (2005) *Executive Summary.*

[42] DWP (2004) *Family Resources Survey.*

[43] This is known as the 'status quo bias'. Financial Services Authority (2008) *Financial Capability: A Behavioural Economics Perspective*, p.33.

[44] This is known as 'time discounting'. Frederick, Loewenstein and O'Donoghue (2002) Time discounting and time preference: a critical review. *Journal of Economic Literature* 40:350-401.

[45] This is analogous to the model developed by Becker for rational addiction. Becker and Murphy (1986) A theory of Rational Addiction. *Journal of Political Economy* 96: 675-700

[46] Pensions Commission (2005), p.3.

[47] Thaler and Sustein (2008).

[48] Madrian and Shea (2001) The power of suggestion: Inertia in 401(k) participation and savings behavior. *Quarterly Journal of Economics* 116:1149-1187.

[49] Data taken from Madrian and Shea (2001).

[50] DWP (2008) *Royal Assent – Workplace Pension Reform – 15 Key Facts*.

[51] DWP (2009) *The use of default options in workplace personal pensions and the use of group self invested personal pensions for automatic enrolment: Consultation on draft guidance.*

[52] DWP (2009b) *Impact Assessment of Workplace Pension Reform (Completing the Picture) Regulations 2010*, p.2.

[53] DWP (2009b), p.2.