BEHAVIOURAL SCIENCE IN THE PRIVATE SECTOR: GUIDELINES FOR AVOIDING MISUSE

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This document emerged from a discussion with practitioners about how to get the most out of behavioural science in the private sector, and how to avoid its misuse. It traces the rise of behavioural science in the public sector and its uptake in the private sector. It also reflects on the debate that has been taking place as to whether taking advantage of people’s inherent cognitive biases could be considered to be unethical.

We conclude that, used well, behavioural science in the private sector does not have to be deceitful, covert or manipulative. Businesses can and should use behavioural science for the public good. Furthermore, consumers have a different relationship with private companies than they have with politicians and policy makers. They expect that companies will want to make a profit. They expect that companies will try to sell to them. There is an implicit contract between the consumer and the brand owner. Businesses may, in fact, have more licence to use behavioural science than the public sector, provided they are not dishonest.

In the past, there has been public unease about the use of the psychological sciences in the commercial sector. This produced a backlash against apparently subversive techniques, but also resulted in the setting up of a code of practice supported by the industry. The same may be needed with respect to the use of behavioural science.

As a starting point, we suggest the following guidelines:

1. Behavioural interventions built on untruths are unacceptable.
2. Nudges that make it difficult for people to choose otherwise are unethical: people must have the freedom to choose differently.
3. Behavioural interventions should be scrutinised for unintended, as well as intended, consequences.
4. Consent should not be hidden: interventions should be transparent wherever possible.
5. Practitioners should be comfortable to defend their approach, methods and motives in public.

The remainder of this document explains how we reached these guidelines. In the spirit of this discussion, we invite and welcome your feedback. hrr_freshperspective@innoviatech.com
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2 INTRODUCTION

Behavioural science is not really a new thing. The systematic study of how humans behave individually and with each other has been with us for many years, and in many guises. The discipline now called ‘behavioural science’ has emerged from many others, including psychology, anthropology, sociology, and economics. It came to the fore as ‘behavioural economics’ in the 2009 book Nudge, written by an economist (Thaler) and a legal scholar (Sunstein), describing an approach to changing behaviour based on manipulating the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives. In practice, this means that policy makers in the public sector, and increasingly those in the private sector too, present information in such a way as to take advantage of predictable patterns of behaviour to encourage people to make a particular choice without coercing them.

Thaler and Sunstein’s ideas were a development of work done by two psychologists, Daniel Kahneman and Amos Tversky, who were curious about why people often made irrational economic choices. According to classical economics, people act rationally – as if they had complete foresight and information. However, Kahneman and Tversky demonstrated that this is far from the truth. Humans do not analyse every decision in forensic detail, and decisions can be suboptimal: we use rules of thumb or ‘heuristics’ to make the decisions easier for us. These systematic cognitive biases can be useful for some decisions but for others, the biases may lead to outcomes that are not as good as we might have hoped.
The list of known cognitive biases has grown to enormous proportions. Wikipedia lists over 180 decision-making, social, memory-related and other behavioural biases. It is easy for the layperson to think that this list is all there is to behavioural science. Unfortunately, influencing people’s behaviour is not that simple.

The field of behavioural economics that informs the concept of nudging is mainly about decision-making. This is a cognitive approach: it focuses on mental processes such as thinking, memory and learning. Humans have limited cognitive processing abilities because we have to make multiple, rapid decisions every day. We use heuristics (mental shortcuts) because we do not have the time or the mental bandwidth to examine every decision in detail. But behaviour is more than just decision making. A lot of behaviour occurs at the emotional, automatic, or habitual level and within a social and cultural context.

There are two aspects to consider when using behavioural science in the private sector: First, behavioural science, used well, is more than taking advantage of cognitive biases. Second, behavioural science is a powerful tool that can change people’s behaviour, and so we need some guidelines to ensure we use it wisely.

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In 2008, the Behavioural Insights Team (BIT) was set up in the UK: a government department created with the explicit brief of making policy simpler, more effective, and easier to implement. The Social and Behavioural Science Team (SBST), in a similar role, was set up in the USA in 2014. The decision to form these teams was founded on the premise that people behave in predictable ways. By changing the choice architecture (how we frame what we offer to people), we can take advantage of inherent biases, which make people more likely to do what is right for them and best for the government. It is a more acceptable, and relatively inexpensive, way of getting people to do things you want them to do.

And it would seem to have been relatively successful. The 2015–2016 BIT Annual Report describes an intervention to reduce prescription of antibiotics. In a randomised controlled trial, 800 general practitioners were sent a letter from the Chief Medical Officer, which stated that ‘the great majority (80 percent) of practices in your area prescribe fewer antibiotics per head than yours.’ The letter also contained three simple, actionable alternatives to immediate prescriptions (such as delayed prescriptions, in which the patient picks up the prescription at a later date if it is still needed). These were compared with 800 general practitioners who did not receive this letter. Over six months, those who received the letter reduced their antibiotic-prescription rates by 3.3 percent more than those who did not, leading to 73,406 fewer antibiotic prescriptions.

Similarly, the SBST reported that they had piloted an intervention to increase enrolment in the Thrift Savings Plan (TSP). Service members had to make an active ‘yes’ or ‘no’ choice about whether to contribute to TSP upon their arrival at a new military base. This increased TSP enrolments by 8.3 percent.

These types of interventions are based on well-researched evidence of how people behave. In the first example, it is known that people respond to peer group pressure, hence the reference to the prescribing rates of local practices. In the second, the evidence suggests that people are more likely to do something once they have made an overt commitment, hence the requirement to make an active choice about contributions.

These two examples describe simple interventions that encourage the change of a specific behaviour. There is no underlying theory or model being used to think about the overall decision-making process. While this is effective in some situations, there is much more to behavioural science than just using behavioural biases and changing the choice architecture.

To understand more complex cases, we can use evidence-based theories and models of behaviour. Models have three purposes: they are used to understand something that already exists (such as a map of the world), to make something exist (such as a blueprint), or to provoke new thinking (such as when we think about what action causes an effect). These representations of the real world are useful to us: they enable us to make sense of what is happening, and define the relationship between cause and effect.

We all carry models in our head, although we may not explicitly acknowledge this. We have models of the way we should behave when we order food in a restaurant, or of what we should do when going to see the doctor. Different groups of people may be carrying different models in their heads about the same things. Take ‘going to see the doctor’ as an example. Some people will see the doctor as the expert, and will expect to be given direction about treatment without being overloaded with information or needing to ask questions. Others will see the doctor as an advisor, and will expect to be informed of different options, and be active in making their treatment decision.
Mental models are the assumptions, generalisations, theories, beliefs, and images that we hold about ourselves, others, institutions, and phenomena. These models influence how we behave. Changing behaviour is often a dialogue between the mental models of different people: almost all change involves bringing people together who have different perspectives. Models can provide a common language for describing and understanding a situation. Having some theoretical underpinning before we make a decision about an intervention increases the likelihood that we will be focusing on the aspects that actually influence behaviour. As Kurt Lewin said, ‘there is nothing as practical as a good theory’.

Theories are a proposed system of ideas or factors intended to explain something, and models define how these factors are related to and influence each other. Theories are useful because they explain why, when, and how a behaviour does or does not occur; and they show the important sources of influence that can alter the behaviour. They help us to generate testable hypotheses and to make predictions about what might happen in the future.

The models that have been developed to explain behaviours recognise that behaviour is a complex and dynamic system that is influenced by multiple factors. They demonstrate that there is unlikely to be one simple solution to change behaviour: many things influence our intentions, and our motivations can change from minute to minute.
The Theory of Planned Behaviour (TBP) is a commonly used model in health promotion and marketing, and is based on the assumption that the best predictor of behaviour is the intention to perform that behaviour. Intentions are influenced by three factors: the attitude towards the behaviour, the subjective norms that surround the behaviour, and the amount of perceived behavioural control. It is a relatively simple model with only four explanatory factors, and has come in for a great deal of criticism because, on average, it appears that it is capable of predicting only 34% of the variance in behaviour. There have been calls for it to be retired, and several researchers have modified it to improve its utility. Nevertheless, it has been found to be useful in some circumstances, and it has been argued that much of the problem is that it has been applied indiscriminately; a case of ‘poor use of the theory rather than the theory being poor’.

The value of the model lies in the fact that it is parsimonious, and a behavioural scientist can easily highlight and try to alter the relevant underlying beliefs. Recently, Innovia used a modified version of the TPB to good effect for Gillette, because we wanted to know the relative importance of social norming and self-efficacy to understand why Chinese men decide to use (or not use) wet razors. The value of the model was that it enabled us to identify the main drivers of behaviour, and to use this knowledge to inform communication of the technical benefits of wet shaving in a culturally relevant way.

Using evidence-based theory and models that show the decision-making process goes beyond the mere exploitation of cognitive biases. It allows us to gain a deeper understanding of what drives people to do what they do, not just what they say they do.
**4 USE AND MISUSE OF BEHAVIOURAL SCIENCE**

As we’ve shown, behavioural science can be used to change people’s behaviour to benefit them. This raises some ethical questions: we need to use this tool wisely. Seemingly trivial changes to the way we convey information, the way we arrange choices, or how we use ‘default’ choices can affect how people behave. There has been a lively debate in the public sector about the ethics of using ‘nudges’ that could be relevant for the private sector. What do we need to be aware of when we apply behavioural science? Let’s look at how nudging can be misused.

### 4.1 Misuse

Critics of nudging say that it is deceitful and manipulative. They are concerned that nudging relies on exploiting a variety of human biases by manipulating the environment, and taking advantage of a pattern of behaviour without a person’s consent\(^{11}\).

When we manipulate a person’s choice, even if it is for their own good, we are treating them like a child, reducing their autonomy by altering their free will to make a decision\(^{12,13}\). Nudging has been described as ‘soft paternalism’, as it does not respect people’s choices. Furthermore, nudges are not transparent. Consumers are currently concerned about hidden consent (the sort of consent where users are charged exorbitant rates if they forget to specify what they want).

A potentially bigger problem is the source of the nudge. The people who are doing the nudging may get it wrong. The nudgers have biases of their own and do make mistakes\(^{14}\). They may want to push ahead with a programme because they feel it is for the good of the person being nudged and may become annoyed when the people being nudged disagree with them.

It has also been said that the nudgers are too quick to portray people’s preferences as irrational when they may be making decisions based on sound, or at least reasonable, grounds\(^{15}\). People may be predictable in their irrationality but they are not stupid. They may know that they need to exert self-control to select the healthy salad over the chips or pasta but deliberately choose not to, especially if they are not currently on a diet!

**Default options** are options selected automatically unless an alternative is specified, and setting defaults is an effective tool in choice architecture when there is inertia or uncertainty in decision making (Samson, 2014).

**Paternalism** refers to acting for the good of another person against their will or without their consent. Hard paternalism occurs when you prevent someone from taking a harmful action, like banning people from swimming in a dangerous place. Soft paternalism occurs when you coax someone to prevent them from taking a harmful action, like putting up signs on the beach telling people not to swim at specific times.

### 4.2 Good use

Proponents of ‘nudging’ argue that, by definition, a nudge alters the choice architecture without coercing people, so respect for choice is maintained\(^{15}\). Moreover, many nudges are intended to improve people’s welfare and in such cases it would be ethically wrong not to nudge them\(^{16}\). In fact, nudges can promote autonomy: making decisions becomes easier, so people are freed up to focus on more important concerns. The paradox of choice describes the fact that just because some choice is good, it does not mean that more choice is necessarily better. Too much choice can be overwhelming and can lead to poor decision making. Using nudges helps people to make more rational and better decisions\(^{17}\).

Additionally, nudges do not have to be covert or manipulative. Nudges can be transparent and still be effective when the reasons behind them are explained\(^{18}\).

Although the nudgers may be biased, proponents of nudging say that providing the nudgers act with the best intentions, base their actions on the available evidence, and that people have consented to being nudged, then this method is fair, even though there may be a risk of error\(^{19}\).
4.3 What can practitioners in the private sector learn from this debate?

This debate is by no means resolved. However, practitioners of nudging in the private sector can learn from the discussion. While some businesses will not be as ethical as we would wish, it is not in the interest of most companies to be dishonest and deceitful with their customers because of the potential reputational damage.

Persuasion using behavioural science does not have to be deceitful or manipulative. Nudges do not have to be covert, and consent does not have to be hidden. We can help people to make better decisions by making the choice more intuitive. We can use science and evidence to make better choices, and to design products and services that actually satisfy consumer needs.

There are some additional factors to be taken into consideration. Consumers have a different relationship with private companies than they have with politicians and policy makers. They expect that companies will want to make a profit. They expect that companies will try to sell to them. There is an implicit contract between the consumer and the brand owner: ‘We know what you are up to, but we will listen to what you have to say. We think this is OK as long as you inform and entertain us, and you don’t lie’. Frequent exposure to marketing and advertising means that people are savvy consumers: they know how to decode the messages. People expect a level of ‘game playing’ from companies that they would not tolerate from a nanny-state government. In a 2015 Nielsen survey, 63 percent of respondents claimed to trust adverts in newspapers, and 58% trusted adverts in magazines. In contrast, only 21% trusted politicians.

In summary, the use of behavioural science does not have to be deceitful, covert or manipulative. Businesses can use behavioural science for good, and may have more license to use behavioural science than the public sector, provided they are not dishonest. There are those that believe that businesses will always tend towards unethical behaviour if left unchecked, but it is a counsel of despair to assume that all businesses are dishonest or that there is little we can do to ensure that we use behavioural science in an ethical manner. We can, and must, do better.

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5 LEARNING FROM HISTORY: THE HIDDEN PERSUADERS

Before we begin to outline what sort of guidelines might be developed, it is worth pausing to note that this is not the first time that a psychological approach from the private sector has been criticised. In the mid-twentieth century, the case of the Hidden Persuaders raised similar ethical questions.

In 1957, a journalist called Vance Packard published a book called The Hidden Persuaders. Packard argued that the advertising industry was using unscrupulous techniques to persuade unsuspecting consumers to buy products they didn’t need. His major criticism was in the use of ‘motivational research’. Motivational research, like nudging, had its foundations in psychology. The basic premise was that consumers could not be trusted to behave rationally, did not always know what they wanted, and did not always tell the truth to market researchers. Motivational research techniques aimed to dig deeper into understanding consumer preferences by investigating their preconscious and subconscious motivations. The tools and techniques of the motivational researchers included in-depth interviews, projective tests, the use of hidden symbols to tap into our innermost desires and supposedly-subliminal advertising, which tapped into the unconscious mind.

Packard described an experiment that showed that moviegoers could be induced to buy more Coca Cola if they were repeatedly shown ads for Coca Cola for 0.0003 seconds. Despite the facts that the experiment could not be replicated, that there was no other evidence that subliminal advertising worked, and that the advertising industry was not actually using subliminal advertising, there was widespread moral outrage at the idea of such manipulation. The book became a bestseller.

It is interesting to learn how society reacted when this book was published, as there are parallels with the debate around nudging today.

First, there was governmental overreaction. Despite the lack of evidence for the effectiveness of subliminal communication, the Federal Trade Commission and the Federal Communications Commission issued policy statements prohibiting the use of this advertising technique.

Second, there was a concerted effort to produce some guidelines. The advertising and research community responded to the criticisms made by Packard and reviewed the methodologies they used. There was a move to ensure that advertising claims were ‘legal, decent, honest, and truthful’. In 1961, the UK Advertising Standards Authority was set up to ensure that advertising worked for ‘the benefit of consumers, business and society’. In the USA, the Federal Trade Commission stated that ‘under the law, claims in advertisements must be truthful, cannot be deceptive or unfair, and must be evidence based’.

As we have already noted, people did not reject advertisements. Trust in advertising still remains surprisingly high. There are several reasons for this. The guidelines acted to reassure people, representatives from across the industry came together to enforce the guidelines that regulate their activities, and consumers were given a channel through which they could directly express their concerns to the enforcers. This system works well. In 2014/5, the Advertising Standards Authority resolved 29,554 complaints from the public and as a result 4,584 ads were either withdrawn or amended.

In this instance, a voluntary code backed by adjacent legislation has yielded an approach that is acceptable to all parties.
It’s clear that, to take an ethical approach to nudging, we need to be aware of both the advantages and the disadvantages of this technique. We need to avoid the (unfounded) publicity storm surrounding the Hidden Persuaders. We can navigate the ethical pitfalls by setting out some guidelines for appropriate ethical use of behavioural science in the private sector.

At present, no country forbids companies or policymakers from using biases, nor is there any overt form of ‘behavioural economics regulation’. There is some evidence that policy makers are aware of behavioural science intentions when they make laws to protect consumers. In one example, the European Commission managed to prevent Google from bundling products based on the default design of the content, and in another, there has been some legislation about privacy contained in the General Data Protection Regulation. This regulation specifies that consent must be voluntary, come from a request, and be easy to withdraw from. It must also clearly explain whether it is necessary, or only preferable, to give consent for the company to access or process your data.
There are cultural philosophical differences between the Americans and the Europeans. In the USA, there is a cultural tenet that people should be completely free to make their own choices, even if the outcome is poor. Thus, protecting consumers from corporations is seen as highly paternalistic: if people behave differently because of their biases, it is a simple mistake. The state should not prevent people from making their own mistakes. In contrast, the Europeans believe that it is the role of the state to protect consumers from companies that encourage poor choices.

On 15th November 2016, I proposed four tentative guidelines for using behavioural science in a LinkedIn blog post, ‘Is it ethical to take advantages of peoples’ inherent biases? Four principles for avoiding the misuse of behavioural science in business’, and asked for feedback from practitioners. These broad guidelines suggested that limiting choice or making it difficult for people to choose otherwise are unethical; behavioural interventions built on untruths are unacceptable; and that behaviourally based interventions should be scrutinised for unintended, as well as for intended, consequences.

The blog received many responses, but opinion was divided. Some people felt that this was a doomed endeavour. One response stated, “Nudging is deceit. It would not pass scientific merit. It’s that simple. Find a different way where you don’t have to play mind games with your participants.” Another felt that the use of nudges in the private sector was not appropriate. “To me, this implies that nudges are a public policy tool, not a tool for private sector marketing. As others have commented here, private marketers use people’s biases and limited information to sell things and make profits, not to promote the greater good.”
The vast majority of responses, however, were supportive. Several people commented that this is an important issue and although difficult, “it is laudable to adopt specific ethical rules.” Some commented that, given the increase in the number of behavioural architects operating in the private sector, the time is right to instigate a code for practitioners. Several suggested that a code would help marketers to take personal responsibility and “to examine that line in every case to determine whether it has been crossed. Taking that time serves the marketer, the company, and its customers well for the long term”.

Respondents had different concerns and priorities: the main themes were concern about lack of transparency, inadequate sharing of information, and the errors that can be made by nudgers if they, themselves, are biased. There was also a recognition that any guidelines that are developed need to go beyond ‘nudging’ to include the broader use of behavioural science interventions. To this end, it was suggested that practitioners could take an online assessment to be accredited and included in a register of names of individuals who comply with a professional code of ethics.

It is early days for the application of such a young science and we are some way off creating a register or from having a professional code. In the spirit of this discussion, as a starting point, I suggest the following guidelines:

1. Behavioural interventions built on untruths are unacceptable.
2. Nudges that make it difficult for people to choose otherwise are unethical: people must have the freedom to choose differently.
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7 REFERENCES


