

COVID-19: behavioural economics in the spotlight

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The COVID-19 pandemic is by definition a global problem. Nonetheless, different countries have adopted different solutions, with varying degrees of success. In the UK, there has been extensive media coverage of the science behind the COVID-19 lockdown, including both the epidemiology (how the virus is transmitted) and the behavioural science (how people behave under different policy interventions).

The lay person would be forgiven for believing that the two disciplines are in conflict with one another—and as if they were somehow substitutes. The UK media is certainly giving the impression of an almighty battle raging over whether behavioural science (of which behavioural economics forms a part) should have any say in COVID-19 policymaking.



One issue that has attracted criticism is ‘behavioural fatigue’—the idea that people will get fed up with lockdown, such that it should not be implemented too early. David Halpern, a psychologist who leads the Behavioural Insights Team,¹ majored on this concept in a briefing to journalists in early March.² The implication was that ‘nudges’ should be adopted initially, with stricter lockdown measures used only as more people become infected.

Indeed, UK policy was initially light-touch; however, this gave way to the stricter lockdown conditions that now apply. A recent article in *The Guardian* reflects on the initial policy, criticising the behavioural fatigue hypothesis:³

[...] the empirical evidence on behavioural interventions in a pandemic is limited. Shortly after Halpern’s interviews, more than 600 behavioural economists wrote a letter questioning the evidence base for behavioural fatigue. Rightly so: a rapid evidence review of behavioural science as it relates to pandemics only fleetingly refers to evidence that extending a lockdown might increase non-compliance, but this turns out to be a study about extending deployment in the armed forces.

The column notes that this is a ‘common critique’ of behavioural economics:

[...] some (not all) members of the discipline have a tendency to overclaim and overgeneralise, based on small studies carried out in a very different context, often on university students in academic settings.⁴

The behavioural fatigue discussion continues, and has taken up a lot of airtime. Arguably, this has been at the expense of a wider discussion of what behavioural economics is, and what it has to offer. In what follows, we tackle four critiques:

- that behavioural economics boils down to nudge theory;
- that behavioural studies lack robustness and external validity;
- that behavioural nudges don’t work, but other interventions do;
- that behavioural economics has little to say about compliance.

In doing so, we draw out some important lessons about behavioural economics.

1. Behavioural economics ≠ nudge theory

Behavioural economics is the application of psychology (and other disciplines) to economics to explain why individuals, organisations and governments behave as

they do (rather than as a standard ‘rational’ model of economic agents would predict). It takes account of behavioural biases to gain a richer understanding of market problems and the ways in which things can be put right. Behavioural market analysis illuminates the true cause of market failures—even if the solution is to use a good old-fashioned remedy such as fines, banning behaviours and regulation.

Before designing a policy intervention, it is necessary to understand the problems at hand. Do people have problems with self-control? Can they process information quickly? Can they correctly assess the risks of an action? Do they care about wider society? Are there certain people who are particularly vulnerable?

Only then can the appropriate remedy be designed. Remedies lie somewhere along a spectrum—from paternalism at one extreme through to libertarianism at the other, as shown in Figure 1 below.

Figure 1 Policy spectrum to deal with behavioural issues



Source: Oxera.

Figure 1 highlights that libertarian paternalism—the formal term for nudging—is but one of the interventions available to policymakers aiming to correct a market failure that has behavioural aspects. A nudge is where the ‘choice architecture’ is modified, without reducing the options available to individuals. For example, making organ donation ‘opt-out’ rather than ‘opt-in’ nudges people to become organ donors while allowing them to choose otherwise.

As noted in the Guardian article, the idea of nudging was promoted by Richard Thaler and Cass Sunstein in a book they published back in 2008.⁵ However, behavioural interventions are not necessarily the best fix for behavioural problems. Nudge theory and behavioural economics are not synonymous terms (more on this later).

2. Behavioural economics = greater empiricism

The sibling of behavioural economics is experimental economics. Behavioural economics exposes itself to failure more openly than some other branches of economics because its propositions can often be trialled and tested.

These can be in the form of randomised controlled trials through real-world

1. See the Behavioural Insights Team website, <https://www.bi.team/>.

2. See: Hutton, R. (2020), ‘Keep Calm and Wash Your Hands: Britain’s Strategy to Beat Virus’, Bloomberg, 11 March.

3. Sodha, S. (2020), ‘Nudge theory is a poor substitute for hard science in matters of life or death’, *The Guardian*, 26 April.

4. Ibid.

5. Thaler, R. and Sunstein, C. (2008), *Nudge: Improving Decisions about Health, Wealth, and Happiness*, Yale University Press.

experiments, laboratory experiments, or online experiments. The issue of generalisation of such experiments, and their replicability, is discussed at length within the economics community and is a subject within itself.⁶ While there may be limitations to experiments, it is better to trust an imperfect yet well-designed and replicated experiment than to rely on untested theory. The efficacy of results obtained in one context can be checked against others.

Medical science also has significant issues with the generalisability of clinical trial results, but this does not mean that such trials should not be undertaken. What matters is that we should not take the results out of context. What do trials on mice mean for humans? What do trials on healthy people mean for the unwell? Replicability and multiple contexts are important to medical science and behavioural science alike.

3. Do nudges actually work?

As alluded to above, nudges have been used by policymakers in the UK during the COVID-19 response. This included the 'Happy Birthday' 20-second handwashing rule, and, under lockdown, the more directional 'Stay home; protect the NHS, save lives' campaign. A number of points are worth making here.

First, it is difficult to generalise about all nudges. Like any field, some theories will be effective while others won't. Nevertheless, the extensive testing gives us a good idea of which nudges are much more likely to be effective than others.

Second, the effectiveness of a nudge depends on the context. Again, there is an extensive literature on what environments are particularly conducive to different types of nudge.⁷

Third, it is worth noting that nudges are often preferable given their low-cost nature—it typically does not cost much to implement a nudge, and so even a very mildly effective nudge can be worthwhile. However, it is important to recognise that focusing on one behavioural bias, while ignoring other factors in the environment, can lead to unintended consequences. For example, when some US Army civilians were auto-enrolled into pensions, they ended up with more mortgage and car debt as a result—the overall effect of the nudge on their long-term wealth is unclear.⁸

More paternalistic interventions can also lead to problems. A well-known example is a scheme introduced in Israel to incentivise parents to drop off their children on time at day-care centres. This involved a standard approach—levying fines. The number of latecomers more than doubled. The psychological explanation? Absent the

fine, parents were intrinsically motivated to drop their children off on time. Once the fine was introduced, this moral imperative was switched off—the fine represented a price for a product ('lateness') that parents were entitled to buy.⁹

With regard to the COVID-19 policy response, we should note that most interventions being implemented in the UK now are not nudges. We are not being nudged into a lockdown. We are being told what to do. We cannot go to bars or restaurants. We cannot go to other people's houses. We cannot come within 2 metres of other people in the supermarket. We do not have the pre-existing level of choice—the current restrictions are paternalistic rather than libertarian. However, these measures are being combined with nudges through the messaging used; both are needed to ensure compliance.

4. The science of compliance

Epidemiology is the study of the incidence, distribution, and control of diseases. Clearly, it helps to understand the ways in which interventions alter the incidence of diseases by changing people's behaviour, and this is where behavioural science comes in. However, there has been undue focus on the issue of behavioural fatigue, and whether this is a relevant concept or not.

Let's ignore behavioural economics for a moment. How then do we enforce social distancing? We could assume people are super-rational and self-interested. This would mean relying mainly on police powers to hand out warnings, fines, and even the prospect of imprisonment to deter people from breaching social distancing.

However, this would be missing a few tricks from behavioural economics (not to mention that it would be costly to enforce and take up valuable police time).

Reliance solely on rationality in the current situation is unlikely to ensure compliance. We have cognitive limitations and are subject to biases. For example, we may not understand the message due to information overload, or we may be overconfident and think we won't get caught by the police for breaking the rules. In contrast to the rational self-interested model, we do care about other people and what others think of us (these are our so-called 'other-regarding preferences').

How then can we use behavioural economics to increase compliance? One answer lies in social norms and social stigma. Social stigma reflects the new norms established under lockdown and increased community involvement. Those flouting the rules may be reported by worried neighbours who are scared of the impact both on themselves and on others,

6. For example, see Duch, R., Laroze, D., Robinson, T. and Beramendi, P. (2020) 'Multi-modes for Detecting Experimental Measurement Error', *Political Analysis*, 28:2, pp. 263–83, which explains how the context for a survey-based experiment can affect the results. See also Belot M., Duch R. and Miller L., (2015) 'A comprehensive comparison of students and non-students in classic experimental games', *Journal of Economic Behavior & Organization*, 113, pp. 26–33.

7. For example, see Meder, B., Fleischhut, N. and Osman, M. (2018), 'Beyond the confines of choice architecture: A critical analysis', *Journal of Economic Psychology*, 68, pp. 36–44.

8. Beshears, J., Choi, J. J., Laibson, D., Madrian B. C., and Skimmyhorn, W. L. (2017), 'Borrowing to Save? The Impact of Automatic Enrollment on Debt', 6 December.

9. This phenomenon is known as 'crowding out of intrinsic motivation through extrinsic incentives'. It draws upon cognitive evaluation theory. The Israel example is explained by in Gneezy, U. and Rustichini, A. (2000), 'A fine is a price', *The Journal of Legal Studies*, 29:1, pp. 1–17.

increasing the perceived probability of punishment. Behavioural interventions can make these points particularly salient for potentially non-compliant individuals.

An example of harnessing social norms to reinforce a paternalistic policy can be found in the UK ban on smoking in public places, which came into effect in 2007. Previously, the measures had been voluntary for places such as pubs and restaurants to implement as they saw fit. The mandatory ban achieved almost immediate compliance, with little formal police or civil enforcement.¹⁰

From a behavioural perspective, the smoking ban established a new norm: indoor smoking was often challenged by (a) non-smokers, who, having obtained the right to clean air, did not want to lose it, and (b) by compliant smokers, who were bearing the costs of change and therefore objected to others ignoring the sacrifices being made.

Thus a good understanding of our biases, and how they can be addressed or utilised in policy, can help to achieve positive outcomes. Behavioural change can happen quickly if reinforced by making helpful social norms salient. Consistent, simple messaging (e.g. 'stay home; protect the NHS; save lives') does not seek to educate us in the detail of epidemiology, but to persuade us through simple language and behavioural techniques.

The idea of 'sacrifice', as an emotive rather than a rational tool, is also important. We are all making sacrifices under lockdown, and those who are thinking of flouting the rules know this.

That being said, compliance driven by social norms is likely to vary by culture. What works in one country may not work in another—interventions must be evidence-based for each context in which they are applied, and tested where possible. It is always important to know whether a particular finding can be generalised or not.

5. Let's get together...

The two sciences, epidemiology and behavioural economics, are complementary. We need good theory and good evidence on both fronts.

Behavioural interventions such as nudges are not necessarily the best fix for behavioural problems; more interventionist approaches involving restrictions may be needed. These have indeed been implemented in the case of COVID-19. Whether the right measures have been taken at the right time is a question for future discussion. Behavioural science will also play a part, alongside epidemiology, in determining when lockdown restrictions might best be lifted.

Different countries are adopting different solutions, and time will tell in terms of which are more successful (for example, in the Netherlands and Sweden less stringent measures have been in place compared to the UK, whereas more stringent measures have been adopted in France and Italy).

Behavioural economics provides insights on the limitations and traits we face as humans, and the way that policy can be designed to deliver good outcomes. Better to use the best available evidence on human behaviour than to ignore it.

10. For a review of the drivers and impacts of the UK smoking ban, see Barbry, C., Barber, S. and Hartwell-Naguib, S. (2015), 'Smoking in public places', House of Commons Briefing SN/SC/4414, 27 March; and Local Government Association (2017), 'A breath of fresh air: smokefree workplaces 10 years on', 13 June.

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