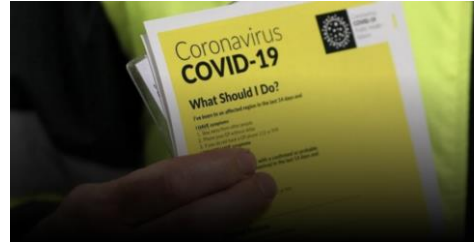




An Chomhairle Náisiúnta Eacnamaíoch agus Shóisialta  
National Economic & Social Council



## Secretariat Covid-19 Working Paper Series

### Covid-19 & Behavioural Change

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**NOTE:** The NESC Secretariat Covid-19 Working Paper Series is to provide timely, concise analysis for policy-makers and other stakeholders. This research work, in normal circumstances, would be used to produce NESC reports, which would be published following detailed deliberation by the Council. The Council has members appointed by the Taoiseach, comprising representatives of business and employers' organisations, trade unions, agricultural and farming organisations, community and voluntary organisations, and environmental organisations; as well as heads of Government departments and independent experts. By putting it in the public domain earlier, it is hoped this research can help those now working on Ireland's response to Covid-19. It will also inform Ireland's discussion of its recovery from the Covid-19 crisis. These papers are un-refereed material and are a work-in-progress by members of the Secretariat. The authors are solely responsible for the content and any views expressed therein, and welcome any comment on these papers (email [info@nesc.ie](mailto:info@nesc.ie)). Working papers may be downloaded for personal use only. Given the nature of the crisis, these working papers are likely to be updated on a regular basis. This will be done in as timely a manner as possible.

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## Introduction

**Behavioural Insights:** An inductive approach to policy making that combines insights from psychology, cognitive science, and social science with empirically-tested results to discover how humans actually make choices.<sup>1</sup>

Research at the National Economic and Social Council (NESC) in recent years has applied elements of behavioural science to policy challenges, most specifically to addressing climate change.<sup>2</sup> Covid-19 is similar to climate change in that, if the challenge is to be met, it requires significant behavioural change by the population. The NESC Secretariat's 2012 work found that climate change was, and is, a challenge where 'effective communication can help to create a sense of fairness in resulting policy measures. This can be a powerful force in driving behaviour and people, moving away from an individualised frame towards one that puts their actions in the context of a large-scale endeavour. It is also important to make climate action relevant to people's lives. Making climate change closer psychologically and the potential impacts relevant to people... is also important'.<sup>3</sup>

The approaches taken to research in NESC vary. Drawing from behavioural science and political science, more recent Secretariat research at NESC finds that in a context of uncertainty, how a problem is framed can have a significant impact on subsequent decisions taken to address that problem and can lead to more progress in challenging policy areas.<sup>4</sup> All of this is true of the current Covid-19 challenge. The response must include driving individual and group behavioural change, and the problem must be framed in a way that positively impacts decisions and delivers speedy progress.

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<sup>1</sup> OECD, 2020

<sup>2</sup> Moore, 2012; NESC Secretariat, 2012 and 2013; and FitzGerald, 2018.

<sup>3</sup> Moore, 2012: 82 and 83

<sup>4</sup> FitzGerald, 2018

## Covid-19 and the Need for Behavioural Change

Separate from the required enterprise, employment, and income supports, the immediate government response to the Covid-19 outbreak will involve three interlinked categories of measures:

- First, there are critical medical and healthcare responses (detection, diagnosis, and treatment).
- Second, there are important organisational and administrative responses (bed/equipment availability, information sources and announcements, contact tracing capability, etc.).
- Third, a key element of the response to the Covid-19 outbreak will be focused on individual and group behavior. This element is the focus of this paper.

For some, the ‘best responses to Covid-19 involve behaviour change, including social distancing, mask use, and, eventually, vaccine uptake’.<sup>5</sup> Given the highly-infectious nature of the disease,<sup>6</sup> necessary behavioural change includes increased adoption of key hygiene behaviours (hand-washing; cough and sneeze etiquette), not shaking hands or making close contact with other people, reducing social interactions, staying/working at home, keeping a distance of two metres between people, restricting movement, and undergoing longer periods of self-isolation.

The Irish Government has taken measures in response to the outbreak—including behavioural change measures—in a sequence of steps; from closing schools, advising that mass gatherings be cancelled, to ultimately insisting that everybody stay at home in all but a few exceptional circumstances.

Ireland’s National Action Plan for Covid-19 stresses that the risk of national community transmission is high. Therefore, the Plan highlights the need to fight the virus through the adoption of particular individual and collective behaviours such as cough etiquette and social distancing (as well as through public-health mandated measures such as restricting travel to within 2km initially for non-essential reasons).

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<sup>5</sup> Gauri, 2020: 1

<sup>6</sup> People can catch COVID-19 from others who have the virus. The disease can spread from person to person through small droplets from the nose or mouth which are spread when a person with COVID-19 coughs or exhales. These droplets land on objects and surfaces around the person. Other people then catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth. People can also catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs out or exhales droplets. [WHO, 2020](#)

However, bringing about behavioural change on a large-scale is difficult. The Government's Action Plan noted this challenge:

Now is the time for solidarity, community spirit, personal behavioural change and resilience in combatting this infection. We can all play our part in trying to delay the transmission of Covid-19. We are a nation of sociable people and it is difficult to accept that we must now change our behavior to self-distance, self-isolate, and avoid our normal social activities, such as staying home from school, out of pubs, away from sporting activities and working from home.<sup>7</sup>

The Government's Covid-19 Action Plan has preempted the challenge of encouraging meaningful behavioural change. Action 2 of their action plan is to engage with experts in behavioural economics to ensure that evidence is incorporated optimally into planning, communications, and other Covid-19 responses. This is because behavioural economics, along with other evidence, data and information, has provided insights into how to overcome the challenges outlined above.

## Why Behavioural Change is Difficult

The behavioural response to COVID-19 is unavoidably collective. Each person's chance of contracting the virus depends not only on their own behaviour, but also on the behaviour of their fellow citizens.<sup>8</sup>

Behavioural change is difficult for a number of reasons.

Firstly, there is the *collective action* problem. When an individual faces a choice as part of a group, maximising short-term self-interest can result in the entire group being worse off.<sup>9</sup> Actions to contain Covid-19, such as social distancing, have indivisible benefits, where one individual can freeride while another takes on the costs. For example, a gathering of around 60 older people for their weekly card game was explained by one participant as being necessary for their mental health, while a person who attended a bar for St. Patrick's Day despite the coronavirus outbreak stated 'I have to live my life!'.<sup>10</sup> In Ireland, despite the well-publicised rationale and advice, there is evidence that well into the crisis large crowds continued to gather outdoors and failed to maintain social distancing (e.g. one Local Authority in Ireland closed all car parks and facilities at a popular visitor attraction on March 22<sup>nd</sup> as a result of these concerns).

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<sup>7</sup> Government of Ireland, 2020: 1

<sup>8</sup> ESRI, 2020: 8

<sup>9</sup> Ostrom, 1998

<sup>10</sup> Weingarten, 2020

Yet, there is also evidence in the research that many individuals do act in the wider interest and against their own, often co-operating conditionally on the basis of reciprocity. This applies to individuals (e.g. voluntary contributions, pay-as-you-wish pricing), communities (e.g. fishing or farming communities' self-regulating, sharing, and allocating resources), and States (e.g. binding themselves via international agreements).

Secondly, behavioural change means *overcoming habits*: 'habits are highly efficient, designed to free up our minds to concentrate on other matters. By definition, habits operate mostly outside conscious awareness and are hence hard to break through improved education and knowledge'.<sup>11</sup> Habitual routines - such as how we get to school or work - are efficient and time-saving as they allow us to carry out necessary, regular tasks without having to reinvent the wheel for each occurrence. However some habits - such as when we wash our hands, or how we greet friends - may not be as appropriate or good for us in times of pandemic.

Specifically, in relation to changing health-related behaviour, a number of additional difficulties have been identified.<sup>12</sup> Thus, a third problem is the interplay between the problem of 'habit' identified above, and external factors such as the *wider environments and culture*. These combined factors mean that relying on a simple appeal to 'common sense' in order to deliver behavioural change is not likely to be successful.

'If changing behaviour was simply about making common sense simple changes and good choices then we would all be able to make whatever changes we wanted to whenever we wanted, but we do not. So there is clearly more to it than that—ask anyone who has tried to give up smoking or lose weight. It does not matter whether the language is simple or obscure, change is difficult and requires sustained motivation and support. Just getting on and doing it, guided by a government body, is not the answer'.<sup>13</sup>

A fourth problem is a reliance on (or placing too much faith in) information from *expert sources as a driver* of behavioural change. The 'fundamental belief about the role of information and knowledge in determining behaviour is wrong and unscientific. Giving people information does not make them change'.<sup>14</sup>

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<sup>11</sup> ESRI, 2020: 4

<sup>12</sup> Kelly and Barker, 2016

<sup>13</sup> *Ibid*: 110

<sup>14</sup> *Ibid*: 111

Research illustrates that individuals consistently signal that they adopt suboptimal behaviour not because they are not aware of the better alternative, rather it is because 'a host of other things in life get in the way' of them doing it.<sup>15</sup>

Although one underpinning of behavioural insights is an acceptance that we do not always act rationally, care must be taken in *assuming rationality or irrationality* in specific decision contexts. This is a fifth barrier to behavioural change. On the one hand, empirical research shows that people regularly deviate from rational options because, for example, they rely on mental short-cuts, they place more weight on a loss than on a gain of equivalent size, and because their preferences are impacted by seemingly inconsequential variation in the presentation of the choice. For example, patients who are told a medical procedure has a 5 per cent mortality rate are more likely to decline the procedure than those who are informed the same procedure has a 95 per cent survival rate. (See the 'The Foundations of Behavioural Insights' working paper of this site for more on this).

On the other hand, we cannot assume that individuals always act irrationally. As Kelly and Barker explain:

'People have their own reasons for doing things. Behaviours that persist tend to be functional for people. In her seminal work, Hilary Graham noted that women who lived in very difficult circumstances with tightly constrained resources still found money for cigarettes and when asked why, said that sitting down for a smoke was the one opportunity in the day that they got a chance to do something completely indulgent for themselves. In their context, smoking was therefore not an irrational thing to do'.<sup>16</sup>

These five barriers make the behavioural change required to respond to Covid-19, difficult. For individuals to overcome these obstacles they require not just the capacity and ability to do so, they rely on motivational factors that 'propel behaviour. Although parts of the way are limited by constraints that may be difficult to change, the will can be influenced by incentives both within the person and without'.<sup>17</sup> This is where behavioural insights can help.

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<sup>15</sup> Kelly and Barker, 2016: 111

<sup>16</sup> *Ibid*: 112.

<sup>17</sup> Berkman, 2018: 40

### Box 1: What are Behavioural Insights?<sup>18</sup>

Behavioural insights are based on empirical research in the field of behavioural economics which illustrates that human emotions limit our ability to make purely rational decisions, an ability which is fundamental to traditional economics. The UK's Behavioural Insights Team describe the use of such insights is as follows:

Applying [behavioural] insights to create 'behavioural public policy' means governments adopt a more realistic view of human behaviour than they have done in the past. Previously, many policies have been developed and executed with an expectation that people would respond to them after carefully weighing up the relevant pros and cons.

In contrast, a behavioural insights perspective draws on research from psychology, economics and other disciplines showing that our decisions are strongly influenced by heuristics (mental shortcuts') and habitual, often automatic, responses to our immediate environment.

While these heuristics and habits often serve us well, in some contexts they can create 'biases' where people make decisions which they later regret—or which create problems for others or society in general. For example, 'optimism bias' is the common tendency for an individual to think that they are less likely to experience a negative event (e.g. divorce, disease) than other people. This perception can lead people to underestimate future costs or inflict harm on themselves by accident.

Most attention has focused on using these insights to proactively influence behaviour to achieve policy goals. The idea is that government can design policy to account for people's heuristics and biases, and thereby achieve better outcomes.

These so-called behavioral insights have been applied to help encourage, for example, greater tax compliance, higher levels of organ donation, and increased recycling of waste. In Ireland, the Revenue Commissioners employed behavioural insights to improve survey responses to taxpayer surveys. That research found that more personalised correspondence can lead to more (and quicker) responses.<sup>19</sup>

This practice, libertarian paternalism, more commonly referred to as 'nudging', is a public policy approach suggested in Thaler and Sunstein's bestselling book from 2008. The book provides prescriptions that 'nudge' individuals to do what they would rationally want themselves to do.<sup>20</sup>

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<sup>18</sup> BIT, 2018: 14.

<sup>19</sup> IGEES, 2016

<sup>20</sup> FitzGerald, 2018: 89-90



## Box 2: Applying Behavioural Insights to the Covid-19 Response<sup>21</sup>

In the days shortly after the seriousness of the Covid-19 outbreak in Ireland became apparent, the Economic and Social Research Institute (ESRI) provided a summary of useful evidence from behavioural science, based on an extensive literature review of relevant behavioural interventions and studies of crises. The ESRI paper discussed the possibilities for combining behavioural insights with the need for simplicity, the role of the media, and possibilities for rapid pretesting. The seven highlighted issues are:

- 1) **Handwashing:** Education and information are not enough. The positioning of hand sanitisers and colourful signage is important.
- 2) **Face touching:** Lack of direct evidence on reducing face touching, but articulating new norms of acceptable behaviour could help.
- 3) **Isolation:** Likely to cause some distress and mental health problems. Additional services and preparedness (social networks, concrete isolation plans, familiarity) help.
- 4) **Public-spirited behaviour:** Most likely with clear and frequent communication, strong group identity, and social disapproval for those who don't comply. This has implications for language, leadership, and day-to-day social interaction.
- 5) **Undesirable behaviours:** Stay vigilant for panic buying of key supplies and xenophobic responses. Communicate the social unacceptability of both as part of a collective strategy.
- 6) **Crisis communication:** Linked to behaviour change. Should be timely, honest and credible, and involve empathy and promote useful individual actions and decisions. Using multiple platforms and tailoring message to subgroups beneficial also.
- 7) **Risk perceptions:** Easily biased, and bias increased by highlighting single cases or using emotive language. Risk is probably best communicated through numbers, with ranges to describe uncertainty, emphasising that numbers in the middle are more likely. Stating a maximum (e.g. 'up to X thousand') will bias public perception.

## Behavioural Insights and Covid-19

Behavioural insights can be applied to help understand some of the challenges of responding to the pandemic. Understanding *hindsight bias* (where the decision-maker believes an event was always more likely to occur once that event has taken place) can help maintain the credibility of official, expert sources. Understanding *availability bias* (where the decision-maker judges the likelihood of an event or outcome based on how quickly it appears in their mind) and *confirmation bias* (where the decision-maker looks for validation of their pre-existing beliefs) can help policy-makers and the population better assess risk.<sup>22</sup> See Box 2 for examples.

### *Limitations and Criticisms*

Despite the obvious potential for behavioral insights to inform and contribute to Ireland's response to Covid-19 it is important to be aware of their limitations as well

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<sup>21</sup> ESRI, 2020.

<sup>22</sup> Rajkumari and Kadyan, 2020.

as their benefits. Behavioural science has been criticised from both within and without the field in relation to its contribution to the response to Covid-19.

External criticism has included the claim that behavioural science has been ‘abused by politicians as a justification for flawed policies over the coronavirus outbreak’, has referred to ‘hubris [among] behavioural scientists’, and saying that practitioners are ‘falling prey to, the very biases they have made their names calling out’.<sup>23</sup>

Most prominently, behavioural science became closely linked with the initial response to the virus in the UK. At a time when social distancing measures, the closure of schools, restaurants and pubs, the cancelling of events, and working from home were being enforced across Europe, the UK government took ‘a decidedly different approach’.<sup>24</sup> It was claimed that concerns over behavioural fatigue ‘lead the government to believe that halting the spread of the disease [was] impossible, and the only solution [was] to slow the progress of the disease across most of the population, until herd immunity is achieved’.<sup>25</sup> This development and the criticism of behavioural science which followed, was the subject of a rebuttal by over 680 behavioural scientists in an open letter to the UK government.

From within the field, behavioural science has been questioned for playing only a marginal role in the response to the pandemic. The founder and co-head of the World Bank’s behavioural science unit has written:

‘For the most part, our field wasn’t ready for a pandemic. We had no behavioural playbook on nudges, defaults, and other strategies for improving social distancing, mask use, remote learning, home-based work, and social transfers. A playbook would have provided a default option for policymakers, whose own bandwidth is overloaded in trying times like these’.<sup>26</sup>

As more interventions are devised and augmented to drive the behavioural change needed in Ireland to combat Covid-19, policy-makers should weigh-up the potential and limitations of behavioural insights, and any ethical considerations, making sure to make them part of the toolkit available to them. They should also look to how the development of a behavioural guide for crises—from pandemics to climate change to economic booms/busts—can be supported in the near term.

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<sup>23</sup> Sodha, 2020.

<sup>24</sup> Hahn et al., 2020.

<sup>25</sup> *Open letter to the UK Government regarding COVID-19* at <https://sites.google.com/view/covidopenletter/home>, accessed April 21<sup>st</sup> 2020.

<sup>26</sup> Gauri, 2020

The box below provides a useful high-level summary from the OECD of some considerations before deciding if behavioral insights are the correct fit for application to a specific project or problem.

Overall, behavioural science and insights can make an important contribution, as part of a mix of approaches, and with a good understanding of their strengths and limitations. Work at NESC work on cost benefit analysis techniques also points to how the field and its application should continue to be enhanced and combined with other insights to assist in decision-making, rather than relying on any one technique to ‘give the answer’ (Cahill and O’Connell, 2018). NESC’s approach to issues draws on a range of disciplinary approaches and literature, and behavioural science is another strand that should and is incorporated into its thinking.

**Box 3: OECD’s Suggested Considerations Before Applying Behavioural Insights (BI)<sup>27</sup>**

<b>What BI is</b>	<b>What BI is not</b>
<p><b>Problem-solving method</b></p> <p>BI is a powerful method to better understand policy problems and pre-test solutions before they are implemented across a wide range of policy issues.</p>	<p><b>Silver bullet</b></p> <p>BI is not a silver bullet that solves all policy challenges. Some policy issues may benefit more from traditional policy levers (i.e. financial, regulatory or awareness-raising approaches) or alternative non-traditional tools (i.e. human centred design or machine learning).</p>
<p><b>Way to learn ‘what works’</b></p> <p>The BI culture of empirically testing solutions and disseminating results allows practitioners and academics to exchange evidence on lessons learned to inform policymaking.</p>	<p><b>One-size-fits-all</b></p> <p>Replicating what works in one environment does not guarantee success in another environment. Ethical considerations should also be adapted to the context. Pre-testing solutions in the context where you plan to implement the policy minimises this risk.</p>
<p><b>Beyond nudging 1.0</b></p> <p>BI goes beyond nudging or small policy tweaks. BI represents a wide range of tools to use evidence to diagnose problems, bridge the gap between research and practice, and inform comprehensive policy solutions.</p>	<p><b>Only for behavioural experts</b></p> <p>BI is not limited to behavioural experts. A multi-disciplinary approach is key for BI projects. BI brings together diverse expertise such as knowledge of the policy context, behavioural science and first-hand experience with public service.</p>
<p><b>Policy tool</b></p> <p>BI should be considered every time you are designing or evaluating a policy. Even in cases where you may not be able to start with a behavioural analysis or run a full experiment, BI can still be used to complement traditional policy tools and levers throughout the policy cycle.</p>	<p><b>Irrationality</b></p> <p>BI does not suggest that humans are fundamentally irrational creatures. Rather, it argues that deviations from ‘traditionally explained rational’ behaviour are not the result of flawed reasoning but rather adaptive forms of reasoning that can also constitute efficient heuristics (i.e. mental shortcuts or intuitive judgments) in an uncertain world.</p>

<sup>27</sup> OECD, 2019: 19

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