Regulatory policy and COVID-19: Behavioural insights for fast-paced decision making

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This policy paper was developed by the Regulatory Policy Division of the OECD Public Governance Directorate, with inputs from behavioural practitioners and policy makers in the International COVID-19 Behavioural Insights and Policy Group. It discusses from a regulatory governance perspective why behavioural insights (BI) should be considered as part of a holistic response to the COVID-19 pandemic, what governance challenges involved in deploying BI against the pandemic, and how some countries have responded to these challenges. Reflecting on these challenges and opportunities allows governments to promote resiliency by preparing the BI field for future crises.

Key messages

- Promoting behavioural change is one of the central goals of regulation. This has been clearly demonstrated during the COVID-19 pandemic, as governments use regulatory approaches to impose public health measures to contain and mitigate the transmission of the virus.
- Regulations seek to impose rapid and widespread changes both to the way society and economies function at the macro level and to the daily lives and routines of individuals at the micro level. Decades of research in the behavioural sciences have shown that social context and behavioural biases can influence behaviours as well as efforts to change them.
- A holistic approach to regulating during COVID-19 is needed, one that makes full use of all tools available, including behavioural insights (BI). Models of pandemic behaviour suggest that simple personal protective behaviours, such as using face masks, sneezing/coughing into tissues, social distancing, washing hands and not touching the face can significantly limit the transmission of the virus. Regulation is an important tool for motivating these behaviours.
- A key finding of this paper is that, despite the need for behaviourally-informed approaches and empirical testing, some behavioural experts in government are finding it difficult to integrate the BI approach into their government's response to the COVID-19 pandemic. From a regulatory governance perspective, these challenges include:
  - *Role clarity and expectation management*: Behavioural expertise is located across governments in many different forms and structures, including through external advice. This may lead to a misalignment between pandemic decision-making structures and behavioural expertise, and necessitate improved co-operation and co-ordination mechanisms.
  - *Financial and human resources*: BI practitioners and policy makers do not always have access to the right resources, at the right time and in the right way to support pandemic response. This may result in a lack of ability to meet the demands of the decision-makers.
  - *Process for generating robust evidence:* There has been a clear acceleration of the pre-pandemic trend of adopting rapid and iterative experimental methods to quickly test policy solutions or generate policy advice based on non-COVID experimental evidence. Caution is thus required when interpreting results and providing advice, as are strong transparency, accountability and ethical guidelines to ensure BI is being applied responsibly.
  - *Communicating outputs and outcomes*: Governments need to invest in publishing the results of BI experiments conducted during the pandemic, demonstrating what worked and what did not.
- However, there is a lot of promise: cases collected from 10 countries and discussions from the International COVID-19 Behavioural Insights and Policy Group demonstrate how BI units are making positive impacts on the crisis response. Lessons learned from their experience can help the field of BI evolve, promote resilience and prepare for future crises. These include:
  - The cases collected show a large number of applications to improve public health communications or technology. This may reflect a lag in the reporting of BI results, as governments relied heavily on communication-based approaches early in the pandemic.
  - The BI community is concerned that their skills are being underutilised and that limiting the use of BI to rapid testing and behaviourally informed advice may set unwanted precedents. Members note that a wide variety of topics are ready for BI applications, including medium- to long-term effects of the pandemic such as social outcomes, mental health and green recovery. Partnerships between government and academia have helped support evidence-informed policy making, as have international forums for exchanging best practices.

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Abbreviations and acronyms

ABCD	Attention, Belief formation, Choice and Determination
BASIC	Behavioural, Analysis, Strategy, Intervention and Change
BC BIG	British Columbia Behavioural Insights Group, Canada
BEET	Behavioural and Experimental Team, Slovak Republic
BEST	Behavioural Sciences Team, Japan
BI	Behavioural insights
COSMO	COVID-19 Snapshot Monitoring
COVID-19	Coronavirus disease 2019
DITP	Direction Interministérielle de la Transformation Publique, France
ESRI	Economic and Social Research Institute, Ireland
IDB	Inter-American Development Bank
NER	OECD Network of Economic Regulators
NSW BIU	New South Wales Behavioural Insights Unit, Australia
OECD	Organisation for Economic Cooperation and Development
RCT	Randomised controlled trials
RSPU	Research Services and Policy Unit, Department of Health, Ireland
RPC	OECD Regulatory Policy Committee
UNIN	United Nations Innovation Network
WHO	World Health Organisation
eMBeD	Mind, Behaviour and Development Unit, World Bank

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Introduction

Promoting behavioural change is one of the central goals of regulation. By setting the "rules of the game," regulations promote the competitive functioning of the economy while protecting citizens, the environment and society more broadly (OECD, 2018[1]). The term "regulation" covers a wide range of tools available to government to promote behavioural change that include hard rules as well as softer alternatives such as incentives and guidance. The OECD (2012[2]) *Recommendation of the Council on Regulatory Policy and Governance* notes that "regulatory policy" is the governance framework for how regulations are made, assessed and revised.

Public health measures in response to the COVID-19 pandemic often rely on a variety of regulatory measures. In the absence of treatments or a vaccine, these measures have been aimed largely at influencing individual behaviour at the group and population levels to slow the transmission of COVID-19, such as wearing mask, washing hands, disinfecting surfaces, and maintaining social distance. This fundamentally requires quick and widespread behavioural change, including at times significant changes to lives and daily routines. Decades of research in behavioural science clearly demonstrate how social context and behavioural biases can influence such efforts to change behaviours (OECD, 2019[3]).

For more than a decade, the field of behavioural insights (BI) has been applying these lessons from the behavioural sciences to try to improve the design and delivery of public policies. The field was incipient in the early 2010s, and grew to become a young but firmly entrenched policy discipline in the mid-2010s (OECD, 2017[4]). OECD research (2018[5]) based on *Behavioural Insights and Public Policy: Lessons from Around the World* (OECD, 2017[4])) suggests that there are over 200 institutions applying BI to public policy worldwide.

Despite the importance and availability of behavioural expertise to support pandemic response, evidence from behavioural practitioners and policy makers suggest that there have been a number of challenges faced by the BI community in contributing to government's response to the pandemic. In many ways, confronting these challenges is positive for the field and can help further its natural evolution, and, ultimately, promote government resilience by preparing the BI community for the next crisis. More broadly, the policy making community will also benefit from understanding how behavioural approaches can support improved policy design and delivery during and outside of crises.

This policy brief seeks to explore these challenges from the regulatory governance perspective and demonstrate how BI practitioners and policy makers are overcoming these challenges to support their government in its response to the pandemic[1]. This is based on conversations, evidence and case studies collected through the International COVID-19 Behavioural Insights and Policy Group[2], which is a forum for BI policy makers and practitioners from over 20 governments and several international organisations to exchange ideas and share practices for applying BI during the crisis. It is clear from these conversations that there exists a lot of promise for improving pandemic response through behaviourally-informed approaches. The cases presented from 10 countries demonstrate BI is succeeding at making an impact.

The themes expressed in this paper suggest the needs for some humility along this journey. First, behavioural practitioners and policy makers need to be aware of the boundaries of behavioural expertise: for instance, decisions on public health regulations and interventions need to be guided by epidemiologists and other public health experts, but a behavioural expert can provide advice on how a population will respond to announcements and interventions to help improve design and implementation. Second, this is inherently a reflective exercise occurring while the pandemic continues to evolve. While many of the questions asked in this paper are relevant now, they are certainly not exhaustive and many others are likely to emerge in the months and years ahead. A proper "post-pandemic evaluation" will be needed to truly understand and assess the answers to these challenges raised by this paper, and learn relevant lessons for the future.

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The policy brief builds on the extensive work on BI developed by the OECD Regulatory Policy Committee (RPC) and the OECD Network of Economic Regulators (NER) since 2013. It is part of a series of responses to the COVID-19 crisis developed by the Regulatory Policy Division of the OECD Public Governance Directorate, starting with a framing piece on *Regulatory Quality and COVID-19: Managing the Risks and Supporting the Recovery* (OECD, 2020[6]) and encompassing five other contributions.[3] This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries. It was prepared by the Secretariat and submitted for comments to the RPC, the NER, the International COVID-19 Behavioural Insights and Policy Group, and the community of BI practitioners and policy makers connected with the OECD work[4]. It may be edited and improved over time as more information becomes available.

Why understanding behaviours is important to regulatory policy in times of COVID-19

OECD (2020[7]) explains why a package of containment and mitigation policies are needed to address individual and collective behaviour in response to the COVID-19 pandemic. The research notes that, in response to pandemics, countries typically use four pillars of actions: 1) surveillance and detection; 2) clinical management of cases; 3) prevention of the spread in the community; and 4) maintaining essential services. These four pillars interact and support one another.

Absent of effective drugs and vaccines, countries need to rely on containment and mitigation measures to "flatten the curve" of infections to a level where hospitals can cope and minimise consequences caused by the virus. These measures are defined as (OECD, 2020[7]):

- **Containment strategies** aim to minimise the risk of transmission from infected to non-infected individuals in order to stop the outbreak. This may include actions to detect cases early on and trace an infected individual's contacts, or the confinement of affected persons;
- **Mitigation strategies** aim to slow the disease, and to reduce the peak in health care demand. This may include policy actions such as social distancing, including a full society 'lock-down', and improved personal and environmental hygiene.

West *et al* (2020[8]) argue that enacting key personal protective behaviours is at the heart of limiting the transmission of the COVID-19 virus. They note particularly six behaviours that, if effectively encouraged, would supress the spread of the pandemic: 1) Sneeze and cough into tissues; 2) Use face masks as appropriate; 3) Social distance; 4) Wash hands with soap or sanitiser; 5) Disinfect surfaces and 6) Avoid touching the T-zone (eyes, nose, mouth). Figure 1 provides a model for how these behaviours block the transmission of COVID-19. These individual behaviours need to be motivated at group and population levels to decrease the spread of the COVID-19 virus in benefit of the collective good.

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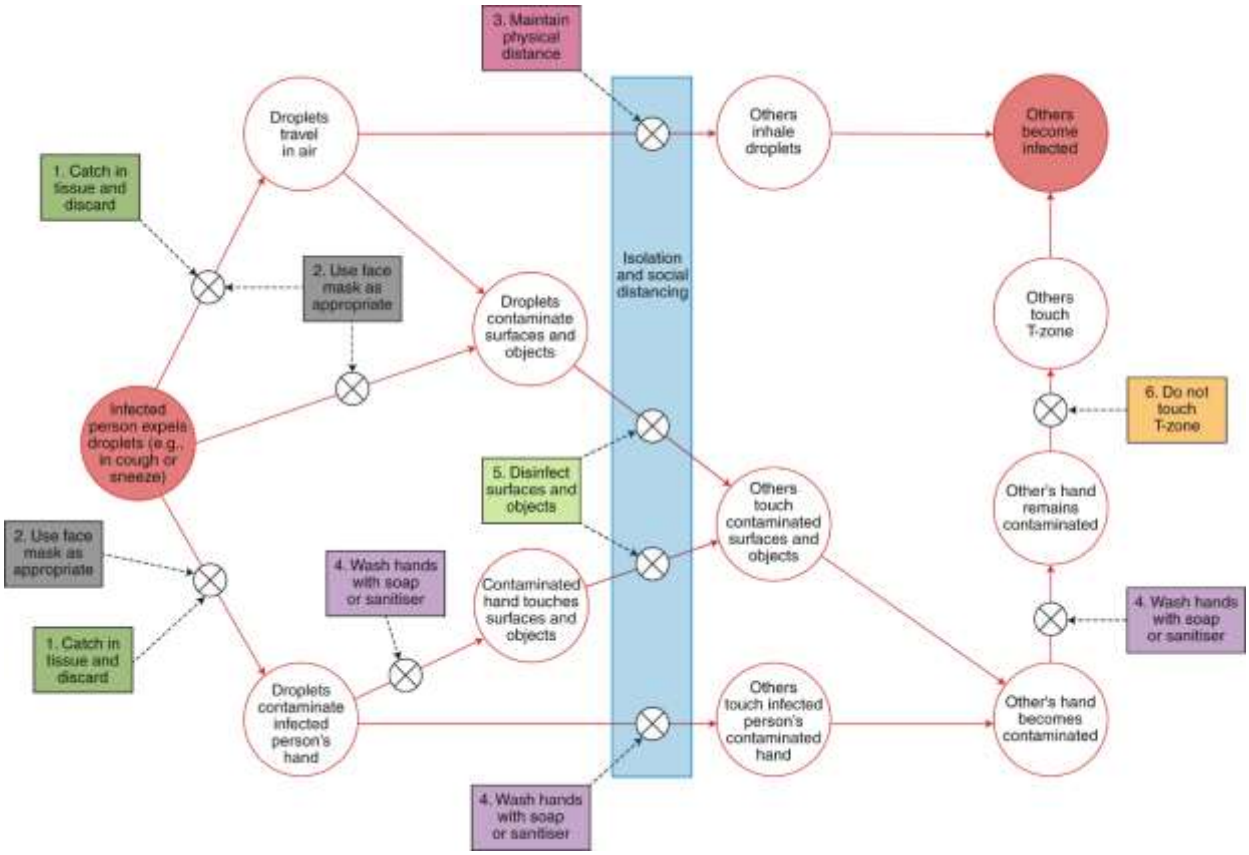
Figure 1. Applying principles of behaviour change to reduce COVID-19 transmission



Source: (West et al., 2020[8])

There are many actors involved in promoting behaviour change in response to the pandemic. West et al (2020[8]) note that this includes governments, health and social care organisations, businesses, media outlets and community groups. OECD (2020[7]) suggests a number of policies governments can take to contain and mitigate the impact of COVID-19, including various social distancing measures (banning mass gatherings, maintaining distance in public or work spaces, etc.), travel restrictions, quarantines, effective communication, and encouraging personal hygiene measures. One of the main tools for implementing policy is through regulation, which is a catch-all term for the hard rules (i.e. laws) or softer alternatives (guidance, information, incentives, etc.) that encourage certain actions (OECD, 2018[1]).

This continuum between harder and softer forms of regulation mimics the many ways in which BI can be used to support better policy design and delivery. Cass Sunstein, in his most recent book, discusses this in detail. Alongside Richard Thaler, Sunstein was a founding father of the BI policy field through the seminal book *Nudge* (2008[9]). Sunstein notes that a "nudge" is an intervention "affects people's behaviour while fully maintaining their freedom of choice" (Sunstein, 2020, p. 4[10]), which he notes as including approaches like reminders, simplification of forms, changing portion sizes, colour choices on a package, or ordering choices in a certain way. However, Sunstein further notes that nudges are just one tool in the BI toolbox – in fact, BI can be used as substitutes or complements to more "coercive approaches", such as taxes, subsidies, mandates, bans, etc (Sunstein, 2020[10]). In the context of COVID-19, understanding this continuum of BI approaches is important in two ways: first, it demonstrates that BI has developed depth in regards to its ability to draw upon a wide range of tools that align with traditional policy making and, second, that this depth provides government with access to a variety of responses that improve the efficiency and effectiveness of policies throughout the lifecycle of the pandemic.

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How can behavioural insights improve regulatory policy making during a pandemic

Regulatory policy making is traditionally derived from highly generalised and powerful deductive models of human behaviour and decision making based on individual preferences (Lunn, 2014[11]). These models often rely on a number of assumptions of human behaviour, such as the "rational actor" model for economic regulation. Policymakers often use these assumptions of humans' decision-making behaviours to build policy responses, when a behavioural element plays an important role.

However, lessons from the behavioural sciences have demonstrated that these models fail to consider that social context and behavioural biases systematically influence people's abilities to act according to the ways these models predict (OECD, 2019[12]). Applied to policy, BI offers a clear methodology for policymakers to analyse policy problems based on lessons derived from the behavioural and social sciences, collecting evidence of barriers and biases affecting individual and collective decision making, and applying these findings to improving the outcomes of public policy. See Annex 1.A for a full discussion of the BI methodology and its application to public policy.

The need to motivate collective action

Applied to the COVID-19 response, a significant consideration for regulatory approaches to the pandemic is the need to motivate individual action for the collective good new social norms around compliance with COVID-related regulations and habits (see for example Bicchieri (2005[13]) on the effects of social norms on regulatory compliance). West et al. (2020[8]) further note the importance of social norms, as well as combatting negative emotions associated with cognitive dissonance and focus on immediate consequences of actions to combat temporal discounting.

Given that COVID-19 is a novel virus, we do not know conclusively what works in using regulation to respond to the virus. However, there is helpful research that can help provide some perspectives. Evidence from collective action research suggests that many individuals will override self-interest and act in the collective interest when conditions to co-operate are present. These conditions are influenced by *inter alia* language, leadership, communication, group identity, media and reporting that others are following advice (Lunn et al., 2020[14]). As regulators, leveraging this tendency towards collective action is potentially powerful. As discussed in OECD (2020[15]), changing group behaviour is different than changing individual behaviour; however, groups are made up of individuals and, often, organisations can be influenced through the people within them.

Behavioural sciences research provides evidence that promoting and reinforcing good behaviours often provides good outcomes in terms of motivating collective action. As discussed in Lunn et al. (2020[14]), mutual assistance is a more likely response to crises that threaten physical danger and entrapment as opposed to individual, self-preserving behaviour (Mawson, 2005[16]). Lunn et al. (2020[14]) further note that this experience was confirmed with the H1N1 "swine flu" (Rubin, Potts and Michie, 2010[17]), and this can be extended to wide spread examples of solidarity during disaster events, e.g. earthquakes, floods, tropical storms (OECD, 2016[18]).

In fact, research into the behaviours of people during crisis situations notes that the public is not as error prone or fallible as we may think. Rather, emergencies tend to bring out the best in people. There can be a general heavy reliance on hard rules and sanctions in regulatory policy; however, there is strong evidence to suggest that a gradation of sanctions is most effective at driving compliance (OECD, 2018[19]). Successful risk and crisis communication strategies start with treating people with respect, capable of taking decisions for themselves and managing personal risk (OECD, 2016[18]). This includes considering that the public is "panic prone" is a myth (Sheppard et al., 2006[20]), that altruism, helping and pro-social behaviours are common (Drury et al., 2019[21]), and recognising that disasters disproportionately affect disadvantaged groups.

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What may require more research is on what drives collective good behaviours, in what direction and why – including the effects of intervening variables. First, drivers that motivate collective good actions may operate differently in various contexts. For example, it is uncertain how long these effects persist in times of prolonged crisis or what variation in terms of effectiveness exists by country, reflecting national cultural dimensions. Furthermore, it is unclear if societies with greater social cohesion and co-operative tendencies can more easily use approaches that leverage collective action than those with greater tendencies towards individual action (for example of such variations, see Hofstede (2001[22]); (n.d.[23])).

Second, the effect of trust in government may have important and uncertain effects. The crisis has highlighted the centrality of trust in government and public institution, in terms of confidence in government messaging and willingness to follow even soft recommendations (OECD, 2020[24]). Evidence collected between 20 March and 7 April 2020 from a survey of over 100 000 people from 58 countries find that 36% indicate that they do not trust their government's handling of the pandemic, and 42% believe their government's actions are not sufficient (Fetzer et al., 2020[25]). The research further found a positive association between perceived insufficient government action and level of worry within people, indicating a mental health effect. However, research also notes surges in trust consistent with "rally around the flag" phenomena commonly found with crises (Jennings et al., 2020[26]). The direction and magnitude of trust based on pandemic response has also been heterogeneous, as countries also experienced positive increases in trust (Jennings et al., 2020[26]). Finally, the link between low trust in government and low willingness to follow public health regulations also needs further research to determine how the correlation works and what policy recommendations flow from it.

How policy makers can use BI to support the pandemic response

The use of behavioural insights in public policy is not a silver bullet; the same applies in the context of the pandemic. The tool can, however, have a clear role to play in governments' response to the pandemic. There exists a number of prescriptive frameworks to help support the application of BI (see for example (The Behavioural Insights Team, 2010[27]); (The Behavioural Insights Team, 2014[28]); (BEAR, 2018[29]); (ideas42, 2017[30]) or (IRS, 2017[31])). To support policy makers apply BI from start to finish on any policy problem, the OECD (2019[12]) released a process toolkit and ethical framework for applying BI. This process is about understanding and analysing the behaviours that underpin the policy problem so that interventions can be planned and tested, and ultimately scaled up for policy change. The toolkit uses a framework to assist practitioners in analysing behavioural problems on the basis of behavioural insights. This framework is called "ABCD," which is an acronym for:

- **Attention**: People's attention is limited and easily distracted.[5]
- **Belief formation**: People rely on mental shortcuts or intuitive judgments and often over/underestimate outcomes and probabilities.
- **Choice**: People are influenced by the framing as well as the social and situational context of choices.
- **Determination**: When it comes to long-term goals, people's willpower is limited and they often have difficulty staying motivated without any plans and feedback.

Using this framework, we can begin to understand the behavioural problems at play during the pandemic. Table 1 provides a simple analysis of these problems using the "ABCD" framework, which is meant as an illustrative and non-exhaustive example for purposes of this paper.

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Table 1. Behavioural challenges for regulatory policy responses to COVID-19 using the "ABCD" framework

Element of the framework	Possible behavioural opportunities/levers to consider
Attention	People may be overwhelmed by all the information provided, and may misunderstand, forget or overlook what they are required to do. This includes: • People may be distracted by different or conflicting information, or more generally attending to other issues raised by the pandemic • Information may be provided when people are not in a suitable state of mind to remember it • Information may be delivered at an inopportune time, and thus not remembered when it is needed • People may forget important personal protective equipment at home, such as masks or gel
Belief formation	People may misperceive the risks associated with the virus, including in association with poor advice, misinformation, and issues with complexity. Excessively rigid or disproportionate enforcement and burdensome procedures may make it hard to trust government advice. This includes: • The pandemic and necessary responses may run counter to people's pre-existing worldview, which makes accepting contrary information or requirements difficult • People may become overconfident in their view of right or wrong in times of pandemic and miss relevant information that helps support good decision making • People may rely too much on mental shortcuts or intuitive decision making rather than expert guidance • Mixed, confusing or excessively "confident" messaging by public authorities (which are later reversed or overtaken by events) may erode trust in government
Choice	People may become overloaded by the number and pace of choices they need to make, which makes choosing the best choice difficult. This includes: • How choices are framed, i.e. positive/negative or making clear how people are affected, influences actions • People may make decisions in reaction to their reference group, i.e. wear/not wear masks if others do the same • Uncertainty regarding the severity of the pandemic and lack of clarity over what rules to follow can make it difficult to decide what even is a good choice • People will make sacrifices "in the common good" despite material or economic incentives
Determination	Making a good decision is hard enough, sticking to it over time is incredibly difficult. Significant changes to daily routines are difficult to sustain, especially when psychological discomfort can lead people to search for immediate gratification. This includes: • Inability to maintain willpower and self-regulation to adhere to the rules • Mental fatigue and exhaustion with the amount and uncertainty of information, making adherence to the rules difficult can lead to a loss of self-control and decrease in decision-making abilities • People may not form plans or receive feedback on their decisions • Showing others following rules increases compliance more than legal sanction, while high profile instances of non-compliance may have damaging effects

Note: ABCD is an acronym for "attention, belief formation, choice and determination", which are four category to understand and group of behavioural problems to help policy makers form behavioural interventions.

Aligning BI with fast paced regulatory policy making in crisis settings

Crises require quick and agile government responses. The pace at which the COVID-19 pandemic has unfolded, especially in the early days of the pandemic, certainly pushed governments into extremely rapid decision making situations. This poses a paradox: policies that change behaviour rapidly are needed more than ever, but there lacks a clear model for using BI to react swiftly in such situations. This challenge is not unique to BI – in fact, many governments are facing similar "pacing problems" in other policy areas, such as with emerging technologies, where the field grows faster than the governmental institutions and processes can react or utilise effectively (OECD, 2019[32]).

This section seeks to analyse from a regulatory governance perspective how the application of BI to policy and regulation have been challenged by the pace of the pandemic and the unique behavioural challenges that have emerged. The goal is to understand the governance challenges BI practitioners faced in such a setting, as well as to identify good examples of solutions that could help improve the way BI is applied

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during the COVID-19 pandemic or to future crises. The section analyses the following dimensions of governance: role clarity and expectation management; resources; process; and output and outcome. This analytical framework is based on the Performance Assessment Framework for Economic Regulators (PAFER), developed by the OECD, which looks at the institutional governance of regulatory authorities but has been applied successfully to other types of government agencies (OECD, 2020[33]).

The challenges identified have been collected through conversations with BI practitioners and policy makers through the International COVID-19 Behavioural Insights and Policy Group, including seven webinars as of the drafting of this paper in August 2020, and broader discussions with members of the international community of BI practitioners and experts.

Role clarity and expectation management

Good governance requires organisations to define its strategic orientations, including its role and objectives as well as how it co-ordinates with other entities in government to deliver on its mission. This section will explore how the pandemic has challenged the institutional design and effectiveness of many BI teams in further detail. Omitted is a broader discussion about the internal roadblocks faced by various government units to intervene in the COVID-19 pandemic response efforts.[6] This is an important topic for consideration in future follow up work on BI and the COVID-19 pandemic response.

The role for BI advice in crisis response

OECD research suggests that there are three broad institutional models for applying BI to policy: central steering units, specialised departmental/agency-based unit and project-based applications (OECD, 2017[4]). One or more of these models can be in operation at one time in a given country – including at the national, sub-national and municipal levels – and they co-exist, evolve and interact over time.

While this diversity can prove beneficial to explore various sets of issues and bring a large range of policy options, in times of crisis this can also create a complex web of BI advice from different actors and perspectives. Such a heterogeneity is compounded by the fact that there is not one field of behavioural insights, but rather many with varying expertise and experiences to lend. In a crisis situation, such as the pandemic, this will naturally affects how, when and where BI can be used to inform policy. This can be seen in two ways.

First, at the broadest level, the type of "BI knowledge" being fed into policy making is increasingly heterogeneous. This means a variety of backgrounds, methods and knowledge bases are inputting into the crisis response space, including BI backgrounds that may not have an expertise in pandemic response. In many ways, this can be a good thing. Having different perspectives can help avoid expert bias and "group think," especially if BI practitioners and policy makers can form partnerships with public health and epidemiological experts to help bring different types of evidence or methods for testing policy solutions into the decision-making processes. Where this has the possibility of issues is regarding the high pressure and fast evolving crisis situations, as this may create confusion – or even pose further debate and disagreement – for policy makers who are trying to understand the evidence and make a right decision. What may be needed then are the appropriate skillsets and tools for providing BI advice to policymakers in a way that quickly and accurately distinguish between good and bad evidence and/or credible and less credible "experts". This discussion is revisited throughout the rest of the paper.

Second, at the institutional level, the variety of structures and models present different connections to the policy process and pathways to different realms of expertise. Inherently, this suggests that there are different entry points for BI in crisis response that are "biased" to the relative position of the unit or practitioner. For instance, BI practitioners in units at the centre have likely established connections with senior decision-makers that could enable opportunities to suggest behavioural responses to the strategic crisis response decisions, i.e. when/how to impose lockdowns, supporting crisis communications, etc. Practitioners in units who are closer to the "frontline" or programme implementation may best know how to

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support specific applications of BI, i.e. encouraging social distancing in public places. This creates issues in relation to both co-ordination between these practitioners, but also what evidence base is used to make decisions. Both of these issues are discussed further below.

The key messages, however, is that careful consideration needs to be paid to how and where BI is inputted into policy in a crisis situation. Given the large uncertainties in such situations, advice to decision-makers needs to be communicated with clarity regarding underlying assumptions and uncertainty in the data. Elevating a potential behavioural issue to a policy recommendation can be a big step – especially if the evidence is not particularly strong or robust (see more in process below) – and may require careful consideration. On the programme level, linking up BI practitioners with policy makers with both policy and situational relevant experience is important. See Box 1 for an example from Ireland where the Department of Health leveraged existing partnerships with the Economic and Social Research Institute (ESRI), a government research institute, to provide timely experiments and evidence to support their pandemic response efforts.

Box 1. Supporting pandemic response in Ireland with BI

Ireland began developing capacity to support health related applications with BI well before the pandemic began. In 2015, the Department of Health (DOH) established the Research Services and Policy Unit (RSPU) as a cross-departmental support unit for evidence-informed policy making, including raising awareness and encouraging the use of BI.

Ireland's Economic and Social Research Institute (ESRI) has been generating independent, high quality research to support a healthy economy and promote social progress for nearly 60 years (ESRI, n.d.[34]). ESRI houses the Behavioural Research Unit (BRU), which specialises in applying behaviour science to policy (ESRI, n.d.[35]). Prior to the pandemic, the BRU had been working with several Irish government organisations including the DOH. University College Dublin (UCD) also supports the government on applying BI to policy. A COVID-19 behaviour change sub-group was created at the start of the pandemic to support the use of BI in the pandemic by providing advice and analysis to the National Public Health Emergency Team (NPHET) and to a communications group.

Ireland was able to leverage this health-related internal and external knowledge and support for applying BI to addressing issues regarding the pandemic. This has resulted in a number of experiments and research papers developed rapidly over the course of two months that have helped inform Ireland's response to the pandemic (see (Lunn et al., 2020[14]); (Belton et al., 2020[36]); (Lunn et al., 2020[37]) (Lunn et al., 2020[38]); (Lades et al., 2020[39]); (Murphy, 2020[40])) and a number of direct applications captured in case studies (see section 3 below).

Leveraging co-ordination

Fundamental to any institution's success is its ability to co-ordinate with decision makers and other relevant actors. Key challenges here highlight the need for governments to consider ways BI expertise can be better co-ordinated in crisis situation, both internally to leverage in-house expertise and externally to gain new ideas and perspectives. Three categories of co-operation are noted where various challenges exist.

First, there is the co-ordination between BI practitioners and policy makers and decision makers – whether this be at the strategic or programme level. For example, working with communications offices who have a long tradition of promoting social and behavioural change or units developing contact tracing apps to integrate behavioural solutions into the design of the apps and communication their benefits to promote uptake. This is fundamentally about how BI practitioners work with policy makers to connect their knowledge into the decision making process. This has been a common challenge for the BI community

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during normal policy making times that has been exacerbated by the pandemic. See the case studies at the end of this paper for several examples of how BI units supported strategic communications in their governments.

Second, there is co-ordination between BI practitioners and policy makers in units inside government. While there exists hundreds of units applying BI around the world across a variety of disciplines, BI expertise is not universal in each government. During a crisis situation, this means information and experiences will need to be shared between behavioural and subject matter experts through relevant co-ordination mechanisms.

Third, there is co-ordination between government units applying BI and external partners, including private sector and academia. There is a very large number of BI practitioners outside governments who support policy makers, including in private sector, non-governmental organisations (NGOs) and international organisations as well as a number of academics with practical experience working on BI. There are several barriers to effectively leveraging external partners that include, for example, frictions between nuanced explanations and rapid policy advice that can influence the interactions between academia and government.

This discussion inherently brings up the broader discussion around inter-sectoral co-operation across and between governments to foster joined-up approaches, which runs into classic governance related challenges associated with “breaking down silos”. It is still too early at the time of writing this paper to discuss these challenges and possible solutions in detail. However, one example of positive impact is the International COVID-19 Behavioural Insights and Policy Group. This group was established in March 2020, which is led by behavioural practitioners and policy makers and supported by the OECD. The Group provided a space for BI practitioners in government as well as those interested in applying BI to meet regularly to discuss examples of how they have applied BI to the government’s response to the pandemic, share how they co-ordinated with policy makers, and dive deeper into complex issues that were challenging to them and their governments. The Group was aided by a host of digital platforms that allowed for virtual sharing and collaboration, including multifunctional workspaces for videoconferencing, digital whiteboards, discussion boards, and networking. There is an opportunity here for governments to build up this type of infrastructure so that it can be activated quickly in future crises, especially to support units and practitioners to “catch up” to crises by learning from the success stories of others.

Resources

Good governance requires that BI teams receive appropriate financing and human resources. This section explores these two issues further with regards to BI and crisis situations.

Financial resources

Funding is an essential part of the success for any unit. In times of crisis, this becomes ever more important to ensure that resources are either allocated or protected from re-allocation in a way that may hinder the BI unit from functioning. On the former, bringing external expertise or devoting staff time to special COVID responses may be challenging from a budgeting perspective. On the latter, governments will certainly require “all hands on deck” and some staff will be re-allocated to support emergency response efforts. Units with fewer core responsibilities, such as BI units, may be first in line for such reallocations. Striking a balance is critical, especially since BI advice can support the crisis.

Procurement processes can also be cumbersome and slow, limiting the ability for units applying BI to use allocated funding rapidly. It can sometimes take months to run competitive bidding processes for external vendors to provide support, for example to access BI experts or run trials and experiments. Similar issues exist with running competitions to hire new staff that may be able to bring some of this expertise in-house.

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Human resources

A secondary effect of the pandemic has been the need for governments to rapidly access skill sets that may be complementary or absent internally. This is both in terms of accessing behavioural science expertise, but also a host of complementary skills not always available via internal channels, such graphic design, data visualisation and human-centred design. For example, working with communications teams to design guidance relying on graphics and minimal text to improve readability. This also reflects previous discussions in this paper, where some of these skills may be found internally but there is a need to promote further co-ordination with government or with external partners.

The pandemic also poses challenges in terms of the nature of BI expertise itself. For example, BI expertise in some governments may be particularly well developed or focused on certain policy applications, such as economic or financial applications. Since the pandemic is fundamentally a health crisis, there is a need for health-related BI expertise or an understanding of how lessons learned from other BI disciplines can – or cannot – be translated to the health context. For example, BI experts could lend some lessons learned from well-tested insights, such as simplification, availability heuristic for judging risk, exponential growth bias, and so on. The conversation needs to be "two-ways," as BI experts will also need to understand important aspects of public health behaviour, such as GP loyalty, health optimism, etc. This challenge is also linked to the different institutional models in each country.

Moreover, research has demonstrated that behaviour is often culture and context specific (OECD, 2020[15]). That is, what works in one country, culture or setting may not work the same in another. BI as a policy discipline has become relatively common place in English-speaking and/or high-income countries (HICs) and based on behavioural science produced in these countries (Ijzerman et al., 2020[41]), which means that governments in these settings likely have access to robust knowledge of what works and what does not to support pandemic response. However, the crisis affects low- and middle-income countries (LMICs) differently, both in terms of the cultural and contextual variables that drive human behaviour as well as the strength and depth of research in those settings from which to draw from. There is significant and innovative research being conducted on applying the behavioural sciences in LMIC settings, as noted by the 2019 Nobel Laureates in Economic Sciences Abhijit Banerjee, Esther Duflo and Michael Kremer. However, policy makers in these governments sometimes note the lack of depth regarding policy solutions tailored for their context. Various international organisations and NGOs have been supporting developing and emerging countries to apply behavioural insights to the COVID-19 pandemic response and drawing lessons for those specific country contexts (see Box 2). In addition, Saldanha and Ghai (2020[42]) have collected application of BI to the pandemic in Africa, Asia and the Middle East.

Box 2. Supporting the application of BI in Low and Medium Income Countries

There are a number of international organisations and non-governmental organisations (NGOs) that have been working extensively with developing and emerging countries to develop capacity and applications of BI. When the COVID-19 pandemic hit, these organisations leveraged their knowledge and connects to support the application of BI to the pandemic.

The Inter-American Development Bank (IDB) through its Behavioural Economics Group, is working with Latin American and Caribbean countries improve the effectiveness of programs aimed at incentivizing preventive behaviours and the uptake of contact tracing applications through the tools offered by BI. This includes analysing perception of self-compliance to social distancing, using masks and hand washing versus the perception of fellow citizens (Boruchowicz and Lopez Boo, 2020[43]), privacy and data concerns, use of the technology and attitudes towards using the apps via an experiment testing opt-in or out conditions for a hypothetical app (Boruchowicz, Lopez Boo and Tejerina, 2020[44]). The IDB is also working on a Spanish and Portuguese version of a behaviourally-informed website called

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germdefence.org and developing a toolkit for communicating about COVID-19 using BI (Martínez Villarreal, Rojas Méndez and Scartascini, 2020[45])

The United Nations Innovation Network (UNIN) Behavioural Science Group fosters behavioural science application within and across UN entities. It is composed of more than 300 members from over 40 UN entities and 60 countries. The Group and has recently described how UN entities are conceptualising and/or applying BI in their COVID-19 response in areas such as health and well-being, employment and economic activity, communicating with the public, and supporting the COVID-19 response (UNIN, 2020[46]). This work includes a UNICEF experiment scaling a BI-informed approach to preventing the spread of misinformation related to COVID-19; an ICAO project to restore passenger confidence and deter unruly behaviour as part of an international effort to restart and expedite the recovery of the aviation industry; a UN University project to investigate from a BI perspective the stigma towards health care workers and explore potential interventions; and, a UNDP Accelerator Lab project in Zambia to understand what low-cost behavioural interventions could help encourage adherence to public health regulations, especially in public places like markets.

The World Health Organization (WHO) Regional Office for Europe's Insights Unit and Health Emergencies Programme at the start of the pandemic developed a tool for behavioural insights surveys in countries, supported by the University of Erfurt in Germany. The tool offers a standard protocol and questionnaire for countries to conduct serial cross-sectional studies that allow for adaptive monitoring of variables ranging from risk perceptions, knowledge and misinformation to preparedness and protective behaviour in regards to COVID-19 (WHO, 2020[47]). As a result, countries across the Region, including several LMICs, are collecting data on population behaviours, perceptions and wellbeing, which is unprecedented in the Region. A similar Behavioural Insights tool is being created to support the African region with COVID-19 behavioural data collection. In addition, the WHO has developed WhatsApp and Facebook based chatbots that provide easy-to-use, machine learning based information on COVID-19 in seven languages and with a potential coverage of two billion people (WHO, 2020[48]). Behavioural science has also been included in the infodemic management work led by WHO (2020[49]). In July 2020, the new WHO BI unit at Headquarters created a Technical Advisory Group on Behavioural Insights and Sciences for Health to support the application of BI at the WHO (WHO, 2020[50]). In October the group held a consultation on acceptance and uptake of the COVID-19 vaccine.

As part of the broader World Bank efforts to respond to the COVID-19 crisis, the World Bank's Mind, Behavior, and Development Unit (eMBeD) is providing insights to Bank staff on embedding behavioural science into the Bank's operational response to the immediate and medium- to long-term impacts of COVID-19 pandemic. Areas of focus include assessing, addressing and improving: trust between governments and citizens; communications regarding hand washing, masks and other health-related behaviours; job searching; food purchases and nutritional setbacks; gender-based violence, sexual harassment and exploitation; risk perception and disaster preparedness; education support interventions; and a wide set of in-time advisory services on specific topics. eMBeD has also worked with the large set of Rapid Response Surveys of the World Bank Poverty Team that collect critical information on a variety of behaviours and with the Development Impact Evaluation (DIME) team on leveraging media and edutainment to provide information, services and support behavior change. Much of this work is in-time support, under implementation and/or in the early stages of dialogue and action. They also prepare guidance documents for Bank project leaders, webinars, and briefs (for example, see (World Bank, 2020[51])) that build upon ongoing support protecting human capital related to focusing on medium- and long-term impacts of COVID-19 across the developing world.

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Process

The next step for good governance is to have strong processes for evaluating policy options and deciding on what decisions to take. Given that BI practitioners and policy makers are within traditional bureaucratic structures, process then often relates to how insights generated by the application of BI are inputted into decision making. Therefore, this section will focus mainly on the challenges BI faces in terms of methods and advice during the pandemic.

The BI methodology in times of crisis

The BI methodology often stands in contrast to traditional policy making, which applies models of human decision making to policy problems in a *deductive* process. The BI methodology is based on an *inductive* process that bases findings, principles and theories on repeated observations of behaviour, usually in a controlled experiment and via the scientific method (Lunn, 2014[11]).

In normal circumstances, behaviourally-informed policies test multiple solutions via experiments and trialling to iterate and determine the best course of action. In times of crisis, time is a luxury; the rapid pace at which COVID-19 developed and posed challenges to government has been especially difficult for BI practitioners and policy makers. This has challenged the traditional "slow and iterative" BI model, and placed a high importance on rapid and quickly implementable models of conducting BI. Such a distinction has existed within the BI community well before the COVID-19 pandemic. Lourenco et al (2016[52]) in their collection of BI case studies in Europe note two relevant classifications for BI initiatives: behaviourally-tested or behaviourally-informed initiatives[7]. The latter refers to policies that use behavioural evidence as a lens or feedback tool to think through behavioural solutions to the policy issue but are not testing the solution in the current policy context.

Evidence from BI applications during the COVID-19 pandemic seems to indicate a further adaptation of these models to the pace of the crisis. On the one hand, behaviourally-tested initiatives are being mostly implemented via rapid and iterative experimental methods, which is discussed further below. On the other, behaviourally-informed or aligned initiatives are commonly built on well-proven insights that have been shown to work effectively in other contexts (see Box 3).

Two key challenges emerge from the adaptation of the BI methodology to the pandemic. First, rapid applications can result in potential unintended consequences – especially if evidence is further refined through future iterations of the trials or experiments. Second, behaviourally-informed initiatives run the risk of resembling the deductive techniques used by traditional policy making. This may contribute to some of the confusion in terms of policy advice noted above, as well as potentially set an unwanted precedent that experimentation and trialling are not necessarily needed. The solution for both of these challenges includes the need to ensure proper monitoring and *ex post* review mechanisms are in place to make sure that effects are as desired and unintended consequences are identified and corrected or removed if the policy issue is no longer relevant.

Box 3. Rapidly implementing behaviourally-informed solutions using past results

During COVID-19, behavioural practitioners and policy makers have been applying BI using a qualitative approach that uses the thought process of BI, i.e. diagnosing behavioural problems and developing solutions, but then immediately implementing them in real-world situations. These solutions often rely on classic behavioural insights that have been shown to consistently work in other situations.

One example of this is "intuitive coding," which is a broad category of insights that help people navigate the complex world and support decision making (OECD, 2019[12]). During the pandemic, it has been easy to notice the omnipresence of arrows, lines and signage directing people to hand washing stations

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or maintain distance in a super market. Several countries have also used this concept to support deconfinement, particularly to support people meeting while maintaining social distancing. Countries have been using circles or squares painted in the grass to intuitively guide people to maintain distance, including examples in Canada (Draaisma, 2020[53]), Denmark and the United States of America (Reyes, 2020[54]).

Figure 2. Intuitive coding in Trinity Bellwoods Park, Toronto, Canada

Source: (Draaisma, 2020[53]).

Experimenting in rapidly changing environments

Choosing the right experimental method is fundamentally influenced by the research question being asked. For much of the early history of behavioural insights applied to policy, the "gold standard" for experimentation (OECD 2017) was often considered the randomised controlled trial (RCT). It represents the most rigorous scientific method available for assessing whether an intervention is effective and, ideally, establishing causal relationships. Because of this, RCTs were long considered the desired way to conduct BI experimentation as they were seen to produce more valid and robust results.

However, even before the pandemic, many BI teams around the world had begun adopting iterative approaches to experimentation, including online, survey and qualitative methods[8]. This trend has been certainly accelerated as teams have been forced to think about new methods for experimenting in response to the COVID-19 pandemic, which are in alignment with some methods already advocated for use in health care (i.e. see Schneeweiss et al, 2015). This was due in part to the significant time and resources it takes to conduct an RCT, which many governments did not have the luxury of having. More broadly, and particularly during the early stages of the pandemic when situations were rapidly changing, RCTs were often not able to answer the research questions of interest to governments. RCTs are very well suited to answering research questions that seek to understand if a given policy works better than another. However, RCTs are less suited to answering research questions that seek to diagnose broader and more complex behavioural issues; for instance, how the public has understood the symptom pattern for COVID-19.

For such diagnostic work, various other approaches enable policy makers to understand the issue from a variety of angles, rapidly test many different forms of behavioural insights, and gain an understanding of what seems to work and what does not. These include, but are not limited to, surveys, field experiments, A/B testing, etc. From this diagnostic, RCTs could be deployed effectively to test different policy solutions.

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This was the approach taken for the recent OECD (2020[15]) work on fostering safety culture in the energy sector. In response to the pandemic, BI teams around the world are clearly moving to such alternatives to the RCT to focus on answering more diagnostic research questions. This has enabled BI practitioners and policy makers to provide a rapid indication of behaviours, and helps to inform policy choices.

This does pose a significant challenge as policy makers require advice to make policy decisions, but making the jump from results to policy advice with such evidence needs to be taken with caution. This is especially relevant when the advice is of strategic nature. Moreover, research demonstrates that answers to self-reported surveys could be influenced by question design, thus delivering results that are not representative of the population (Hansen, *forthcoming*). Though, the research community is working on ways to estimate and reduce measurement errors due to biases in COVID behaviour questions (i.e. see (Daoust et al., 2020[55])). However, the appropriate method used depends on the research question being asked, how the experiment is design, and how the results are communicated. This fundamentally comes down to a debate about whether some evidence is better than no evidence, and how to communicate the appropriate uncertainty to policy makers. Finally, BI results are heavily context and culture dependent – in an ever-evolving crisis, we are not even sure what is found to be an issue this month will still be an issue in the following month. Ijzerman et al. (2020[41]) provide, from an academic perspective, some additional dynamics that need to be considered when providing policy advice based on behavioural science.

This puts BI practitioners in a paradoxical position – due to the pressures of the pandemic, they need to use rapid experimental methods to inform policy decisions. However, if that evidence is used improperly or results in unintended consequences, then the resulting policy decision could face significant backlash and public scrutiny that could risk the reputation of the unit, and the discipline as a whole. This could be especially problematic if the evidence runs contrary to traditional public health solutions (i.e. (Conn et al., 2020[56]) (Hahn et al., 2020[57])).

An important role for BI as a tool to support the pandemic response would be to focus research questions on supporting practical public health responses and add value with reflections on behaviours that may not be traditionally considered. For example, experiments conducted for the Irish Department of Health focused on “marginal behaviours” that were deemed by some to be acceptable and others not, such as meeting outdoors or visiting parents, and focused research on behavioural solutions to these problems (Lunn et al., 2020[37]). Looking forward, the pandemic will likely present a number of opportunity for behavioural scientists to exploit natural experiments given the variety of government responses around the world. This will be an important learning opportunity of the BI community to understand what worked and prepare for future crises.

Transparency, accountability and ethics matters even more than normal

Transparency is a core element of good governance: citizens have the right to know what government is doing and hold government accountable for their decisions. This also helps to build trust, both in the decisions made by government and in the process through which those decisions were made. In crisis situations where stress levels are already heightened and unintended consequences are a very real concern, the need to be transparent and accountable is heightened even more.

Crisis situations such as the pandemic place even more importance on following rigorous protocols and guidelines for applying the science, which can be challenging for many of the reasons noted previously in this section. This includes following robust methodologies for gathering and using evidence, and pre-registering experimental designs to increase the credibility of the findings. Combined with the increasing polarisation towards the use of science, BI practitioners and policy makers also need to be sure that they are ethically and responsibly applying the science to ensure the credibility of field is maintained. As noted above, OECD (2019[12]) offers extensive guidelines on the ethical application of BI, which includes several pieces of guidance on transparency and accountability (see Box 4). A recent framework has also been developed that synthesises academic and public sector debates on ethics into one mnemonic called

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"FORGOOD" (Lades and Delaney, 2020[58]), which stands for seven core ethical dimensions: Fairness, Openness, Respect, Goals, Opinions, Options and Delegation

Box 4. Tools and Ethics for Applied Behavioural Insights: The BASIC Toolkit

In 2019, the OECD released a process framework specifically designed for policy makers who want to apply BI called "BASIC". Named after an acronym for the five-step process – behaviour, analysis, strategies, intervention and change – this toolkit helps policy makers apply BI from start to finish on any policy problem.

An innovative element of the toolkit is the first ever set of guidelines for applying BI responsibly that were developed in consultation with an international network of BI practitioners and policy makers. See summary below in Table 2 or full explanation in OECD (2019[12]):

Table 2. Summary of ethical guidelines for applying behavioural insights

Stage of the policy making process	Summary of ethical guidelines
General guidelines	• Always conduct an ethical evaluation of behaviourally-informed interventions • Public acceptance of BI does not make it always ethically permissible. • Carefully consider issues related to consent and awareness
Before beginning an intervention	• Consider establishing an ethical review board • Ethical supervision of data collection, use and storage • Observe existing ethical guidelines and codes of conduct
By each stage of BASIC	• 10 guidelines presented for each stage, specific to the actions of that stage

Source: (OECD, 2019[12]).

Outputs and outcomes

The final governance step is to gather what was done to transform them into outputs and report on the outcomes. In terms of applying BI during the pandemic, challenges come into play: how to communicate results to the wider community and how to demonstrate to policy makers what works, and what does not.

Communicating results

Even when following a simplified methodology and implementing quick experimental designs, the results need to be communicated to inform policy decisions. As discussed above, this process is already a delicate balancing act. In the context of rapid decision making during the pandemic, additional dangers exist with regards to conveying too much certainty about the findings and how they inform policy decisions. A core challenge then is for BI practitioners to communicate findings and know when or how to convey the necessary underlying assumptions and uncertainty to policy makers.

A further communication challenge in a crisis situation for BI is taking the time to write up and publish these results. Governments have faced especially difficult working conditions during the pandemic, both in terms of the pace at which the crisis is unfolding but also staff that is likely working from home. This may be further aggravated if financial and human resources are under stress, or if working extensively with external sources that may have different guidelines and responsibilities with regards to publishing.

The results of BI experiments could take significant amounts of time to be released to the public – if at all. This would affect accountability, transparency, and trust. It would also reduce the ability to learn from each other. Returning to the previous conversation about BI in LMICs, this would be especially difficult in these settings where an extensive accumulation of BI-related knowledge is needed. For example, making further use of pre-registration helps, as would making summaries of preliminary findings available. Investing in

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posting pre-prints of articles in development and connecting scientists with media to disseminate their findings could also be useful.

Demonstrating the outcomes for BI

In times of crisis, policy makers want answers on what works to support rapid decision making. This has been challenging for every policy community, especially epidemiologists and virologists who are faced with providing advice about a public health crisis with a novel virus. For BI, providing advice about behaviour has been challenging as there is just not enough evidence to say conclusively what works and what does not for many policy issues.

This challenge can become amplified when experiments return null or inconclusive results, which could be met with poor media coverage or criticism. Even with these challenges, it is essential that BI practitioners and policy makers place an emphasis on demonstrating outcomes of BI research. On the one hand, such findings are useful for the community as others may be able to learn from these results and run new experiments that finds a positive solution. On the other hand, not focusing on the outcomes can result in a systemic publication bias where effects can become over stated.

The role of the behavioural insights practitioner is distinct in understanding, synthesising and applying behavioural insights to a certain context, and linking with the necessary parts of the organisation to move to action. It is a unique skillset and often involves discussion with different actors from that with external advisors who provide targeted advice and support. The International COVID-19 Behavioural Insights and Policy Group, is an international example of support for such a community related to COVID-19. It is a collection of policy makers and practitioners from governments and international organisations making progress in this area that has influenced policy in a number of different country contexts.

Early results: Examples applying BI to government responses to the COVID-19 pandemic

So far, this paper has discussed why BI is needed to support regulatory responses to the COVID-19 pandemic and how practitioners and policy makers working in government are facing challenges doing so. This final section seeks to collect practices from some BI practitioners and policy makers in government to demonstrate how they are putting BI into practice in the pandemic, and overcoming some of the challenges noted above.

Three caveats to keep in mind as these cases are read:

1. These are based on submissions by members of the International COVID-19 Behavioural Insights and Policy Group collected as of October 2020[9]. It is a non-exhaustive list and caution should be taken with inferring conclusions. Cases reflect publicly available information; anecdotal evidence suggest that these are only a small portion of what is actually being applied during the pandemic.
2. Information about what BI experiments were conducted is being released at different rates around the world. Some governments are releasing indicative findings while others are still working on classified projects. Therefore the examples below are not to be taken as a representative sample of BI applications to COVID-19.
3. What works in one context does not always work in another. Core to the BI methodology is to always test and iterate, especially when transferring insights from one jurisdiction or field to another. Given the rapidly changing context, the shelf life of these insights may be short and constantly changing.

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Analysis: What the case studies suggest about applying BI to the COVID-19 pandemic response

As noted above, caution has to be taken drawing concrete conclusions from the cases below. However, an overview of the cases and discussions from the International COVID-19 Behavioural Insights and Policy Group can note some trends and points for discussion:

1. **Cases note that most applications have been related to public health communications, with some focused on technology such as contact tracing apps.** Oftentimes communications-focused applications have been developed to support official government communication offices. The goal is broadly to improve the way information is provided, viewed and retained by citizens in regards to a host of behaviours, including testing, hand washing, social distancing, changing modes of transport, encouraging teleworking, guiding people to government services, encouraging the use of contact tracing apps, etc. However, this trend may be most impacted by an availability bias. Publication of cases requires a write up and declassification, two difficult tasks when resources are devoted to crisis response. As, by definition, communications are outward focused, these examples of BI are easily seen and, thus, probably easily declassified. This could also reflect a lag in the dissemination of findings, as early government response to the pandemic was communications-focused.
2. **Testing, when possible, was accomplished largely through rapid and iterative methods**, including surveys, field experiments, A/B testing, etc. These were often followed up with a desire from decision makers to either provide policy recommendations or tools for departments to use, such as checklists or resources to draw upon. Where testing was not possible, "behaviourally-informed" methods were drawn upon to provide advice to government based on past applications of BI.
3. **There are concern that the skills of BI practitioners and policymakers are being underutilised, and possibly setting unwanted precedents**. Over the last decade, the field of BI has developed a wide variety of methods for experimentation and across an array of policy disciplines. While BI has been leveraged to support important government needs during the pandemic, the community strongly supports a broader use of their skills and to ensure that they are not relegated to "quality assurance" or "advisory" roles. A key value-added of the BI approach is with regards to diagnosing behavioural barriers, which needs to be maintained.
4. **Community members note the depth of topics ready for BI applications, highlighting the need for further partnerships with other parts of government.** In the short term, this included aiding governments in their plans to de- or re-confine, including contract tracing, app design, misinformation and vaccination demand and acceptance. However, as the pandemic continues, medium- to long-term issues will need to be addressed. These include the role for BI in addressing secondary impacts of COVID-19, such as gender-based violence, education, employment programmes, social cohesion, food security, mental health/fatigue, and aiding with recovery, including promoting economic outcomes and green growth.
5. **Partnerships between government and academic groups or international networks have been leveraged to support evidence-informed policy making.** This includes through longitudinal studies that track behaviours and psychological variables, largely conducted through regular sampling of the population with the same set of questions to understand patterns in society and feed those into decision making processes. Further research and case study collections may want to look further into the effectiveness of these partnerships on improving government's response to the crisis, what lessons learned can be applied to future crises, and what spill over effects may be gained for the wider research and policy communities. Co-ordination and mutual learning platforms, like the International COVID-19 Behavioural Insights and Policy Group, provide

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valuable opportunities to share what works and what does not, as well as support the use of BI around the world to combat the pandemic.

Cases collected

Australia, New South Wales Behavioural Insights Unit (NSW BIU)

The NSW BIU was formed in 2012. Their unit is located in the Department of Customer Service. The NSW BIU works across the NSW Government helping to improve the effectiveness of public services and policy by applying evidence about the way people think and act. Their team of advisors and data analysts aims to ensure that behavioural insights are at the centre of NSW Government decision-making and policy. This is accomplished through three pillars:

1. Designing, testing, through randomised controlled trials, and scaling evidence-based behavioural solutions with their partners.
2. Capability building across the public sector to support the application of behavioural insights to improve citizen outcomes.
3. Working with public sector agency partners to audit and remove friction in government processes by applying behavioural insights that improve customer experience.

The NSW BIU has delivered a range of advice during the pandemic. They have advised on how to improve user experience when using a heat map of postcodes with COVID-19 case incidence, how to improve remote working experience, how to reduce the number of inappropriate queries for quarantine/border exemptions, how to improve workplace COVID-19 signage and communications, and how to keep businesses and their patrons COVID-safe. In addition, they provided guidance on the NSW public communications campaign, worked with the state's Transport Department on reducing the use of public transport at this time and worked with the Ministry of Health to increase COVID-19 testing numbers. In more detail:

1. **Increasing COVID-19 testing rates**: A randomised controlled trials showed that adding a simple rule of thumb to the text messages that the public receives if they test negative for COVID-19 can increase the public's intention to get re-tested for COVID-19. Three text messages were tested using the "business as usual" BAU as the control ("Your COVID-19 result is NEGATIVE. Please take 3 minutes to tell us about your testing experience via this link"), against two behaviourally informed messages. First, a "pro-social loss frame" message ("By getting tested you have helped prevent deaths in NSW"). Second, they tested a simplified "rule of thumb" message ("Come back as soon as you have symptoms again"). The rule of thumb text increased the proportion of people who are "very likely" to get retested by 11%, in comparison to the BAU message. This trial led to process improvements and the messages are now being widely used across NSW.
2. **Reducing the use of public transport**: A literature review co-written by the NSW BIU and Department of Transport resulted in a behaviourally-informed guide for employers (NSW Government, 2020[59]). In the guide, managers are encouraged to act as work-from-home role models. The guide also suggests that trending norms that show the number of people working from home be shared, encourages staggered start times, and suggests that businesses draw attention to existing cycle paths or walkways and make it easy to work flexibly. The Department of Transport shared the guide with their network of 1 800 businesses to encourage ongoing remote working where possible.

Canada, British Columbia Behavioural Insights Group (BC BIG)

BC BIG is located within the Public Service Agency in the Government of British Columbia. The team applies a human-centred and evidence-based approach to design better programs and services for British

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Columbians. Working with client ministries across the provincial government, BC BIG has three areas of focus: Evidence Building (Projects and Advice); Capacity Building (Learning and Events); and Community Building (Partnerships and Networks). During COVID-19, BC BIG has carried out work in all three areas.

Under capacity building, BC BIG continues to offer workshops and presentations for members of the BC Public Service. They customise each session, for example focusing on flu vaccination and ensuring supply of Personal Protective Equipment for staff at the Ministry of Health. By tailoring each session, BC BIG helps client ministries see the behavioural dimensions of their specific policy context. BC BIG is also keeping the provincial government informed through its internal *Behavioural Science and COVID-19* blog series.

Under community building, BC BIG continues to build a network of BI practitioners and supporters. For example, they send out regular updates through their Behavioural Insights Beyond Borders (BIB2) mailing list. This is a large network of practitioners, scientists, and behavioural insights enthusiasts in the public, non-profit, and academic sectors. In November 2020, BC BIG held its annual BIG Difference BC conference. With over 1 000 registrants and a special session on COVID-19, the conference was a great opportunity for practitioners in Canada and beyond to share insights and lessons learned.

Under evidence building, BC BIG has helped support several ministries in their pandemic response. In the early weeks of the crisis, they helped client ministries looking to shift services online, including tax payments and job support services. The team prepared reports on the behavioural dimensions of the pandemic, focusing on topics such as digital technology, deconfinement, and the gradual return to the workplace. They also partnered with academics to secure external funding and build a long-term research roadmap. The roadmap consists of online surveys, experiments, and focus groups. Topics of inquiry include social norms, ambiguity, motivated reasoning, and loss aversion – all key considerations when public officials communicate with the public.

In addition, BC BIG continues to run randomised controlled trials. For example, they worked with the Ministry of Social Development and Poverty Reduction to help people access job support services. The pandemic was an unprecedented shock to BC's labour market. Within months, the provincial unemployment rate rose to its highest level in decades. During this difficult time, the Ministry has played a major role. It offers valuable job seeking services through the WorkBC program. These include employment counselling, subsidised training, workshops, and other employment resources. Services are free but, for a variety of reasons, many clients delay applying until the last minute. To ensure timely uptake, the Ministry partnered with BC BIG.

For this project, BC BIG and the Ministry built a low-cost, scalable, and fast A/B testing platform – which was made more difficult by the crisis. Using this platform, they ran a randomised controlled trial comparing two email prototypes. The emails invited unemployed British Columbians to contact their local WorkBC office. For each email, they varied the subject line and slightly modified the content. One used a social norms message to indicate the popularity of the service (N=4 624). The other contained a simple checklist indicating that individuals were on the final step towards accessing support (N=4 619). Both emails used personalisation, a clear call to action, and highlighted the benefits of WorkBC services. The emails directed recipients to an online, pre-populated form. People just had to click "submit" and their nearest WorkBC office was automatically contacted.

The checklist email performed the best (see Figure 3). Compared to the social norms email, it generated a 13% increase in email openings, a 43% increase in click-throughs, and a 59% increase in expressions of interest. The checklist email also reduced the delay in submissions by 1.5 days. After two weeks, they sent a reminder email to people who had not yet submitted an expression of interest. This further increased engagement. Finally, they examined results from a Gender-based Analysis Plus (GBA+) lens. For example, in BC, women made up more than 60 per cent of the job losses in the hardest-hit sectors. When they compared across treatment groups, they were encouraged to see engagement was strongest among women, especially those with postsecondary education.

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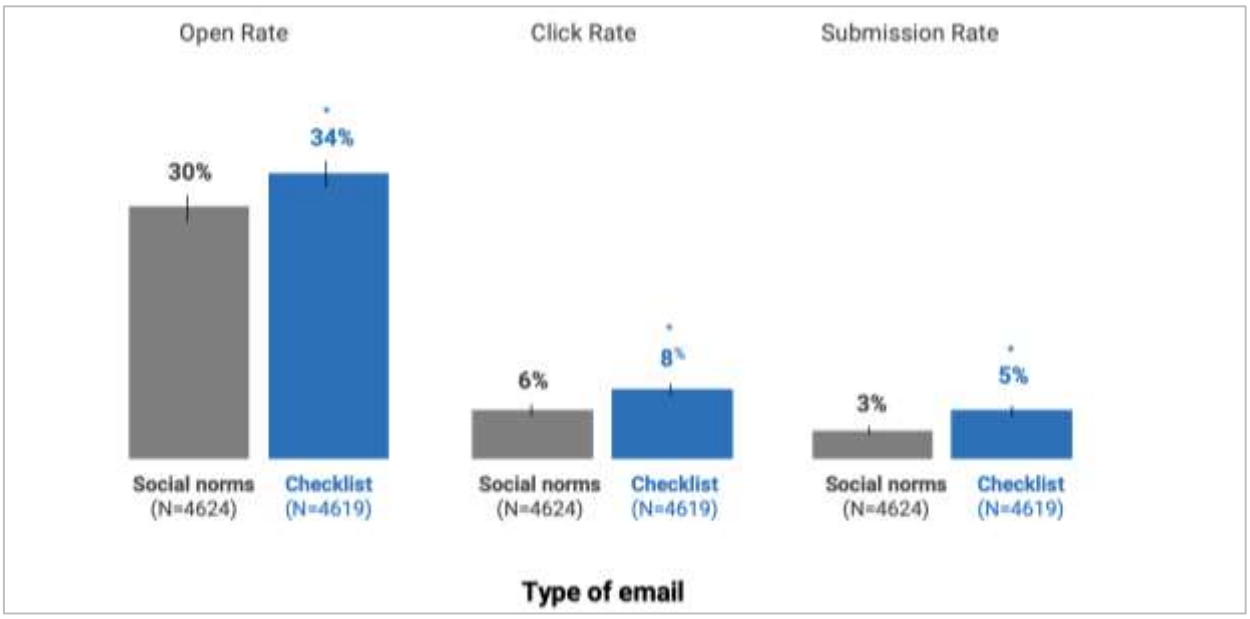
Figure 3. Helping people access job support services during the COVID-19 pandemic



Note: * denotes $p < 0.05$.
Source: Information provided by BC BIG

France, Direction Interministérielle de la Transformation Publique (DITP)

The behavioural insights team within the DITP was highly mobilised in support of the response to the pandemic. Their productions revolved around three types of activities: giving feedback on the various communications that were designed by the governmental communication team (SIG: Service d'information du Gouvernement), running rapid behavioural diagnosis (interviews, surveys) followed by recommendations in various policy areas and producing thematic "kits" on managing the crisis in different contexts (transports, schools, workplace, residences for the elderly etc.). In terms of communication, most advice drew on general principles summarised in the checklist in Figure 4

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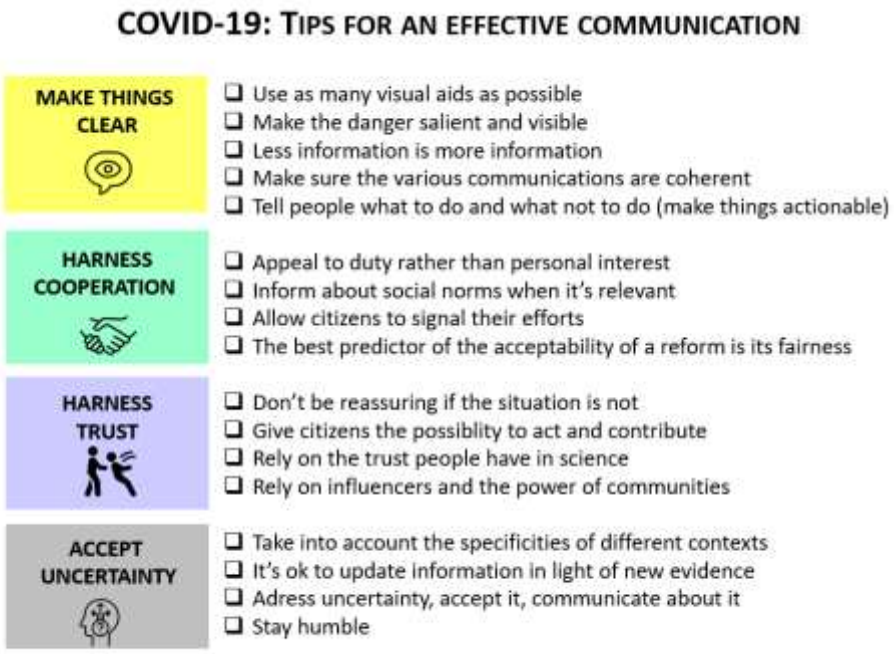
Figure 4. Behaviourally-informed checklist in France



Source: Information provided by DITP

While the team had to operate in a pragmatic and responsive manner and provide its entire bandwidth to the management of the crisis, its limited resources (small size of the team, time-sensitive requests) made it impossible to test and experiment recommendations before delivery. Testing was also challenging in an environment that was evolving and changing very rapidly as every new situation came with new challenges to address.

In retrospect, this *modus operandi* has made the team reflect on several issues regarding the scope and limits of applying behavioural sciences rigorously in such a context. Indeed, while recommendations were behaviourally informed (in other words, based on the scientific literature of "what works" or general "rules of thumb") they were not experiment-based and were not tested in the specific context in which they were to be deployed. This posed a more general question on the generalisability of the scientific literature especially in a context where the replication crisis looms large in the field of psychology and behavioural sciences. The team also felt that it undermined their credibility and its usual advocacy for evidence-based policymaking.

Based on their experience, the team suggests several options to address this problems that can support mutual learning with other teams. If testing is not possible one can focus on recommendations that revolve around making the information clearer and easier to navigate rather than resorting to more complex behavioural levers, such as the use of social norms or social signalling which might backfire. Another option is collaborating with rapid (from few hours to few days scale) online testing platforms that allows real-time experiments – even though these types of experiments are not entirely ecological. One can also work in an anticipative manner (weeks or months scale) in order to have enough time to evaluate upcoming recommendations. For example, the team is currently running experiments on flu vaccination and this has been anticipated four months ahead of the vaccination campaign period. Finally, it would be helpful to deliver recommendations with clear and transparent indicators or labels specifying the level of evidence (expert opinion, behaviourally informed, tested etc.) and precautions that should be kept in mind in order to preserve scientific credibility of behavioural sciences on the long run.

Tackling coronavirus (COVID-19) - Browse OECD contributions

Germany, Federal Chancellery

Germany has expertise in applying BI inside the Federal Chancellery, which includes the Citizen-Centred Government Unit that counts with behavioural scientists as part of their staff. The unit draws on evidence created by scientific networks to gain advice and support, including the German National Academy of Sciences Leopoldina and the Mannheim Corona Study at the University of Mannheim.

The German National Academy of Sciences has issued four "ad hoc statements" on the COVID-19 pandemic since March 2020. These have included advice on the use of behavioural science towards the pandemic, including:

- Statement on *Challenges and options for intervention* recommends, as part of information and education, to use expertise from behavioural science to facilitate the acceptance and implementation of measures to mitigate the expected negative psychological-physical consequences of a temporary shutdown and of physical distancing in schools and universities (National Academy Leopoldina, 2020[60]);
- Statement on *Measures relevant to health* suggests communicating broadly results showing that Germany's population shows a high willingness to implement the recommended measures regarding the transmission of the disease to promote sustainable and responsible behaviour (National Academy Leopoldina, 2020[61]).
- Statement on *Sustainable ways to overcome the crisis* includes a section on improving risk communication and promoting responsible individual behaviour (National Academy Leopoldina, 2020[62]).

Germany is also participating in continuous surveys that collect information on psychological and behavioural aspects of the pandemic. The first is the University of Mannheim Corona Study produced through the Collaborative Research Centre 884 "Political Economy of Reforms" that brings together about 150 researchers from economics, political science, sociology, statistics and computer science. This study began in March 2020 and has continuously studied a group of 3 500 participants who have agreed to regularly participate in the research for at least 18 months, allowing the researchers to compare life in Germany before and since the outbreak. Daily participation is around 500 participants. Questions include personal behaviours during the crisis, as well as on anxiety, risk, personal hardships, etc.

The second is the COVID-19 Snapshot Monitoring (COSMO) study, which is a joint project with seven universities and research institutes that is led by the University of Erfurt (2020[63]). The aim of this project is to repeatedly gain insight into how the population perceives the corona pandemic and how the "psychological situation" is emerging. Questions cross over a wide variety of behaviours associated with the pandemic and the summary reports including recommendations.

Ireland, Research Services and Policy Unit (RPSU)

Ireland developed capacity to use BI in response to a health crisis long before COVID-19 emerged. As described in Box 1, the Irish Department of Health (DOH) established the RPSU in 2015 as a cross-departmental support unit for evidence-informed policy making, including raising awareness and encouraging the use of BI. In response to the pandemic, Ireland created the National Public Health Emergency Team (NPHET) COVID-19 Subgroup: Behavioural Change, which is composed of Irish experts from national agencies and academic institutions, including the RSPU and the Communications Unit from the DOH. The Subgroup was set up to provide insights and evidence to support the Communications strategy and the wider work of NPHET. The Economic and Social Research Institute (ESRI) was established in 1960 to generate independent, high quality research to support a healthy economy and promote social progress. ESRI houses the Behavioural Research Unit (BRU), which specialises in applying behaviour science to policy and has produced extensive research to support Ireland's response to the

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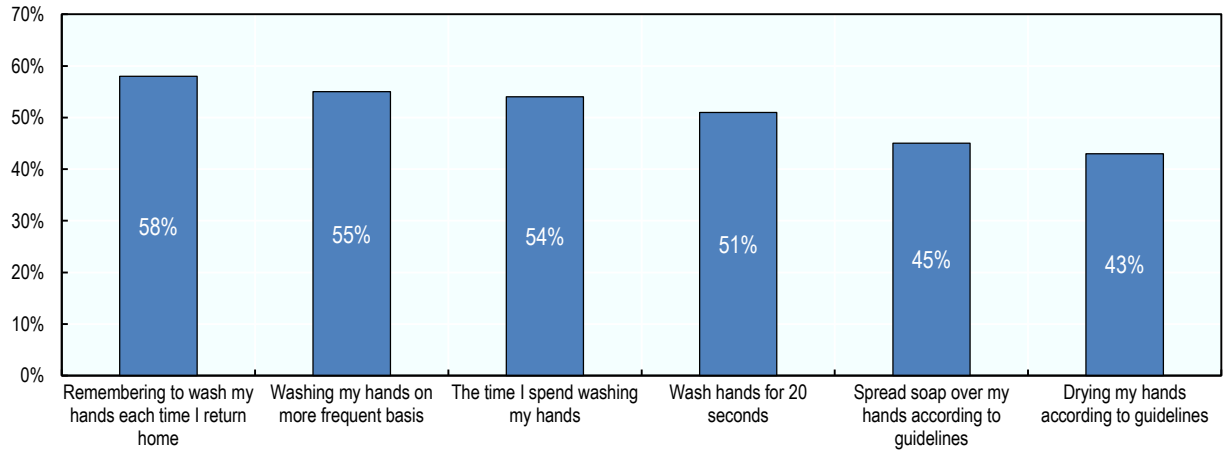
pandemic. Prior to the pandemic, the BRU had been working several Irish government units including the DOH. University College Dublin (UCD) also supports the government on applying BI to policy.

This partnership has resulted in several applications of BI to support Ireland's COVID-19 response, of which two will be highlighted here. First, following WHO (2020[64]) advice on the need for handwashing to slow the transmission of the virus, the DOH sought to test behavioural solutions to improve handwashing in homes. This was in response to desk research on intention-behaviour gap, where self-reported (Dean, Foddai and Grant, 2017[65]) and observational studies (Vaganay, 2020[66]) show that people do not adhere to recommended handwashing behaviours.

The DOH designed a behaviourally-informed hand washing poster and issue it to all households in April 2020 (Murphy and Mooney, 2020[67]). The poster content and design were informed by international guidance ((CDC, 2020[68]) (ECDC, 2020[69])) and insights from a literature review (Murphy, 2020[40]). The final design resulted from a collaboration between the RSPU and the Communications Unit in the DOH. The poster focuses on the capability (how to) as it stresses the importance of using soap and water, and shows the steps and time involved. It also targets motivation, with an emphasis on the emotions of threat and disgust ("Kill the virus") and affiliation ("To protect you and others" and "Save lives"). Results show that more than half of respondents in a follow-up survey recalled receiving the poster (59%) and most of these noticed improvements in their hand washing since receiving the poster (see Figure 5).

Figure 5. Extent to which you have noticed a change since receiving the poster?

% a little or a lot more than before, base: recalling receiving



Source: Recreated by the OECD from (Murphy and Mooney, 2020[67])

Second, in developing a COVID Tracker App, Ireland was aware that achieving a critical mass of users was essential to its effectiveness (Murphy, Gibney and Mac Criosta, 2020[70]). Research shows that most people in Ireland have access to smartphones (Gibney and McCarthy, 2020[71]) and were willing to download the app when it becomes available (Lero/SFI, 2020). However, research also shows the importance of public trust in apps and in the privacy of app users (Gibney, McCarthy and Lindberg, 2020[72]). Officials responsible for developing the app wanted to use behavioural insights to help ensure that the app is easy to use, is trusted and supports users over time.

The overall approach involved development and testing, active engagement, and public health research. A range of documents are available on the HSE COVID Tracker App page. Two aspects of the public health research were undertaken to inform the app development team:

Tackling coronavirus (COVID-19) - Browse OECD contributions

1. Using insights from user experience research and expert review to refine the app's content. A mixed-methods user experiences research study using focus groups and cognitive interviews was undertaken with a baseline version of the app (Gibney, Bruton and Doherty, 2020[73]). The app was reviewed and commented on by members of the NPHET Subgroup – Behavioural Change (Murphy, 2020[74]). Additional suggested refinements to app content was provided by a behavioural economist in the Department of Health and by the team undertaking a behavioural study.
2. It was decided to pre-test the effect of certain content, in particular additional privacy assurances and the format of hypothetical exposure notifications (Julienne & Lunn, *forthcoming*).

These insights were used to refine the app's content. A follow-up survey (4 to 5 days after participants downloaded a trial app) showed that most participants reported checking it daily and most had a positive overall impression of the trial app (Julienne & Lunn, *forthcoming*). The experimental pre-testing showed that additional privacy assurances (see Figure 6) increased trust, reduced privacy concerns, and increased consent, while participants who saw the redesigned hypothetical exposure notification (advice organised under subheadings) were more confident they would know what they should and shouldn't do if they received a notification. The redesigned privacy notices and exposure notifications were adopted for the launch version of the app.

Figure 6. Data protection and privacy assurance message

Source: (Murphy, Gibney and Mac Criosta, 2020[70])

Italy, Behavioural Policy Unit (R^2) of the Municipal Government of Rome

When Italy declared a state of emergency, the R^2 unit convened a working group of behavioural practitioners and policy makers[10] to provide near-real time quantitative evidence about the behavioural aspects of the crisis through one of the first online experiments on COVID-19 (Kwon, 2020[75]). The working group subsequently conducted more online experiments as well as evidence-based interventions aimed at both containing the spread of the virus and mitigating the negative repercussions of the social crisis at large. These activities have been performed in collaboration with national government agencies and some of the Italy-based UN entities. Some examples include:

Evaluating COVID-19 Public Health Messaging in Italy – Self-Reported Compliance and Growing Mental Health Concerns (Barari et al., 2020[76]): A nationally representative survey used to evaluate the Italian government's public health efforts and citizen responses found that, first, public health messages were being heard and all subgroups understand how to keep themselves and others safe from the virus and were acting in accordance, even for those with low trust in government. The slight exception was for

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young adults, who had lower compliance rates. Second, the quarantine was beginning to have serious negative effects on the population's mental health. The report recommended that the focus of communications should move from explaining to citizens that they should stay at home to what they can do there and stated the need for interventions that make staying at home and following public health protocols more desirable to alleviate boredom and isolation. These interventions could include virtual social interactions, such as online social reading activities, classes, exercise routines, etc.

Experimental Survey: Phase II – the new normal: The R^2 unit conducted a study on the eve of the phase II, which saw some restrictions being gradually softened. The study aimed to measure some behaviours and perceptions of Roman citizens during the lockdown and future intentions during the following stage of loosening restrictions. Participants were exposed to three different messages delivered via e-mail to a sample of citizens of Rome who had subscribed to the Municipality's newsletter (N=5 107). The messages relied on behavioural insights that proved to be effective in changing people's attitudes and behaviours in many contexts and referred to loved ones to engage with reciprocity and mutual support. These are presented below and in Figure 7:

- Message A (emphasising threat): "You and your loved ones have made tremendous efforts, do not waste them. Reduce travel to the minimum"
- Message B (positive framing): "You and your loved ones have made tremendous efforts, keep it on. Reduce travel to the minimum"
- Message C (loss aversion): "When you go out, you endanger your health and the health of your loved ones Reduce travel to the minimum."

Figure 7. Message A tested in Rome, Italy

Messages B and C are the same image with text above in its place

Source: Information provided by the City of Rome Behavioural Policy Unit

The analysis showed no significant effects. Looking more deeply into the different messages, it was possible to see some significant results at the internal correlation levels. This suggested that the messages had some specific effects on people with certain characteristics (emerging from their answers to the questionnaires). For instance, participants who wished to go shopping for groceries only once per week after the removal of the lockdown did not find the message interesting or worth remembering: one

Tackling coronavirus (COVID-19) - Browse OECD contributions

interpretation of this effect is the scarce need of cognitive processing of an already cognitively interjected information. This led to the choice of Message B as the basis of a communication strategy.

Improving communications: The R^2 unit worked with the United Nationals Development Programme (UNDP) Office in Rome to produce a behaviourally-informed pamphlet (see Figure 8).

Figure 8. Behaviourally-informed pamphlet in Rome, Italy

Source: Information provided by the City of Rome Behavioural Policy Unit

Japan, Behavioural Sciences Team (BEST)

BEST is Japan's nationwide nudge unit and was established in April 2017 on the initiative of the Ministry of the Environment in collaboration with the industry, academia, and local and central governments. Its mission is to help people make better choices by guiding their own autonomous decisions without stress in a personalised way, preserving freedom of choice.

One of the three pillars of the basic strategy to combat COVID-19 in Japan is the behaviour change of citizens to avoid high risk environment, to take basic disease-prevention measures including hand washing and disinfection, and to increase resistance with a balanced diet, moderate exercise, rest and sleep. The BEST aims to elicit such behaviour change through use of behavioural insights by disseminating and sharing information useful for promoting hand washing and disinfection, maintaining physical distancing, etc. (see Figure 9).

Tackling coronavirus (COVID-19) - Browse OECD contributions

Figure 9. Behaviourally-informed communication designed to reduce transmission of COVID-19

Source: (BEST, 2020[77])

One such experiment was to promote the use of hand disinfectant. Previously, the rubbing alcohol was placed at the height of eyes at the entrance of rooms in the Ministry of the Environment. Then, an arrow tape has been placed in some rooms to make it easier for people to notice the rubbing alcohol and added a message to show gratitude for co-operation (see Figure 10). The effect of arrow tape was examined by a difference-in-difference experiment. The consumption of alcohol was compared between rooms with arrow tape and rooms without arrow tape. Results show that the consumption of alcohol increased three-fold by the installation of the tape on March 2020.

Tackling coronavirus (COVID-19) - Browse OECD contributions

Figure 10. Promoting hand washing and disinfection at the Ministry of the Environment

Source: (BEST, 2020[77])

The BEST also held a contest to collect good practices using behavioural insights throughout Japan. A similar experiment using tape to guide people to a handwashing station was run at the entrance to the Uji City Hall, resulting in a 10% increase in the number of users compared to before the installation of the arrows. Nudge messaging to encourage handwashing was also installed in a national garden (Shinjuku Gyoen), encourage physical distancing amongst students in Hiketaelementary and junior high school in Kagawa Prefecture, and guiding tape was added in various locations such as the vending machine lines during the cherry blossom viewing season. These and more are further explained in BEST (2020[77]).

Slovak Republic, Behavioural and Experimental Team of Slovakia (BEET)

BEET is located inside the Ministry of Health of the Slovak Republic. The mission of the BEET is to bring comprehensive health policy solutions based on knowledge from the behavioural sciences that are tested using laboratory and field experiments. BEET tests policies and measures intended for healthcare practice reduce the risk of their negative social impact and streamline the use of public financial resources. BEET is composed of members from the ministry and academia, including the University of Economics in Bratislava and Macquarie University in Sydney. BEET also collaborates with other ministries and the third sector and representative bodies, such as the Student Council of Higher Education Institutions.

During the COVID-19 pandemic, the National Transfusion Service of the Slovak Republic (NTSSR) had a critically low level of blood supply caused by the restrictions of mobility of citizens. BEET sought to increase the number of blood donors, which were low in part due to fear of safety issues around donating blood during COVID and lack of awareness that blood was being collected during the pandemic. Three behavioural interventions using posters were tested (Figure 11):

- Call to an action: “A drop of blood today, saves life tomorrow”
- Positive framing: “who can donate blood”
- Safety first noting appointments and new measures: “the assurance: blood donation is safe”

Tackling coronavirus (COVID-19) - Browse OECD contributions

Figure 11. Behaviourally-informed posters to increase blood donations during COVID-19

Source: Information provided by the BEET

United Kingdom, Public Health England

England has extensive in-house behavioural insights expertise across government that has been mobilised during the crisis. There are behavioural insights teams in Public Health England, the National Health Service, the Cabinet Office, in almost all government departments, and growing in number across local government and local public health teams underpinned by a national strategy.

Behavioural scientists act as members of the Scientific Advisory Group for Emergencies (SAGE) and its Scientific Pandemic Influenza Group on Behaviours sub-group, which advise the government's strategic response, anticipate behavioural challenges and help to optimise interventions. The Government Communication Service use behavioural science to enhance communication and marketing. The Government has a procurement framework to efficiently commission external behavioural insights capacity including the Behavioural Insights Team (BIT), Ipsos Mori, and Kantar which have conducted COVID-19-related testing and research.

In England, behavioural science has been applied to support the government's response to the pandemic, using different research methods and informing different policy categories (Figure 12). Some examples are given below.

The Scientific Pandemic Influenza Group on Behaviours have used rapid evidence reviews and expert scientific advice based on relevant theory and evidence to inform government decision-making on topics including:

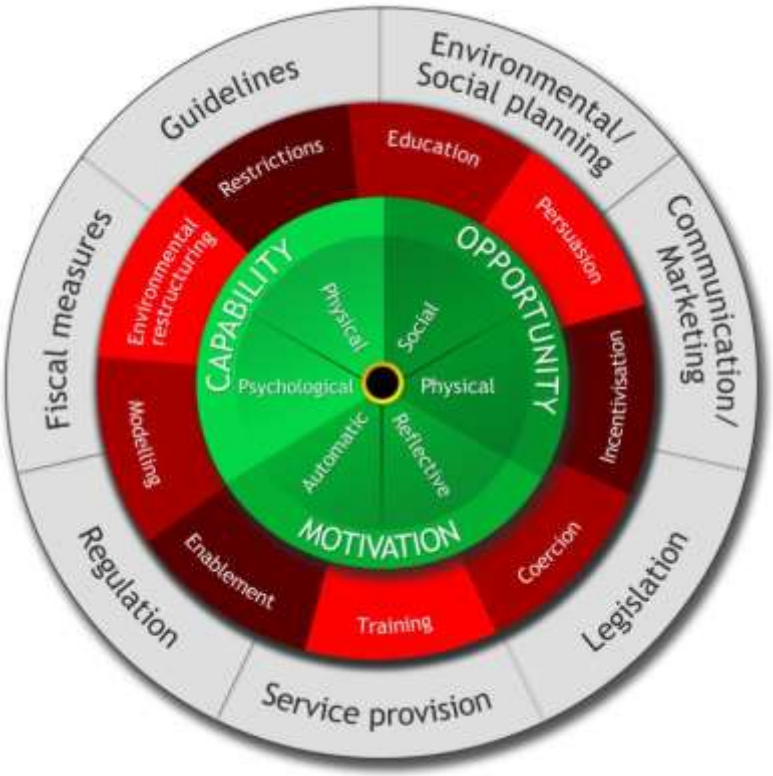
- the effects of possible behavioural and social interventions to limit and slow transmission of COVID-19 (e.g. isolation of people with symptoms and vulnerable groups and social distancing)
- the use of facemasks
- key behavioural issues relevant to test, trace, track and isolate
- identifying options for increasing adherence to social distancing and shielding vulnerable people

Their recommendations have informed multiple policy categories including **guidelines**, **communications and marketing**, and **service provision**.

Tackling coronavirus (COVID-19) - Browse OECD contributions

Figure 12. The Behaviour Change Wheel

Green = source of behaviour, red = intervention functions, and grey = policy categories



Source: (Michie, van Stralen and West, 2011[78])

Public Health England's behavioural scientists have helped develop and review several key COVID-19 policy **guidelines** including the 'stay at home', 'self-isolation' and 'mental health and well-being during COVID-19' advice. Their role in providing feedback on COVID-19 policy guidance documents has developed during the course of the pandemic and the team are now fully embedded in the guidance review process whereby it is now a requirement that all guidance is reviewed by an individual with behavioural science expertise before it is approved.

Public Health England's behavioural scientists are also helping to evaluate and improve the '**service provision'** for national contact tracing. Methods include thematic analysis of customer feedback and qualitative interviews with users who have completed the process across a range of sociodemographic characteristics and experiences of the service (e.g. internet versus phone interaction). Insights gained from users are being used to improve customer experience, increase the quality of contact tracing data and support compliance with self-isolation.

On commission from the government, BIT used online randomised controlled trials to test the efficacy of different infographics within the policy category '**communication and marketing'**. They randomly assigned online population samples to see different types of poster, such as face coverings and handwashing, and reported on their recall, understanding and intentions. Kantar's and Ipsos Mori's uses public polling to indicate views such as trust in government and support for local lockdowns and intentions such as use of contact tracing apps.

Finally, government funding has enabled academics, in partnership with Public Health England and representatives of the public, to develop an evidence, theory and person-based digital behaviour change

Tackling coronavirus (COVID-19) - Browse OECD contributions

intervention to improve infection control in the home: Germ Defence. This provides a free digital behavioural support service that is beyond most media campaigns. Similarly, the National Institute of Health Research (NIHR) Health Protection Research Units (HPRU), a collaboration between leading Universities and Public Health England, have adapted their work programmes to focus on COVID-19, such as the work of the Behavioural Science and Evaluation and Emergency Preparedness and Response HPRUs.

Tackling coronavirus (COVID-19) - Browse OECD contributions

References

Amárach (2020), *Public Opinion Tracker for Department of Health, 27th April 2020*, Amárach for the Department of Health. [87]

Barari, S. et al. (2020), *Evaluating COVID-19 Public Health Messaging in Italy: Self-Reported Compliance and Growing Mental Health Concerns*, Working paper, https://gking.harvard.edu/covid-italy (accessed on 20 October 2020). [76]

BEAR (2018), *How Should Organizations Best Embed and Harness Behavioural Insights? A Playbook*, http://www.rotman.utoronto.ca/-/media/Files/Programs-and-Areas/BEAR/White-Papers/BEAR_BIinOrgs.pdf?la=en (accessed on 6 November 2018). [29]

Belton, C. et al. (2020), "Public Expectations for Lifting COVID-19 Restrictions", *ESRI Survey and Statistical Report Series* 88, http://dx.doi.org/10.26504/sustat88. [36]

BEST (2020), *Eliciting behavior change of citizens to combat COVID-19 in Japan through use of behavioral insights*, Behavioural Sciences Team, Ministry of the Environment, Japan, http://www.env.go.jp/earth/ondanka/nudge/BI_COVID-19.pdf (accessed on 20 October 2020). [77]

Bicchieri, C. (2005), *The grammar of society: The nature and dynamics of social norms*, Cambridge University Press, Cambridge, http://dx.doi.org/10.1017/CBO9780511616037. [13]

BIT (2020), *Young men are hardest to engage on coronavirus guidance*, The Behavioural Insights Team, https://www.bi.team/blogs/young-men-are-hardest-to-engage-on-coronavirus-guidance/ (accessed on 28 June 2020). [88]

Boruchowicz, C. and F. Lopez Boo (2020), *Overconfidence bias on regulation guidance and preventative behaviours: An experiment in Latin America and the Caribbean*, https://publications.iadb.org/en. [43]

Boruchowicz, C., F. Lopez Boo and L. Tejerina (2020), *Opt-in or Opt-out? An experiment on the uptake of contact tracing apps in Latin America and the Caribbean*, https://publications.iadb.org/en. [44]

Broadway, R., F. Cowell and M. Florio (eds.) (2020), *Behavioural Science and Public Policy*, Cambridge University Press, Cambridge, United Kingdom, http://dx.doi.org/10.1017/9781108973144. [10]

CDC (2020), *Handwashing - Clean Hands Save Lives*, Centers for Disease Control and Prevention, https://www.cdc.gov/handwashing/index.html (accessed on 28 June 2020). [68]

Conn, D. et al. (2020), "Revealed: the inside story of the UK's Covid-19 crisis | World news | The Guardian", *The Guardian*, https://www.theguardian.com/world/2020/apr/29/revealed-the- [56]

Tackling coronavirus (COVID-19) - Browse OECD contributions

inside-story-of-uk-covid-19-coronavirus-crisis (accessed on 10 June 2020).

Daoust, J. et al. (2020), "How to Survey Citizens' Compliance with COVID-19 Public Health Measures: Evidence from Three Survey", *Journal of Experimental Political Science*, Vol. 16, pp. 1-8. [55]

Dean, M., A. Foddai and I. Grant (2017), *Hand Sanitisers-their use and efficacy*, Safefoods, https://www.safefood.eu/SafeFood/media/SafeFoodLibrary/Documents/Publications/Research%20Reports/Report-Hand-Sanitizers-Report-1-June.pdf (accessed on 28 June 2020). [65]

Draaisma, M. (2020), "Physical distancing circles painted on grass at Trinity Bellwoods Park | CBC News", *CBC*, https://www.cbc.ca/news/canada/toronto/circles-grass-trinity-bellwoods-physical-distancing-city-toronto-1.5587702 (accessed on 23 June 2020). [53]

Drury, J. et al. (2019), *Facilitating collective psychosocial resilience in the public in emergencies: Twelve recommendations based on the social identity approach*, Frontiers Media S.A., http://dx.doi.org/10.3389/fpubh.2019.00141. [21]

ECDC (2020), *Poster: Effective hand-washing*, European Centre for Disease Prevention and Control, https://www.ecdc.europa.eu/en/publications-data/poster-effective-hand-washing (accessed on 28 June 2020). [69]

ESRI (n.d.), *About the ESRI*, https://www.esri.ie/about (accessed on 23 June 2020). [34]

ESRI (n.d.), *Behavioural Research Unit*, https://www.esri.ie/bru (accessed on 23 June 2020). [35]

Fetzer, T. et al. (2020), "Perceptions of an Insufficient Government Response at the Onset of the COVID-19 Pandemic are Associated with Lower Mental Well-Being", *PsyArXiv Preprints*, pp. 1-126, http://dx.doi.org/10.31234/OSF.IO. [25]

Gibney, S., L. Bruton and P. Doherty (2020), *COVID Contact Tracing App: User Perspectives and Experience Research*, Research Services and Policy Unit, Research and Development and Health Analytics Division, Department of Health, https://igees.gov.ie/wp-content/uploads/2020/07/Research-Report-App-user-experience-and-perspectives-May-2020.pdf (accessed on 24 September 2020). [73]

Gibney, S. and T. McCarthy (2020), *Profile of Smartphone Ownership and Use in Ireland*, Research Services and Policy Unit, Research and Development and Health Analytics Divsion, Department of Health, https://assets.gov.ie/81401/e6c10ac5-e6b4-438e-b31d-30cd2b241f7c.pdf (accessed on 24 September 2020). [71]

Gibney, S., T. McCarthy and C. Lindberg (2020), *Literature Review Digital Contact Tracing: Benefits and Enablers*, Research Services and Policy Unit, Research and Development and Health Analytics Division, Department of Health, https://assets.gov.ie/81398/61d21c2b-c9b0-4830-b4ab-b6454ebc294d.pdf (accessed on 24 September 2020). [72]

Hahn, U. et al. (2020), "Why a Group of Behavioural Scientists Penned an Open Letter to the U.K. Government Questioning Its Coronavirus Response", *Behavioural Scientist*, https://behavioralscientist.org/why-a-group-of-behavioural-scientists-penned-an-open-letter-to-the-uk-government-questioning-its-coronavirus-response-covid-19-social-distancing/ (accessed on 10 June 2020). [57]

Hofstede, G. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, Sage, Beverly Hills, California. [22]

Tackling coronavirus (COVID-19) - Browse OECD contributions

Hofstede, G. (n.d.), *Compare countries*, Hofstede Insights, https://www.hofstede-insights.com/product/compare-countries/ (accessed on 2 March 2020). [23]

ideas42 (2017), *Define, Diagnose, Design, Test*, http://www.ideas42.org/blog/first-step-towards-solution-beta-project/ (accessed on 6 November 2018). [30]

Ijzerman, H. et al. (2020), "Use caution when applying behavioural science to policy", *Nature Human Behaviour*, Vol. 4, pp. 1092-1094, https://www.nature.com/articles/s41562-020-00990-w#citeas. [41]

IRS (2017), *Behavioral Insights Toolkit*, Internal Revenue Service, Washington, D.C., https://www.irs.gov/pub/irs-soi/17rpirsbehavioralinsights.pdf (accessed on 2 March 2020). [31]

Jennings, W. et al. (2020), *Political Trust and the COVID-19 Crisis: Pushing Populism to the Backburner? A study of public opinion in Australia, Italy, the UK and the USA*, Ipsos: Democracy 2025 project, https://www.ipsos.com/sites/default/files/ct/news/documents/2020-08/covid_and_trust.pdf. [26]

Kwon, D. (2020), *Near Real-Time Studies Look for Behavioral Measures Vital to Stopping Coronavirus*, Scientific American, https://www.scientificamerican.com/article/near-real-time-studies-look-for-behavioral-measures-vital-to-stopping-coronavirus/. [75]

Lades, L. and L. Delaney (2020), "Nudge FORGOOD", *Behavioural Public Policy*, pp. 1-20, http://dx.doi.org/10.1017/bpp.2019.53. [58]

Lades, L. et al. (2020), *Daily emotional well-being during the COVID-19 pandemic*, publicpolicy.ie, Dublin, http://publicpolicy.ie/papers/daily-emotional-well-being-during-the-covid-19-pandemic/ (accessed on 1 July 2020). [39]

Lourenço, J. et al. (2016), *Behavioural Insights Applied to Policy: European Report 2016*, European Commission, http://dx.doi.org/10.2760/903938. [52]

Lunn, P. (2014), *Regulatory Policy and Behavioural Economics*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264207851-en. [11]

Lunn, P. et al. (2020), "Using Behavioral Science to help fight the Coronavirus", *Journal of Behavioral Public Administration*, Vol. 3/1, http://dx.doi.org/10.30636/jbpa.31.147. [14]

Lunn, P. et al. (2020), *Motivating social distancing during the Covid-19 pandemic: An online experiment*, ESRI Working Paper No 658, https://www.esri.ie/system/files/publications/wp658.pdf (accessed on 23 June 2020). [37]

Lunn, P. et al. (2020), *Using decision aids to support self-isolation during the COVID-19 pandemic*, ESRI Working Paper No 664, https://www.esri.ie/system/files/publications/WP664_0.pdf (accessed on 23 June 2020). [38]

Martínez Villarreal, D., A. Rojas Méndez and C. Scartascini (2020), *La economía del comportamiento puede ayudar a combatir el coronavirus*, Inter-American Development Bank, Washington, D.C., http://dx.doi.org/10.18235/0002315. [45]

Mawson, A. (2005), "Understanding Mass Panic and Other Collective Responses to Threat and Disaster", *Psychiatry*, Vol. 68/2. [16]

Michie, S., M. van Stralen and R. West (2011), "The behaviour change wheel: A new method for characterising and designing behaviour change interventions", *Implementation Science*, [78]

Tackling coronavirus (COVID-19) - Browse OECD contributions

Vol. 6/42, http://www.implementationscience.com/content/6/1/42.

Murphy, R. (2020), *Summary of Comments by the Sub-group on Behavioural Change on the content and design of the COVID-19 Contact Tracing App*, Research Services and Policy Unit, Research and Development and Health Analytics Division, Department of Health, https://igees.gov.ie/wp-content/uploads/2020/07/Behavioural-Change-Subgroup-Report-April-2020.pdf (accessed on 24 September 2020). [74]

Murphy, R. (2020), *Using Behavioural Science to Improve Hand Hygiene in Workplaces and Public Places*, Research Services and Policy Unit, Department of Health, https://assets.gov.ie/73447/7989b01eb9844f1aaa636d0ba7c254f7.pdf. [40]

Murphy, R., S. Gibney and G. Mac Criosta (2020), *Refining Tracker App content with user experience, expert review and an experimental study*, Research Services and Policy Unit, Department of Health, https://www.gov.ie/en/collection/3c5bc8-health-research-and-statistics/ (accessed on 20 October 2020). [70]

Murphy, R. and R. Mooney (2020), *A brief case study on using a behaviourally informed poster to improve hand washing in homes*, Research Services and Policy Unit, Department of Health, https://www.gov.ie/en/collection/3c5bc8-health-research-and-statistics/ (accessed on 20 October 2020). [67]

National Academy Leopoldina (2020), *2nd Ad-hoc-Statement on Coronavirus Pandemic-Measures Relevant to Health*, National Academy Leopoldina, http://dx.doi.org/10.1038/s41586-020-2196-x. [61]

National Academy Leopoldina (2020), *3rd Ad-hoc Statement: Coronavirus Pandemic-Sustainable Ways to Overcome the Crisis*, National Academy Leopoldina. [62]

National Academy Leopoldina (2020), *Ad-hoc statement Coronavirus Pandemic*, https://www.leopoldina.org/en/press-1/news/ad-hoc-statement-coronavirus-pandemic/ (accessed on 17 July 2020). [60]

NSW Government (2020), "COVIDSafe Travel Choices: Activating the messaging", *New South Wales Government*, https://doi.org/10.1371/journal.pone.0159780 (accessed on 20 October 2020). [59]

OECD (2020), *Behavioural Insights and Organisations: Fostering Safety Culture*, OECD publishing, http://forthcoming. [15]

OECD (2020), *Driving Performance at Ireland's Environmental Protection Agency*, The Governance of Regulators, OECD Publishing, Paris, https://dx.doi.org/10.1787/009a0785-en. [33]

OECD (2020), *Flattening the COVID-19 peak: Containment and mitigation policies*, OECD, http://www.oecd.org/coronavirus/policy-responses/flattening-the-covid-19-peak-containment-and-mitigation-policies-e96a4226/. [7]

OECD (2020), *Highlights from the OECD Webinar: "The ties that bind: Government Openness as Key*, OECD, Paris, http://www.oecd.org/gov/second-oecd-webinar-on-trust-highlights.pdf (accessed on 22 September 2020). [24]

OECD (2020), "Regulatory Quality and COVID-19: Managing the Risks and Supporting the Recovery", https://read.oecd-ilibrary.org/view/?ref=131_131923-jisarlbai9&title=Regulatory-Quality-and-COVID-19-Managing-the-Risk-sand-Supporting-the-Recovery (accessed on [6]

Tackling coronavirus (COVID-19) - Browse OECD contributions

31 May 2020).

OECD (2019), *Regulatory effectiveness in the era of digitalisation*, https://www.oecd.org/gov/regulatory-policy/Regulatory-effectiveness-in-the-era-of-digitalisation.pdf (accessed on 7 February 2020). [32]

OECD (2019), *Tools and Ethics for Applied Behavioural Insights: The BASIC Toolkit*, OECD, Paris, http://dx.doi.org/10.1787/9ea76a8f-en. [3]

OECD (2019), *Tools and Ethics for Applied Behavioural Insights: The BASIC Toolkit*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9ea76a8f-en. [12]

OECD (2018), *Behavioural Insights for Public Integrity: Harnessing the Human Factor to Counter Corruption*, OECD Public Governance Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264297067-en. [86]

OECD (2018), *Good Jobs for All in a Changing World of Work: The OECD Jobs Strategy*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264308817-en. [80]

OECD (2018), "Institutions applying BI to public policy around the world", *OECD research (unpublished) based on data collected through OECD (2017), Behavioural Insights and Public Policy: Lessons from Around the World, OECD Publishing, Paris, https://doi.org/10.1787/9789264270480-en.*, https://twitter.com/faisal_naru/status/1027162896340578304 (accessed on 15 October 2020). [5]

OECD (2018), *OECD Regulatory Enforcement and Inspections Toolkit*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264303959-en. [19]

OECD (2018), *OECD Regulatory Policy Outlook 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264303072-en. [1]

OECD (2017), *Behavioural Insights and Public Policy: Lessons from Around the World*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264270480-en. [4]

OECD (2016), *Trends in Risk Communication Policies and Practices*, OECD Publishing, http://dx.doi.org/10.1787/9789264260467-en. [18]

OECD (2014), "The crisis and its aftermath: A stress test for societies and for social policies", in *Society at a Glance 2014: OECD Social Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/soc_glance-2014-5-en. [81]

OECD (2012), *Recommendation of the Council on Regulatory Policy and Governance - OECD*, http://www.oecd.org/governance/regulatory-policy/2012-recommendation.htm (accessed on 27 April 2018). [2]

OECD (2010), *OECD Employment Outlook 2010: Moving beyond the Jobs Crisis*, OECD Publishing, Paris, https://dx.doi.org/10.1787/empl_outlook-2010-en. [79]

OECD and WCG (2018), *Making a Real Difference: Nudging for Policy Change - Key Messages & Summary*, OECD and Western Cape Government, http://www.oecd.org/gov/regulatory-policy/Behavioural-Insights-Conference-in-South-Africa-Summary-and-key-messages.pdf (accessed on 10 June 2020). [84]

Reyes, K. (2020), "Here's what inspired social distancing circles at San Francisco's Dolores Park - ABC7 San Francisco", *ABC 7 news*, https://abc7news.com/mission-dolores-park-circles- [54]

Tackling coronavirus (COVID-19) - Browse OECD contributions

circle-social-distancing/6213793/ (accessed on 23 June 2020).

Rubin, G., H. Potts and S. Michie (2010), "The impact of communications about swine flu (influenza A HINIv) on public responses to the outbreak: Results from 36 national telephone surveys in the UK", *Health Technology Assessment*, Vol. 14/34, pp. 183-266, http://dx.doi.org/10.3310/hta14340-03. [17]

Saldanha, N. and S. Ghai (2020), "Dispatches from the Behavioral Scientists Fighting Coronavirus in the Global South", *Behavioural Scientist*, https://behavioralscientist.org/dispatches-from-the-behavioral-scientists-fighting-coronavirus-in-the-global-south/ (accessed on 18 October 2020). [42]

Sheppard, B. et al. (2006), *Viewpoint: Terrorism and dispelling the myth of a panic prone public*, Palgrave, http://dx.doi.org/10.1057/palgrave.jphp.3200083. [20]

Sunstein, C. (2020), *Too much information on warnings, paperwork, and enjoying life*, MIT Press, Cambridge. [83]

Thaler, R. and C. Sunstein (2008), *Nudge : improving decisions about health, wealth, and happiness*, Yale University Press. [9]

The Behavioural Insights Team (2014), *EAST Four simple ways to apply behavioural insights*, The Behavioural Insights Team, https://38r8om2xjhhl25mw24492dir-wpengine.netdna-ssl.com/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf (accessed on 6 November 2018). [28]

The Behavioural Insights Team (2010), *MINDSPACE*, The Behavioural Insights Team, https://www.behaviouralinsights.co.uk/publications/mindspace/ (accessed on 6 November 2018). [27]

UNIN (2020), *Leveraging behavioural insights to respond to COVID-19*, https://drive.google.com/file/d/1adecMoDuKBW-ujvll9dIDAMOzi4Iqtay/view (accessed on 17 November 2020). [46]

University of Erfurt (2020), *COVID-19 Snapshot Monitoring (COSMO)*, https://projekte.uni-erfurt.de/cosmo2020/cosmo-analysis.html#1_zusammenfassung_und_empfehlungen (accessed on 17 July 2020). [63]

University of Southampton (2020), *Germ Defence*, https://germdefence.org/ (accessed on 28 June 2020). [89]

Vaganay, M. (2020), *An investigation of hand washing facilities in various settings on the island of Ireland*, Safefoods, Forthcoming, https://www.safefood.eu/Professional/Research-Portfolio/1-Microbiology-Food-Hygiene/An-investigation-of-hand-washing-facilities-in-var.aspx. [66]

Varazzani, C. (2020), *Nudging fast and slow: On the pace of behavioural science in government*, Presentation delivered at Nudgestock 2020 by Chiara Varazzani, Principle Behavioural Insights Advisor, Victoria State Government Behavioural Insights Unit, Department of Premier and Cabinet, Australia, https://youtu.be/ObFrZImxYeI?t=1305 (accessed on 24 June 2020). [82]

West, R. et al. (2020), "Applying principles of behaviour change to reduce SARS-CoV-2 transmission", *Nature Human Behaviour*, Vol. 4/5, pp. 451-459, https://doi.org/10.1038/s41562-020-0887-9. [8]

Tackling coronavirus (COVID-19) - Browse OECD contributions

WHO (2020), *COVID-19 Snapshot MOnitoring (COSMO)*, World Health Organisation, https://www.psycharchives.org/handle/20.500.12034/2397 (accessed on 16 August 2020). [47]

WHO (2020), *Infodemic Management*, https://www.who.int/teams/risk-communication/infodemic-management (accessed on 17 November 2020). [49]

WHO (2020), *TAG on Behavioural Insights and Sciences for Health - Membership*, World Health Organisation, https://www.who.int/departments/science-division/behavioural-insights/TAG-on-behavioural-insights-and-sciences-for-health-membership (accessed on 16 August 2020). [50]

WHO (2020), *WHO Health Alert brings COVID-19 facts to billions via WhatsApp*, World Health Organisation, https://www.who.int/news-room/feature-stories/detail/who-health-alert-brings-covid-19-facts-to-billions-via-whatsapp (accessed on 16 August 2020). [48]

WHO (2020), *World Water Day 2020 highlights the essential role of handwashing*, WHO Regional Office for Europe, https://www.euro.who.int/en/health-topics/environment-and-health/water-and-sanitation/news/news/2020/3/world-water-day-2020-highlights-the-essential-role-of-handwashing (accessed on 28 June 2020). [64]

WHO (n.d.), *COVID-19 Snapshot MOnitoring (COSMO)*, World Health Organisation, https://www.psycharchives.org/handle/20.500.12034/2397 (accessed on 16 August 2020). [85]

World Bank (2020), *Behavioral Sciences to Protect Human Capital Investments During and after the COVID-19 Pandemic*, https://openknowledge.worldbank.org/handle/10986/33718 (accessed on 15 November 2020). [51]

Tackling coronavirus (COVID-19) - Browse OECD contributions

Annex 1.A. What are behavioural insights?

Behavioural insights (BI) is the application of the behavioural and social sciences to policy making. It has risen as a policy making field in reaction to traditional methods of public policy, which often assume that humans make "rational" decisions and build policy decisions based on this model. However, lessons from the behavioural science demonstrates these models fail to consider that social context and behavioural biases systematically influence people's abilities to act in accordance with these models (OECD, 2019[12]).

The core concepts are easy to relate to: we have limited ability to attend to all aspects of life, our choices are shaped by our context, we often have difficulty making sense of the complex world around us and we have bounded willpower that limits our determination to stick with decisions over time (OECD, 2019[12]). These behavioural issues are increasingly being considered when analysing, designing, implementing and evaluating policies.

Policymakers around the world are turning to the field of BI as a clear methodology that generates evidence on how people "actually" behave. The field of BI is fundamentally about analysing policy problems based on lessons derived from the behavioural and social sciences, collecting evidence of which solutions works and which do not, and applying these findings to improving the outcomes of public policy.

A key feature of the BI methodology is its empirical approach, driven by experimentation and piloting. This approach also allows policy makers to experiment and test solutions at smaller scale to determine the best course of action. As a result, governments can test multiple policy solutions with the beneficiaries at once before committing to resources to implementing full policy solutions that may need to be revisited later (OECD, 2019[12]).

In 2019, the OECD released the BASIC framework, which is an acronym for the 5-step process of applying BI throughout the policy cycle (OECD, 2019[12]). The steps are:

1. **Behaviour**: Identify and better understand the policy problem, including its structural and behavioural drivers.
2. **Analysis**: Review the available evidence to identify the behavioural drivers of the problem.
3. **Strategies**: Translate the analysis into strategies to address the behavioural problem.
4. **Intervention**: Design and implement an intervention to test which strategy best addresses the problem.
5. **Change**: Develop plans to scale what works into full policy solutions, sustain behaviour and communicate results.

However, BI is not a "silver bullet" – or cure-all – that can solve every policy problem. It needs to be used as part of a holistic response to policy making that considers all tools and approaches, and chooses the best one for the problem at hand. Above all, BI needs to be applied responsible so that policy makers are always using the methodology to obtain the best outcomes for citizens and society.

OECD (2017[4]) research suggests that BI is mostly used for individuals and protecting consumers, and often at the implementation phase to improve the effectiveness of non-behaviourally informed policies. The community is exploring new frontiers for applying BI, which include towards changing the behaviour of organisations. This was explored by the OECD in a project applying BI to fostering elements of safety culture in the energy sector (2020[15]), and further work is forthcoming on applying to changing government itself – including its institutions and processes to support more efficient and effective policy making.

Tackling coronavirus (COVID-19) - Browse OECD contributions

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Notes

[1] This analysis is based on work conducted since 2013 by the OECD Regulatory Policy Division, including on mapping how BI can be applied to regulatory policy (Lunn, 2014[11]), a collection of over 110 case studies and survey of 60 units around the world (OECD, 2017[4]), and a process framework and ethical guidelines for applying BI to policy (OECD, 2019[12]). For the sake of space, a full discussion of BI, its costs and benefits, and cases are omitted but can be accessed through these resources.

[2] The group is organised by Mary MacLennan, Behavioural Science Lead, United Nations Behavioural Science Group; Tim Chadborn, Head of Behavioural Insights and Evaluation Lead, Public Health England, United Kingdom, and Ammaarah Martinus, Director of Policy, Research and Analysis, Department of the Premier, Western Cape Government, South Africa and supported by the OECD Secretariat. Special thanks are given to the organisers who provided regular comments and inputs into the various drafts of this paper.

[3] On international regulatory cooperation, removing administrative barriers, improving regulatory delivery, the use of new technologies to expand regulatory capacity, the use of regulatory management tools and the role of regulatory oversight, and sector regulation during the COVID-19 crisis, available at: www.oecd.org/gov/regulatory-policy/reg-covid-19-activities.htm.

[4] The OECD Secretariat would like to thank, from the OECD Secretariat, Eliana Barrenho, Charles Baubion, Filippo Cavassini, Marco Daglio, Francesca Papa and Andrea Uhrhammer, and, from the BI community, Kirsty Bennett, Cynthia Gabriela Boruchowicz, Mariama Chammat, Jeanette Deetlefs, Heather Devine, Martina Fehérová, Abigail Goodnow Dalton, Tadahiro Ikemoto, Pete Lunn, Florencia Lopez Boo, Robert Murphy, Lukas Sekelsky, Federico Raimondi Slepoi, Dave Trudinger, René van Bavel, Laurianne Vagharchakian, Chiara Varazzani for their written inputs and case studies. Sincere thanks are especially extended to the membership of the International COVID-19 Behavioural Insights and Policy Group who are too numerous to thank individually but provided helpful comments during a live consultation exercise

Tackling coronavirus (COVID-19) - Browse OECD contributions

on this paper held in October 2020. Special thanks are extended to Cass Sunstein, who reviewed and provided invaluable comments to the final version of this paper.

[5] For more discussions on attention, see Sunstein, C.R. (2020[83]), *Too Much Information: Understanding What You Don't Want To Know*, Cambridge, MIT Press.

[6] This topic is omitted due to both lack of evidence and that the discussion requires a depth not allowed for in a policy paper context. Such a discussion includes *inter alia* the effect of power in terms of existing institutional structures, rules and procedures in place that would limit any non-primary respondents (i.e. non-public health units, in the case of COVID-19) to intervene. More broadly, silos existent around government's traditional line ministry structures challenge the way various units in Ministries are involved in the crisis. As well, since crises happen so quickly, senior government officials may have limited bandwidth to hear new/different ideas, especially if they were not fully aware of these ideas before the crisis.

[7] Lourenco et al (2016[52]) actually articulate three classifications, fully define as: Behaviourally-tested (initiatives are based on an *ad hoc* test, or scaled out after an initial experiment); behaviourally-informed (initiatives are designed explicitly on previously existing behavioural evidence); and behaviourally-aligned (initiatives are those that, at least a posteriori, can be found to be in line with behavioural evidence). For the sake of this paper, discussion is focused on applications where BI is intentionally used – i.e. tested or informed.

[8] This movement towards alternative experimental methods than RCTs have been underscored by many, especially those working in the international space to advance the use of BI such as the OECD (2019[12]) and European Commission (van Bavel, 2020). In addition, many of the cases collected by OECD (2017[4]) further note this trend.

[9] The examples were collected following an open call to the Group and compiled by the OECD Regulatory Policy Secretariat, They have been reviewed by the respective governments. The content is that of the authors who provided the case, not of independent OECD research.

[10] This profile was submitted by Federico Raimondi Slepoi, head of the R^2 unit. The projects described were the product of a uniquely collective work by a number of behavioral and social scientists and practitioners. The Municipality of Rome wishes to thank Soubhik Barari, Guglielmo Briscese, Irene Buso, Stefano Caria, Michela Carlana, Francesco Chillemi, Robert Cialdini, Silvia Cottone, Antonio Davola, Alessandro De Carlo, Immaculata De Vivo, Daniela Di Cagno, Paolo Falco, Thiemo Fetzer, Stefano Fiorin, Iris Firstenberg, Noah Goldstein, Ben Grodeck, Johannes Haushofer, Lukas Hensel, Andriy Ivchenko, Jon Jachimowicz, Seema Jayachandran, Gary King, Gordon Kraft-Todd, Alice Ledda, Mary MacLennan, Jessica Metcalf, Diletta Mora, Lucian Mutoi, Nicholas Otis, Claudio Pagani, Sebastiano Rapisarda, Elena Reutskaja, Niccolò Rocco, Christopher Roth, Steven Sloman, Lorenzo Spadoni, Erez Yoeli, David Yokum, Sarah Zaccagni and Eliana La Ferrara.

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