

Response to *Applying behavioural science to government policy: Finding the ‘Goldilocks Zone’:* From a BI unit perspective

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Abstract

It is now seven years on since the Behavioural Insights Team (BIT) was formed by the then UK Prime Minister, David Cameron. Since that time, and building on the success of the approach in the UK, behavioural insights units have emerged all around the world everywhere from the White House to Singapore. I've had the privilege of working with a number of these units, both directly on projects (or indeed being part of the team itself) or more informally in providing general advice. Much of what Bolton and Newell describe rings true, and comes at a timely moment with the proliferation of behavioural insights (BI) work taking place. However, their piece does fail to recognise the role BI has played in building a stronger scientific and evidence based culture in policymaking. This response looks to provide the government policymaking perspective on the tensions and risks identified by Bolton and Newell, as well as highlight some of the opportunities they present.

While scientific endeavour and government policymaking are quite different worlds, they share a considerable amount of common ground. You will be hard pressed to find a policy official who would not welcome rigorous academic evidence to help them make a policy recommendation. Similarly, I imagine you are unlikely to find a scientist who would not be excited by the prospect of their research being used to help, for example, improve the health or education outcomes of large segments of the population. With that said, practicing good science in the context of government policy making is a balancing act, and behavioural science is no exception. There is spectrum between observational and experimental, and trade-offs that need to be considered whether in the field or in the lab. Hopefully this response helps bring us closer to the 'Goldilocks zone' that Bolton and Newell make reference to.

Keywords

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Threats from the cultural environment

As Bolton and Newell note, the cultural environment of modern scientific practice brings with it a suite of pressures that might affect robust work being undertaken. You combine this with the environmental pressures in government policymaking, such as the continuing need for announcements of new policy initiatives (or in the parlance of government 'announceables') and the constant scrutiny of every decision, and you have a complicated array of sometimes contradicting incentives at play. However, this is as much a risk to good policymaking as it is good science.

Much of the success of BIT (as well as other BI units and organisations) has been being able to effectively navigate both the similarities and differences between academia and government. The composition of BIT – a mix of academics (mainly economists and psychologists, but others as well) and civil servants – helps with bridging the gap. One way of seeing it, is as Bolton and Newell suggest "scientists must rely on

government personnel who may be unfamiliar with scientific processes and principles or what constitutes 'good science'". However, in BIT, it is as much about equipping scientist with policy nous and an understanding of government processes, as it is about equipping policymakers and civil servants with a strong foundation of scientific processes.

While the focus of BIT is the application of behavioural science, we also see our role as helping to spread scientific rigour in policy thinking, whether it is promoting the use of randomised controlled trials (RCTs) or how to interpret evidence. In this way, while Bolton and Newell suggest the spread of BI approaches is a risk to good scientific practice, it can also actually be an avenue to increase engagement with scientific processes. For example, once they understand the logic behind RCTs, it is often policymakers or frontline government staff that come up with innovative ways to do randomisation in a way that satisfies scientific rigour as well as reduces the likelihood of disruption to a service. From my experience, BI has helped build a greater scientific ethos in

policymaking and encouraged more policy officials to actively engage with evidence from the academic literature as well as scientific methodology.

In this section of the paper, Bolton and Newell are critical of claims that small changes can lead to millions of dollars' worth of savings because of the expectations they may create. Caution around these claims is necessary and any attempts at extrapolation should be measured. In saying that though, the use of robust evaluation techniques which science brings, such as RCTs, allows us to better understand impacts. Often policymakers and politicians require a translation to fully understand the impact of an intervention or new process, and in many circumstances the financial impact is what resonates strongest. There is a need to be considered in these kinds of statements, as there is a risk that some go on to believe these kinds of approaches are a 'silver bullet', when in fact they are complements to necessary larger policy initiatives.

This is particularly important when behavioural science is being applied to more complex policy issues. A fair criticism of behavioural science in policymaking, is that sometimes it can lull government officials and politicians towards solutions that don't address a deeper policy issue, where legislation is required, or a great budget allocation is key. While it is not trivial to get a citizen to pay their tax on time (where a more 'nudge' style intervention might work), when you look at issues such as domestic violence, corruption and economic growth, behavioural science should be viewed as a way of looking at a problem, and a tool to consider as part of a broader package of interventions.

At BIT we will often engage on complex issues by highlighting what BI can do, but will also advise that if real inroads are to be made, than a broader change is required and suggest more traditional policy levers alongside. Part of this is about understanding the limits of a BI approach, but also the potential of it. At BIT, we are increasingly looking at 'wicked' policy issues such as how to improve the outcomes of refugee populations, addressing entrenched disadvantage and how to improve the effectiveness of the criminal justice system. It is important to recognise that one nudge is unlikely to solve one of these more complex problems, but a series of well thought out, contextualised and rigorously evaluated interventions together might have an impact. This sort of approach rests not only the practice of good science, but also good policymaking.

Threats from assertion of haste

This is one of the most common points of tension in the application of behavioural science in the policymaking context. At the core of it is the challenge of introducing a robust scientific process, into policymaking timeline that is often short and influenced by political considerations. However, this is not all negative. These very same currents that put pressure on scientists and policy officials to produce results, can also help build momentum and unlock funding that might not otherwise be available for research. There is nothing like a Prime Min-

ister or President's speech for calling attention to an issue, and building the impetus to bring in new partners that weren't willing to engage previously or to galvanise the broader government apparatus into action.

It is the role of scientists and policy officials to work together to find a threshold for scientific rigour that can be achieved given certain constraints. A well-functioning partnership will involve building in various points where certain findings can be shared with senior government officials and ministers, while protecting the timelines necessary for a good scientific process to be undertaken. It will involve doing this in a way that demonstrates an understanding of key political and policymaking milestones such as speeches, budget decisions and government strategy announcements. Most government ministers and senior officials can appreciate the time needed for strong science to be done, but likewise scientists should also appreciate the political pressures faced in government. Appreciating these considerations, is not the same as compromising scientific independence.

Bolton and Newell highlight a number of very practical frustrations that academia may find challenging in working with government, such as high staff turnover in policy areas, political changes and systems that are not built for experimentation. While I'm sure it is of little comfort, policymakers often feel the same frustrations. It is worth highlighting that application of BI in government can actually help address some of these issues, rather than just encountering them. This is particularly true in relation to the point around government systems not being built for experimentation. For example, in a number of contexts in trying to test a BI intervention, I have seen or been part of project teams that have uncovered contracts with vendors that make testing alternative version of letters expensive or cumbersome. Based on this, we have spoken to senior government officials about such issues, and they have committed to negotiate on this point when these printing contracts are renewed. If viewed in this light, the BI approach has made adopting a more robust scientific approach easier in the future. This is in keeping with the idea that rather than being an overall threat to 'good science', the application of BI is in fact helping to improve the practice of science in government.

Threats from inappropriate power assertions

There is undoubtedly a risk of the power dynamics in government superseding the scientific process. This however is not unique to the application of behavioural science and is a broader risk to the application of science itself in government policymaking. In saying that, political leaders in democratic countries are elected by the people, and this fact should not be ignored. Bolton and Newell are right to question the levels of this expertise or training of those involved in the application of BI, particularly given its ever-increasing popularity. While I would welcome interest from any policy official in the application of behavioural science, this enthusiasm does

not directly translate into the capability to do so in a scientific way. For this reason, I can see why scientists would be concerned with government officials making decisions about what projects and solutions to support. However, where decisions are made by policymakers without consultation with appropriately qualified scientists, I don't think this is an issue of power assertion, as that implies a degree of intended malevolence. From my experience, it is driven more by an uncertainty of how to best engage scientists in the decision making process. BIT is closely linked to academia, with scientists within the organisation and academic partners outside of it. Even with these close linkages, we can still find it challenging to know how to best get scientific involvement in a process. One way of overcoming this, is a model from the UK where there is a Cross-Government Trial Advice Panel¹. The Panel consists of top experts in experimental and quasi-experimental methods from across the UK government and academia (supported by the Economic and Social Research Council), and convenes to provide support on the very concerns Bolton and Newell raise. While still a relatively new initiative, the Panel provides an example of policymakers recognising the need for specific scientific expertise and setting up a process to help address the need.

While a more concerted effort to define who should be made accountable for what in the application of BI would be welcomed, the answer from my experience is more elementary. On the one side it is about government developing a better understanding of scientific processes, and BI can be a strong entry point for this. On the other, it is about scientists developing a stronger understanding of government decision making and knowing how to best input their expertise to ensure a scientific standard is met. Where I have seen this work most effectively, there is a mutual respect for the roles of policymaker and scientist, and sufficient crossover of expertise that there is a shared understanding of when to defer to the other for judgement. It is not an issue of power assertion, but more about coming up with the best model from incorporating scientific know-how into decision making processes.

Threats to the scientific community's access to data and replication

Bolton and Newell raise two separate, but related points in this section. The first emphasising the importance of replication, and the second, the publishing of null or negative results.

On the first point of replication, rather than being a threat to the principle of replication, the application of behavioural science in government in my view is part of the solution. When done well, BI trials run in the policymaking context can be the ultimate form of replication. While controls can be more limited, often trials are undertaken on much larger samples (often in the thousands, tens of thousands or even hundreds of thousands) and on real people, whose decisions

will have real outcomes. Replication at this scale would not be possible outside of government and perhaps a select few big companies. There are also the benefits of external validity, which are particularly pronounced in behavioural science where context is so important. While, I agree with the Bolton and Newell's statement that releasing government data can be complicated, from my experience BI units often help unlock access to data and help government understand the importance of doing so in order to further scientific understanding of what works and what doesn't. On the point of who grants access, it will depend from government to government (and even between departments in the same government), but most have research boards with policy officials with substantial scientific training who decide. In the UK, these decisions are also potentially subject to Freedom of Information requests.

The second point relates to the publication of null or negative findings. While this issue exists in government, the issue is much broader than government. Even within the scientific community, while at the core of the scientific process, null or negative results are often not published, even if the scientists involved are seeking to do so, due to the competitiveness of publication. In a 2014 article published in *Science*, Franco, Malhotra and Simonovits analysed a population of 221 social science studies, looking to account for how many results were published (Franco and Simonovits 2014). They found only 10 out of 48 null results were published. Strong results were 40 percentage points more likely to be published, and 60 percentage points more likely to be written up in the first place. The publication of null and negative results is fundamental, and government and the scientific community alike should not just educate the public about these results not being failures, but also within and between each other create the right incentives for these results to be published and celebrate when they are. The application of BI in government is as much an opportunity to overcome this issue, as it is a threat to extending it.

Threats to designing and conducting investigations with the highest professional standards

As Bolton and Newell outline, in the policy context, there can be some substantial challenges to designing a scientific process to test out the effectiveness of behavioural science interventions. This is particularly the case where more substantial or interlinked behaviours are involved. The key to addressing the issue is for scientists and policymakers to be clear about what is achievable. While Bolton and Newell are more disparaging of “creative workarounds”, from my experience, these kinds of solutions to issues such as randomisation, preventing spillovers and many others, can sometimes be almost effective as controls you might be able to introduce in a smaller lab study. In some cases a near perfect trial design is possible, while others not. In the cases where the trial design is not optimal because of constraints associated with the field nature of the study, it is important to note what the

¹<https://www.gov.uk/government/publications/cross-government-trial-advice-panel-role-and-membership>

true counterfactual to an imperfect policy related study would be. In most cases, it is not a perfect trial, but more likely a basic pre-post evaluation, if any evaluation at all. With this in mind, I would be surprised to find a scientist who would not prefer a sound, but imperfect experimental approach with some pre-recognised limitations.

Conclusion

Bolton and Newell are right to set out some of the challenges and threats around the increased application of behavioural science in government. They are also right to set out the importance of maintaining strong scientific processes and the need to be vigilant in doing so. As they suggest proper procedures should be considered and the threats and challenges recognised. However, many of the threats they outlined are not unique to the application of behavioural science in policymaking. In fact, the promulgation of BI approaches has highlighted these areas, and started to help address them. Underlying all of this, and the key to reaching the ‘Goldilocks zone’ is a mutual respect and understanding of scientific processes as well as the demands of policymaking in government. Where I’ve seen it work best, academic partners have seen their engagement not as an “obligation” as Bolton and Newell suggest, but an opportunity to work side by side with people who know how to transform a good idea into government policy to maximise its positive impact. They also see it as an opportunity to build an understanding of scientific processes in government. From my experience, the growth of BI in policymaking has actually been a key part in improving the adoption of scientific processes in governments around the world.

References

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