

The value of research evidence for policy

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3. The value of research evidence for policy

David Christian Rose (University of Reading) and Chris Tyler (University College London)

3.1. Introduction

In this chapter, we explore the value of research evidence to policy-makers and provide a number of suggestions to researchers about how to engage productively with them. We understand that policymakers engaging with academics can provide a rewarding experience for both groups, as indicated by the following quote:

When you connect with the academic world, it really is oxygenating, you feel invigorated because it exposes you to a whole other world out there that is thinking in different ways. (Dr Gemma Harper, Deputy Director, Marine, Defra – testimony, CSaP Policy Fellows scheme)

However, defining the term ‘research evidence’ is not straightforward. In this chapter, we refer to research evidence in a way that academics traditionally would, associating it with knowledge generated through a rigorous, scientific methodology, encompassing the natural and social sciences and the humanities. We recognise that the boundary between ‘research evidence’ and other forms of knowledge is blurry and we do not seek to place academic ways of knowing on a pedestal. But, other forms of knowledge, such as anecdotal or experience-based evidence, are not usually generated using a robust scientific methodology (Alliance for Useful Evidence, 2016; Kenny *et al.*, 2017).

With reference to a study of research use in the UK Parliament and four initiatives to bring research and policy together, we start by outlining why policy-makers want to use research evidence to make decisions. We then provide some top tips for how researchers can improve the chances that their research evidence is used by policy-makers.

3.2. Why do policy-makers want to use research evidence?

Critical scholars frequently refer to the myth of evidence-based policy-making, arguing that policy-makers do not utilise research evidence to its full potential (Nutley *et al.*, 2007). However, in a survey of over 2,000 policy officials in Australia by Newman *et al.* (2015), the majority of respondents (58%) said that they used databases to download academic research and more than 60% reported using research evidence in written reports. Though the Institute of Government (2018) in the UK noted problems with the way research evidence was used, it did highlight a number of examples of where it was being useful to policy-makers.

A collaborative study between University College London and the Parliamentary Office of Science and Technology asked UK parliamentarians and the staff supporting them if they valued research evidence in their work, and if so, why? This study engaged 157 people in Parliament, including MPs, Peers, and parliamentary staff, through a mixed methods approach (Kenny *et al.*, 2017; Rose *et al.*, 2020a). In a survey used for this study, 98% of respondents strongly agreed or agreed that research of all kinds was useful to them and over half reported that they used it daily. Parliamentarians and staff found research evidence useful for a number of reasons, including:

- To make more robust and credible policy decisions
- To provide background knowledge, helping them to understand an issue
- To provide balance
- To learn lessons from other countries
- For political purposes, scoring points over opponents

Though we know that research evidence can be used politically (Cairney, 2016), studies have shown its value in making policies more robust and credible (see e.g. Phoenix *et al.*, 2019). Credibility was the number one factor determining the use of evidence in the study of the UK Parliament (Rose *et al.*, 2020a). Parliamentary staff said that they wanted to make sure they were 'only using authoritative sources'. MPs' staff spoke of the need to illustrate points 'credibly' with 'killer facts' (Kenny *et al.*, 2017). Credible research evidence was seen as important to scrutinise existing policies to see how they could be made more effective, and evidence from academics tended to be perceived as credible (Kenny *et al.*, 2017; Rose *et al.*, 2020a).

The example of the Conservation Evidence initiative, shown in Box 3.1., highlights how research evidence can be vital in creating credible policies and avoiding mistakes.

Box 3.1. Using Research Evidence to Avoid Mistakes - Conversation Evidence

The Conservation Evidence initiative (see www.conservationevidence.com) summarises the evidence on the effectiveness of conservation interventions from the academic literature and provides lay summaries in an accessible form for policy-makers. In 2019, an average of 29,000 pages were viewed each month by an average of 9,000 people and it has been cited in multiple policy documents in the UK and New Zealand. A number of organisations, such as Froglife and regional branches of the Wildlife Trust, have signed up to be evidence champions, which partially involves making a pledge to check Conservation Evidence for information on whether a proposed intervention or policy is likely to work or not. There are many testimonies of how useful the collated evidence has been to policy-makers with the Head of Planning and Environment at Forest Enterprise England saying that they use it 'to ensure that our limited funds stretch as far as possible'.

Policy-makers can use this resource to make sure that they do not make decisions that are unlikely to work. For example, Norfolk County Council have been criticised for spending £1 million pounds on bat gantries, designed to guide bats to fly over roads at a high level to avoid collisions with cars (Crowley, 2020). However, a simple check of Conservation Evidence would have shown, based on the research evidence, that such a policy was unlikely to work. A check of the synthesised evidence could have saved money for the taxpayer and helped Norfolk Council to find alternative approaches that were more likely to work (such as installing underpasses or overpasses).

Policy-makers also value research evidence as a means to broaden their horizons and to spot emerging threats and opportunities. The Policy Fellows programme at the Centre for Science and Policy (CSaP) in Cambridge (UK) is a good example of where policy-makers have been exposed to the latest cutting-edge research evidence, see Box 3.2.

Box 3.2. Using Research Evidence to Broaden Horizons - CSaP Policy Fellows Scheme

The Centre for Science and Policy in Cambridge (UK) has run a Policy Fellows scheme since 2011. This invites policy-makers from a range of governmental departments and

beyond on a two-year programme to connect them with researchers in Cambridge. Each bespoke programme begins with a few days in the University of Cambridge, with a series of meetings with academics who have been carefully selected to meet the research evidence needs of each policy maker. The remainder of the two years sees a wide variety of engagement opportunities between policy makers and researchers. Since its launch in 2011, more than 450 Fellows have been recruited and meetings have been set up with them and over 1,700 academics. In 2019/20, 833 meetings were held between Policy Fellows and researchers.

The scheme has been helpful to researchers interested in the application of their research to policy, even prompting new lines of research enquiry. It has also been valuable to those policy-makers who have taken part. Two of the major impediments policy makers face in engaging with research evidence is time and access (Kenny et al, 2017). By taking policy makers out of Whitehall (and other government centres) and embedding them (primarily) in the University of Cambridge for a week, they have the time and access they need to explore both their broad and particular evidence needs. Policy Fellows report that their horizons have been broadened by having the time to make contact with a number of researchers from different disciplines who each have their own unique take on solving a problem. The quote from Dr Gemma Harper (Defra) at the start of this chapter argued that Policy Fellows felt ‘invigorated’ by discussions held with researchers. Claire Moriarty (Permanent Secretary, Department for Exiting the European Union) said of the Policy Fellows scheme:

‘Connecting things together will always give you access to a wider range of solutions that anyone could get in their own minds, no matter how fantastically brilliant they are.’

Siddharth Varma, who was a Policy Fellow while he was a Policy Adviser at the National Infrastructure Commission said:

‘The day-to-day of working in the centre of government, invariably on a procession of urgent things, is exciting but isolating. Policymaking is done best when its practitioners are genuinely open to new ideas and the latest evidence, acting with confidence about what they know and humility about what they do not. My time in Cambridge gave me plenty of time to practice the latter in an environment conducive to debate and reflection.’

These comments show that research evidence is valued by policy-makers as are the

opportunities to engage with researchers on a deeper level with more time.¹

We also know that policy-makers like to learn from international evidence of what works. In the study of the UK Parliament, one Peer said that having international evidence in public policy is like “gold dust”, a “hugely powerful resource to back up your recommendations” (Kenny *et al.*, 2017). The International Public Policy Observatory is a recent example of the mobilisation of global research evidence to address the social impacts of COVID-19. Indeed, the way that research evidence has been used across the world to inform policy responses to the pandemic has illustrated the significant value of research to policy-makers. Our response to the pandemic from lockdowns, to vaccine development, and eventually to recovery would not have been possible without research evidence. One of the enduring memories from the pandemic across the world will be of politicians and scientific advisers standing on podiums to give press conferences, pointing to various graphs filled with research evidence. An example of how research evidence has been used to inform policy makers during the pandemic can be seen in Box 3.3.

Box 3.3. IPPO - Mobilising Global Evidence to Inform Policy-Makers

The International Public Policy Observatory (IPPO)² is a collaboration between UCL, Cardiff University, Queen’s University Belfast, the University of Auckland and the University of Oxford, along with partners such as the Scottish Policy and Research Exchange, Pivotal, the International Network for Government Science Advice (INGSA) and academic news publisher The Conversation. IPPO aims to be more demand led than some past observatories, engaging directly with decision makers to understand their evidence needs and then synthesising answers they can use, including examples from global practice as well as formal syntheses of research evidence. As such it places a high premium on relationships and conversational engagement with policy-makers.

The various research partners work with policy partners across England, Scotland, Wales and Northern Ireland to offer insights, evidence and analysis of global policy responses to COVID-19 to enable them to address the immediate social, economic and public health impacts and help communities to recover. IPPO focuses on social issues relating to COVID-

¹ For more information please see <https://www.csap.cam.ac.uk/policy-fellowships/policy-fellows/>

² For more information please see - covidandsociety.com

19, such as education, mental health, living online, care homes and adult social care, housing, vulnerable communities, and addressing the disproportionate impacts on Black, Asian and minority ethnic groups. In each area, evidence from wide sources – including many international sources – is synthesised, analysed and communicated to policy makers, local leaders and frontline workers to help improve the outcomes of the difficult decisions they have to take.

Funded by the Economic and Social Research Council, IPPO is one of a number of novel approaches to making the most of academic research in public policy. Whereas most major investments by research funders focus primarily on novel research, this ESRC investment focuses largely on research synthesis (led by UCL's [EPPI-Centre](#)) and policy engagement (led from UCL [STeAPP](#) along with all the other partners). We know from our own research that policy makers value evidence synthesis and international evidence (Kenny et al, 2017; Rose et al, 2020), and in this respect IPPO is a timely and important innovation.

Studies have also shown the value of research evidence to policy-makers if it is synthesised in an accessible form, which is one of the aims of the POST Fellowship scheme, described in Box 3.4.

Box 3.4. POST Fellowships - Learning How to Present Research Evidence to Policy-Makers

The Parliamentary Office of Science and Technology (POST) is the UK Parliament's in-house source of science and technology advice. For nearly 30 years, POST has been running a Fellowships programme bringing PhD students from a wide range of disciplines into Parliament to work on briefings for parliamentarians. This is valuable for Parliament for two reasons. First, the more than 20 PhD students joining the team for three months at a time is funded externally to Parliament, which means that politicians and their staff are getting great value for money. Second, the influx of external enthusiasm and expertise is invaluable. Some of the PhD students work with select committees and occasionally elsewhere in Parliament, but most of them spend their time with POST, each researching and drafting a four-page briefing document called a POSTnote.

POSTnotes are internationally recognised as a gold standard for parliamentary briefings. Today they are widely imitated around the world as parliamentary science advisers slowly move away from a primary reliance on long and weighty reports. Our research showed that

a lack of time is a major barrier for politicians and their staff to access research evidence (Kenny *et al.*, 2017; Rose *et al.*, 2020). This is one reason why the relatively short and focussed POSTnotes are so popular in Parliament. Another reason is that they are designed to place science and technology in a policy context, providing the link between policy options and available evidence for politicians. Finally, they are widely respected as non-partisan and accurate, which is a function of the expertise of POST, the training they provide the PhD Fellows, and the importance of extensive peer review as part of their production.

Parliament is not the only beneficiary of this programme. During their time in Parliament, the PhD students learn how Parliament works, how to translate evidence into parliamentary briefings (both written and oral), and the importance of bringing the best of academic research to bear on parliamentary debate, scrutiny of government and legislative activity. At the end of the fellowship, the students take this knowledge with them back into academia. Many of them go onto successful academic careers and very often to stay close to POST, and their experience in Parliament influences their research activities, making them more relevant to public policy. Another subset of the fellows leave academia but go into policy roles, for example in scientific institutions and academies. The POST fellowships are similar to PhD Internships, which are covered in more detail in Chapter 13 of this book.

Policy-makers do, therefore, value the use of research evidence. However, impact is not always quick. Owens (2015) has shown that examples of ‘direct hits’ between the provision of research evidence and policies informed by that evidence are rare. Rather, impact is slower and more diffuse. A key message for academics then is not to get disheartened if policy-makers do not appear to be influenced by research evidence immediately. We make some further recommendations below about how academics can improve the chances that their research evidence is valued by policy-makers.

3.3. Communicating research evidence to policy-makers

There are plenty of excellent guides for academics about how to communicate with policy-makers so that their research evidence is more impactful. Oliver and Cairney (2019), for example, offer a series of ‘do’s and don’ts’ of influencing policy based on a systematic review. Phoenix *et al.* (2019) also provide an interesting perspective as a group of social researchers in the Department for Environment, Food & Rural Affairs (UK) about what type of communication strategies are most valued. They argued that research evidence needs to be

relevant to policy-makers, presented at the right time to seize on policy windows, as well as being tailored to the audience in terms of presentation style. Good forms of communication include preparing policy briefs and slide-packs written in non-academic language. These tips are valuable because policy-makers in the study of research use in the UK Parliament criticised academic research evidence for sometimes lacking relevance, being too difficult for a non-specialist to understand, as well as being inaccessible due to paywalls and not being presented at the right time (Rose *et al.*, 2020a). Advice for academics on how to engage with legislatures has been combined into a blog based on several studies (Tyler *et al.*, 2020).

Below we draw on personal experience, for example as Director of POST and CSaP (Tyler), as well as on academic and our study of the UK Parliament, to outline five top tips for researchers seeking to improve the chances that their evidence is used by policy-makers. We recognise that there are institutional barriers, such as lack of time and incentives for academics, to putting some of them into practice.

1. **Synthesise evidence and communicate succinctly:** the examples of Conservation Evidence and the POSTnotes produced through the POST Fellowships highlight the importance of synthesising evidence and putting it into an accessible form for policy-makers. Policy-makers generally want to learn what the body of evidence says about an issue, rather than reading individual studies. If efforts can also be made to synthesise global evidence, as in the IPPO example, then this can be hugely valuable to policy-makers. Synthesised evidence provided in an accessible form can be easier to use in a fast-paced, time-poor policy-making environment. Writing a good policy brief, or preparing an engaging slide-pack or infographic, is an important skill for researchers to learn (Phoenix *et al.*, 2019). In addition to doing evidence synthesis, academics should work with research funders and their own institutions to establish systems that fund and reward the time, expertise and impact of these efforts. ESRC's investment and UCL's leadership of the IPPO are a good recent example of the value of prioritising evidence synthesis and policy collaboration.
2. **Establish two-way channels of knowledge exchange:** the examples of the CSaP and POST Fellowships show the value of bringing policy-makers and researchers together. Many of the most productive relationships between the two occur as a result of sustained efforts over a long period of time to establish

a connection and build trust, even re-establishing contact with new staff who take on policy roles. Listening to policy needs and investing time in building a relationship, rather than looking for immediate impact, is important. Ideally, over time, public policy will be influenced by good research and the research projects will be influenced by current and future policy needs.

3. **Understand how policy-making timescales work:** in the study of research use in the UK Parliament, parliamentarians and their staff criticised academic researchers for missing key policy windows; for example calls for evidence. Knowing how policy-making timescales work, seizing on windows of opportunities (easier if trusting relationships are already formed), and presenting research evidence in a timely fashion is vital (Rose *et al.*, 2020b). In the absence of available time to conduct fresh research, making use of the best available evidence, both locally and internationally, is still valuable.
4. **Spend time enhancing your credibility:** a key part of developing trusted relationships with policy-makers is the establishment of a credible research profile. Policy-makers are generally wary of individuals who have an axe to grind, perhaps from a specific political viewpoint. Building a credible scientific reputation and public persona is an important step to being invited to engage with policy-makers in windows of opportunity. Networks of researchers, policy makers and intermediaries evolve over time, and the foundational relationships that fuel these important networks require effort. A shared cup of tea today may yield important results in a few months time.
5. **Make research open access where possible:** policy-makers regularly complain that they are unable to access research evidence that appears to be useful from a title. This is rarely the fault of the individual researcher, but rather the fault of academic publishing models. Where possible, academics should ensure that their research is open access, or if it is not, time should be spent undertaking more accessible forms of dissemination, such as writing blogs or policy briefs and making these available publicly.

Undertaking the steps above can ultimately help boost the credibility, relevance, iterativity, and legitimacy of academic engagement at science-policy interfaces, which are key hallmarks of success (Sarkki *et al.*, 2015).

3.4. Conclusion

Academic research evidence is valued by policy-makers to make better policies and avoid mistakes, to inform scrutiny of existing policies, and to broaden horizons and knowledge on issues of societal importance. If research evidence is accessible to policy-makers, free from paywalls and scientific jargon, synthesised and summarised for speedy digestion, as well as being available on time to meet deadlines, then it is much more likely to be used. Initiatives described in this chapter, including academic-led evidence synthesis, partnerships designed to bring together multidisciplinary experience on a specific issue, and knowledge brokering organisations who link science and policy, are well-placed to inspire or assist readers to enhance the policy impact of their own work.

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