Chapter 5
Evidence-Informed Policymaking

Introduction

The concept of evidence-based policymaking has been developed from the scientific method applied to medicine, and then extended to several other fields concerning topics where public policy decisions should be advised by rigorously established evidence. This good practice reflects the belief that rigorous and scientific evidence is an essential tool to help bring sustainable information to decision-making process especially in the interest of social actors. It is commonly accepted that “evidence-based/informed” decision-making and public policy development are the hallmarks of good governance and responsible public administration. As it is often remarked, “policy without science is gambling” (Copeland 2015). The aim is to use unbiased reasoning to guide social interventions and spend public funds more effectively. In an era where the truth seems dispensable to some politicians, evidence-informed policymaking champions the importance of getting the facts right. However, the quantitative methods commonly employed in the scientific field (randomized con-

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1We introduce the evidence-informed term (but evidence-based will continue to be used with a certain logic). SAPEA report (2019:101), “Politicians make evidence-informed decisions, not evidence-based decisions, because the decision will be influenced by his/her political values as well as economic constraints and social acceptability”. Politicians often need to be re-elected and this influences decision-making process.
trolled trials, data gathering, statistical analysis, replication of results, generalization of concepts, causal relationship investigation, construction of statistical models, etc.) and qualitative research methods (designed to investigate behaviour and perception of targeted samples with reference to different topics, i.e. in-depth interview, focus groups, case studies, content analysis) should be implemented by ethics, philosophical reasoning, psychological approaches, and more structured stakeholders’ involvement on an issue or a set of issues. “Evidence-based policymaking has two goals: to use what we already know from program evaluation to make policy decisions and to build more knowledge to better inform future decisions” (Urban Institute 2016:2). It can assume many forms: use of research findings to inform new policies or improve the effectiveness of existing programs; support of data collection and analysis for research and management; development of policies that incentivize the use of evidence, etc. One form to improve governmental effectiveness “is evidence to promote improvement through more effective policies and programs—evidence of how well such policies and programs ‘work’ in different circumstances. Here we are talking about knowledge of how policy interventions achieve change in social systems. Conventionally, we assume that reliable knowledge provides a sound basis for effective action; it is explanatory and theoretical, providing an understanding of how policies work” (Sanderson 2002:3). A more “structured” position is taken by Ruggeri et al. (2020:2) as they propose “standard guidelines to support communicating evidence to policymakers. Such standards benefit scientific progress and policymakers while encouraging wider appreciation for empirical evidence”. Nowadays, we have many interdependent factors that have the potential to negatively influence policymaking on a global scale especially in time of crisis (Galluccio 2019; Ruggeri et al. 2020):

1. Profusion of scientific evidence
2. Ambiguity of available data and difficulties of cross-country comparability
3. Abundance of information and misinformation
4. Difficulty on behalf of scientists and experts to fully understand the complexity of political decision-making processes
5. Lack of cooperation and joint attention on behalf of main actors into the process
6. Confusion of roles, sometimes, between scientists and politicians/diplomats
7. Lack of communication between and among main actors
8. Lack of ability, on behalf of the scientists/experts and politicians/diplomats, to forge links with people

On the face of it, maybe the final aim of evidence-informed policymaking could be that of helping to strengthen the cooperative attitude in working relationship between the scientific and political world to enhance, boost, and assess the direct and efficient application of research findings to the society throughout political decision-making processes.

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2 Principles of Evidence-Based Policymaking, evidencecollaborative.org, 2.
Brief History of Evidence-Based Policymaking

Evidence-based policymaking seemed to emerge with a new decisive awareness in late 1990s with the election of Tony Blair’s government in the United Kingdom, which aimed to produce better policy outcomes on the basis of scientific evidence in order to “deal with problems that are forward-looking rather than a response to short pressures” (Government of the United Kingdom 1999:15). Indeed, one of the priorities of the new Labour Government was concretely promoting the work of policymakers as this was clearly emphasized in its agenda for modernization: “More new ideas, more willingness to question inherited ways of doing things, better use of evidence and research in policy making and better focus on policies that will deliver long-term goals” (Government of the United Kingdom 1999:16). The slogan adopted was “what matters is what works” and ten What Works Centres targeted on specific sectors were founded to meticulously evaluate policies in their area of expertise. The path followed in the United Kingdom foresighted inclusive, forward-looking, fair, and integrated programs, which aimed at providing “public services of the highest quality”, ensuring “that government is responsive to the user” and making “certain that citizens and business will have choice about how and when to access government services” (Government of the United Kingdom 1999:10). Prime Minister Tony Blair’s primary concern was committing his government to public service and, to obtain this result, he needed to design policy around shared goals, carefully defining solutions for cross-cutting issues by employing external highly qualified advisors.

At the same time, also the European Commission of the EU was working on that political direction as in the White Paper, released in 2001, it was stated: “Scientific and other experts play an increasingly significant role in preparing and monitoring decisions. From human and animal health to social legislation, the Institutions rely on specialist expertise to anticipate and identify the nature of the problems and uncertainties that the Union faces, to take decisions and to ensure that risks can be explained clearly and simply to the public” (European Commission 2001:18). This political-legislative new direction was mainly motivated (but not only) by the fact that the EU had to renew the community method due to the lack of faith expressed by EU citizens, who did not feel to be actively part of the EU’s political decision-making process. The new implemented method started to follow a less top-down approach, complementing the EU’s policy tools with a more efficient non-legislative instruments which required a simplified regulatory pathway: up-to-date and online information on the preparation of policy formulation and consent; stronger dialogue with regional and local governments through national and European institutions and associations; establishment of partnership arrangements; and published guidelines on collecting and using expert advice for policy formulation. This final point was crucial in the EU’s role in defining risk assessment and risk management by strengthening its system of scientific committees set up in 1997 (European Commission 2001:2).
Evidence-Informed Policymaking in the European Union

The first step in the direction of building a European evidence-based/informed policymaking (today the new construct is evidence informed) was the creation of a coherent and solid European group of scientific diplomats coordinated by the European Council with the scope of harmonizing national actions. This was a great priority because only by putting together member states’ national resources and coordinate efforts for an implemented effectiveness of the common action it would have been possible to create long-term strategies in the common interest of the EU’s citizens. The primary concern of the EU was then that of implementing different policy tools, such as legislation processes, social dialogue, structural funding, and action programs, to name but a few, in order to open up “policymaking to make it more inclusive and accountable” (European Commission 2001:6). Five principles were established for legislation and policymaking processes: openness, participation, accountability, effectiveness, and coherence. Furthermore, the legislation of the EU were given new tools to be able to react more rapidly to changing market conditions, and to new problems created by globalizations in all the fields, by reducing the long delays associated with the adoption and implementation of the EU’s rules. This had to be developed on an effective analysis of the scale and appropriateness of the intervention which often included a solution, as a part of a broader approach, also involving third countries’ actors. We understand that the question of involving different actors in the policymaking process is a central objective of the EU’s action. In 2008 the Directorate General for Research and Innovation released a document titled Scientific evidence for policy-making which underlined the importance of the “dialogue between policy-makers and researchers in order to maximize the policymaking impact of projects in the social science which are funded within the Framework Programmes” (European Commission 2008:7). Project coordinators were encouraged to put the policy usefulness of their research findings to the forefront of their objectives and work programs in order to open up the innovation to a broader non-specialized public with whom a broad dialogue had to be ensured. They had also to include partners from the world of policymaking to ensure that the chosen subject, as well as the scope of the research, would have responded to the areas of interest. The task of broadening the research findings in enhancing their application was also a task of the DG Research and Innovation itself. It needed to strengthen its strategic cooperation across the European Commission by developing a targeted communication in those areas that had major economic, social, and scientific relevance to the EU ensuring that the news about project outcomes would have arrived to the European Commission President’s advisors. In order to overcome the communication barriers existing in both areas, it was deemed of main importance the enhancement “within Member States’ administrations of ‘strategic intelligence units’ development acting as interface for communicating, cooperating, and debating with the scientific community” (European Commission 2008:12). Indeed, the complexity of the policymaking environment required interdisciplinary approaches which had to be integrated from a different range of areas: social,
economic, scientific, political, and diplomatic. On the international level, this strategic focus was already introduced in 2001, looking beyond the European borders in order to contribute to the debate on global governance. The principles of good governance and good international relationships were set up as key points to boost the cohesion, coherence, and coordination (3 Cs) for the effectiveness and enforcement of international institutions as the European Commission set a series of scopes for its mandate (European Commission 2001:3–4):

- Improve the dialogue with third countries’ governmental and non-governmental actors when developing policy proposals with an international dimension
- Propose a review of the EU’s international representation to allow it to speak more often with a single voice
- Reinforce attempts to ensure policy coherence and identify long-term objectives
- Bring forward to the next Intergovernmental Conference proposals to refocus the Commission’s executive responsibility

The Relation Between the Scientist and the Diplomat: Recommendations

The document adopted by the European Commission, DG Research in 2008, was developed starting from the analysis of the material provided by interviews to policymakers, senior policy advisors, and knowledge transfer specialists who identified three groups of obstacles (experienced in relation to scientists vs. policymakers) (European Commission 2008:13–14).

- **Contextual**: As it has been already highlighted, the diplomat and the scientist are two very different figures who work in two very different disciplines and environments, and they use “two different languages” to describe their experiences and needs. The challenge for researchers is understanding the constraints of policymaking and translating their research finding into useful and applicable material for policymaking.
- **Structural**: The working environment and the methodologies implied are different. The scientist, generally, achieves results which usually have no immediate impact on everyday society, whereas the politician/diplomat requires to think not only on the long term, but also on the short and middle terms, in order to efficiently and immediately respond to the rapidly evolving political and societal challenges. Moreover, policymakers have to interact with a wide range of figures to develop solutions based on consensus model, while the scientist interacts in peer-to-peer relationships.
- **Cultural**: At the very end, the relationship between scientists/researchers and diplomats/policymakers is also built on the national tradition of encouraging (or not) this communicative bridge between the two very different worlds.
The path followed to enhance the connection between these two worlds implies not only a full mutual respect and a better communication from the researchers to the policymakers, but also a wider importance to be given by the policymaking decision-making process to the research findings. For example, the “European Commission should facilitate more interactive small-scale events and policy-learning type meetings that involve a number of policy-makers. ERA-NET type activities should be continued as they provide a useful learning experience for policymakers” (European Commission 2008:17). In order to assure and strengthen this connection, the DG Research stated its willingness to use scientific evidence both in the definition of the policies (ex ante) and in the policy choice evaluation (ex post) to ensure transparency at every single stage of the policymaking process. According to the abovementioned European Commission’s paper released in 2008, the most appropriate intermediary bodies are scientific academies, research councils, scientific and technological bodies, foundations, and national parliaments which spread the European voice within national borders. Nowadays, the European bodies concretely working in this direction are the Joint Research Centre (JRC) running within the European Commission, the European Research Centre (ERC) established in 2007, and the Scientific Advisory Mechanism (SAM) established in 2015.

Evidence-Informed Policymaking in Action

Evidence-informed policymaking may be the gold standard for crafting policy—the question is how that gold standard copes with messy reality. Obviously, in policymaking decisions are influenced by a wide variety of factors (including ministers’ values, principles, experience, and expert and political judgements). This means that even in individual policy areas the evidence-informed policymaking must be both broad enough to develop a wide range of policy options and detailed enough for those options to stand up to intense scrutiny. It is commonly argued, however, that evidence-informed policymaking process gives too many times too much power to scientists/researchers and to diplomats/policymakers who know little about the concrete sector and leaves stakeholders out of the decision-making process. The first step towards an efficient evidence-informed policymaking is highlighting problems and needs that really require public policy intervention in setting reliable policy options, instead of dissipating energy and money on useless legislative (and non-legislative) projects: “a better understanding of the specific nature and incidence of social problems is fundamental to improving the effectiveness of policy responses” (Sanderson 2002:4). It seems there is a strong necessity of strengthening evaluation processes to provide up-to-date and relevant information for actual performances. This could be done by building the capacity of taking action to modify policy designs, and effectively implementing processes on the light of such fundamental evaluation processes. Pilot projects are frequently launched. The first problem concerns the time needed for the effects of the new policies to be manifested and to become evaluated, in isolating factors such as social rather than economic
factors. It may take considerable time for pilot projects to become fully established as far as to represent the conditions under which a policy would be fully implemented. Moreover, when policy initiatives arise from political commitments, policymakers are understandably impatient to receive results that will provide support for present and further implementations. However, “such a political interest potentially conflicts with the interests of evaluation research, the interests of which are served by long-term, in-depth analysis of the effects of pilots” (Sanderson 2002:11). The second problem arises from the difficulty to isolate the effects of pilot programs from exogenous changes and effects derived from other initiatives that may also influence the same set of problems as that addressed by the pilot program. This may lead to a significant problem: the size of the impact may not be substantial and therefore it may be difficult to measure the provided data. “Thus, we need to recognize that policies are essentially ‘conjectures’ based upon the best available evidence” (Sanderson 2002:19). At the end of the day, evaluation processes are necessary to assess and understand how policies have been carried out and implemented in the social and economic field, how they have worked, and which kind of lessons could be learned to enhance further improvements.

Standardization vs. Experience-Based Approach

The question that arises now is how evidence-informed policymaking can rely on standard patterns while handling the reality which often presents emergencies that cannot be forecasted. Of course, it is impossible to treat every situation as an emergency. Standard procedural strategies, on which we all depend upon, just help us to reach “everyday” goals. Ruggeri et al. (2020) proposed a standard procedure for evaluating evidence in policy contexts as they developed the Theoretical, Empirical, Applicable, and Replicable Impact rating system (THEARI). They referred to the “evidence as scientifically produced insights or conclusions reported through peer-review or other recognized specialist dissemination channels, though there are certainly other forms” (Ruggeri et al. 2020:4). THEARI could be applied to “visible ratings of a study for compilation of inputs in policy decisions”. There is no rating for opinions, commentaries, or editorials. It seems that unreliable insights and biases will be overcome: “the ultimate benefit we envision is setting a common framework as a starting point for utilizing evidence in policy discussions, overcoming biases and the effects of inconsistent definitions or unreliable insights” (Ruggeri et al. 2020:9). While we are waiting to better understand the meaning and framing of “common framework” and “standards” in practical terms, we think this is an interesting paper: a common currency for evaluating papers from different domains in terms of their suitability for public policy seems like a necessary, if not sufficient, step.

However, we can become vulnerable if we hold too rigid mindsets because they can impede us to adjust to changing conditions. In this case we are supposed to bring to the fore the “experience” and relate on it. We have to implement it in our
decision-making processes because “we need both mental gears”: one for using the standard procedures and the other for improvising when situations became unsettled (Klein 2009:5). This means that the statistical analysis that seems so impressive under stable conditions often turns out to be insensitive to surprises. Nowadays, instead it seems that we like to transform skills into procedures to be applied to different contexts, because following checklists or frameworks (or evidence-informed policies at large) is simpler and clearer, as it avoids the problems that could occur due to lack of experience, expertise, or attention. In the political/diplomatic context, evidence-informed strategies seem to be “neglecting” too much heuristics, intuition, and expertise without appreciating their strengths. However, this pathway could be overcome as soon as people become more proficient. A researcher, politician, or diplomat develops the ability to detect “by intuition” (tacit knowledge) of unexpected problems that procedures and rules cannot forecast due to their bond to working schemes. Procedures, including checklists, are tools. Every tool has limitations because they cannot cover and predict the entire spectrum of possibilities that might arise. People will have to use their own judgment and expertise to overcome unexpected events. Moreover, working schemes and demands keep evolving faster and faster while certain frameworks, standards, and procedures become obsolete and, thus, even counterproductive. Relying rigidly on procedures, rules, checklists, and fixed schemes could provoke the erosion of the expertise instead of its improvement (Klein et al. 2016). This does not mean that standardization and procedures have to be banned from evidence-informed processes, but this means that only by appreciating their limitations we will be able to make better use of them. They are a useful tool to reduce uncertainty and workload and make it easier to attend critical aspects of the task without losing focus on it, to safeguard against interruptions, and to coordinate teamwork by imposing consistency. Procedures could be the best ally during normal worktime if they are used with criteria and implemented by knowledge and expertise. An important role in decision-making process is played by tacit knowledge. Indeed, although we tend to rely more on standardized procedures, what really makes the difference in our work is what we know and how we use it to bear difficult and unexpected situations. The COVID-19 crisis has showed this mercilessly! The concept of “tacit knowledge”, here emphasized together with intuition, describes the basis for our skill acquisition and the self-reflection on our inner experience in different fields. It lays under the surface of our consciousness, hidden behind the facade of our lives, but it is critical for the way we design and use procedures in complex situations. It includes major abilities such as acquiring perceptual skills (with experience we learn to see things that others do not notice); developing mental models; learning pattern matching (every expert has built up a repertoire of patterns to quickly understand and give fast responses); judging typicality and anomaly; and generating workarounds (Klein et al. 2016). Another crucial point at stake is the relation between statistical analysis and intuitive expertise. Numerous researchers claim in their papers and textbooks that for any important judgment (on long time) we should call in the statistical analysis, meta-analysis, and frameworks, instead of relying on the intuition of experts. However, it is more correct to state that maybe we need both analysis and statistics. Indeed, before producing an analytical
response on a prediction, people should *collect* and *combine* data from a changing context, two operations that require expertise and a little bit of intuition. The role of the context is also pregnant in people’s decisions because it helps them in taking fast and functional choices without overthinking. The only solution to this harsh relation is *blending* systematic analysis and intuition. Intuition includes tacit knowledge: our ability to recognize patterns stored in memory (Klein 2009). It is not very necessary to underline that the ultimate decision that we take is the result of a selection among several options that have been compared. However, when the solutions are very similar to one another, the choice becomes harder and people must relate on their own intuition, experience, and expertise. Klein et al. (2016) described this strategy as “Recognition-Primed Decision (RDP) model” which combines intuition with analysis. The pattern matching is the intuitive part, and the mental simulation is the deliberate analysis. For policymakers, on the other hand, there are no “too close” solutions, because they “are likely to look for more options, or shift from decision making to problem solving, trying to find ways to make some options work better” (Klein 2009:95). Scientists and advisors should be able to manage the tension present in policymakers (and in themselves as well) between a held belief and world views at large and the adaptation process of those beliefs and views to dissonant evidence (Galluccio 2011; Tetlock 2005).

**Evidence-Informed Policymaking: Leading from the Shadow**

One of the most ambiguous themes is whether or not policymakers should receive evidence-based/informed advices on everything they are going to decide. Moreover, who should be in charge (and dare) of giving those kinds of advices to them under conditions of uncertainty and stress? Beyond the sustainability of political decisions, it is important to consider that the communication channel between science and politics could be impaired by basic misunderstanding and cognitive biases. The way HOW advices are communicated is of fundamental importance. Just try to make it simple; first of all, any proposal addressed to policymakers (be it a draft from scratch, a legislative amendment of an existing text, etc.) must be based on reliable evidence-informed policymaking. This requirement is indispensable for science credibility. Each thesis must be supported by solid basis, whether studies, research, data, and scientific evidence must be irrefutable. It must be borne in mind that a politician, should he or she decide to adopt a certain position, will make it his or her own in all respects and, as it is normal, this will involve his or her public exposure to judgments and criticisms. Therefore, it is absolutely necessary that the thesis be “attack-free from political counterparts” who, in turn, could have consulted other scientists. Another element closely related to scientific credibility is represented by the necessary independence of scientists from private subjects, bodies, companies, etc. The more independent the scientist, the greater his or her credibility will be in the eyes not only of the individual politician but also of the community at large. Further element to keep in mind is that scientific data by their
intrinsic nature are complex and technically difficult to understand for non-experts, as they are often supported by a series of extensive documents that are not always easy to read for those who do not have a technical-scientific background. As often happens, policymakers do not have enough time to read through evidence-based studies. Therefore, in order to facilitate interpersonal negotiations between the two spheres it may be important to adopt some communication cues, both in oral and written forms to simplify the understanding of scientific evidence-informed policies without distorting their contents. Oral language is one of the primary vehicles to help to get to the heart of policymakers and in order to be effective, it must be simple, clear, and concise without frills and should go straight to the point. In this sense, it is advisable to adopt a simplified technical register that avoids acronyms, technicalities, or references to cases that non-experts are unfamiliar with. Rather, it is preferable to personalize as much as possible the arising data, bringing to the forefront concrete cases and examples that can be traced back to everyday life. In this way the policymaker can identify himself or herself with the thesis that has been proposed and with the problem to be solved. In this process of linguistic simplification, it is advisable to have a hand copy of the substantial and necessary scientific evidence (which is, and will always be, the linchpin of each meeting) and to complete the file with a very short summary of the file with a clear guidance (summary, main message, recommendations, and defensive points). Finally, it is important to be aware that the communication channel could be flooded by “dysfunctional” behaviours of either party. An attitude of arrogance and superiority assumed by either party could generate friction in the communication process and provoke an interpersonal negotiation rupture. For example, an expert denigrates just with a non-verbal communication or a lack of technical knowledge on behalf of a policymaker, or an expert is surprised a policymaker asked trivial questions (instead of blindly appreciating the superiority of scientific knowledge). This could bring a distinct risk of losing sight of the other side and the overall working relationship. It is important to keep in mind that nothing is really impossible to explain. It is necessary just to simplify, but the advice must always be scientifically exact. Policymakers, on their part, have a moral duty to listen to all sides involved in the legislative process, as well as to investigate the many facets of a problem and study the topic in depth (in crisis situations it gets a lot more complicated as time constraints do not allow this process to unveil this way). As already mentioned, it may be useful to have the support of specific technical-scientific committees composed by selected independent experts with a specific cursus honorum, who can be assembled into small and functional teams.