

# 1. The research–policy nexus: boundaries, bonding and ten golden rules

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## 1.1 THE EMERGENCE OF POLICY-ORIENTED RESEARCH

Policy studies ‘have a long history and a short past’ (De Leon, 1994, as cited in Howlett et al. 2009: 17); the field emerged (initially mainly in the USA) after 1945, based on the idea that what governments actually do could be a proper object of systematic examination (Dunn 2007; Young and Quinn 2002). Lasswell (1951) called for a ‘policy orientation’, overcoming disciplinary distinctions and making the policy process ‘a suitable object of study in its own right, primarily in the hope of improving the rationality of the flow of decisions’ (Lasswell 1951: 3, as quoted in Hudson and Lowe 2009: 5).

A linear policy process is nowadays a straightforward heuristic device (Bridgman and Davis 2003; Hill 2014). At that time, the ‘stagist’ model approach also happened to fit the expansion of scope and responsibility of Western governments during the 1950s and early 1960s. The victory and the tragedy of World War II had convinced Western countries (the USA in particular) that public action could be rationally planned, implemented and evaluated in order to guarantee a ‘common good’.

The world must change and could be changed. And research could contribute to the success of public action (Campbell 2014). This is part of the ‘decisionist approach’ (Majone 1989) developed during the World War II and implemented in the 1950s by policy-oriented think tanks and the Rand Corporation in particular. The idea of a limited number of (political) actors being capable of making calculated choices amongst clearly defined options has emerged, grounded on the typical linear process which characterises the war and military action. As Majone pointed out, ‘a continuous line of development runs from the wartime studies of military operations, of logistics and tactics, to the early industrial application of

new quantitative methods, to systems analysis, and then to policy analysis' (Majone 1989: 13).

Later years saw that optimism gradually challenged: Simon (1957) questioned whether policymakers do (or even can) act rationally, and thus implicitly questioned the feasibility of policy study as a rational analysis of predictable and linear processes. The policy process is complex, perhaps circular and chaotic (Lindblom 1965), or even a 'garbage can' (March and Olsen 1976) or a 'messy process' (Hudson and Lowe 2009). Policy study, accordingly, is a science of 'muddling through' and its scientific understanding is intrinsically limited (Lindblom and Cohen 1979; Weiss 1977; Weiss and Bucuvalas 1980; Majone 1989; Nowotny 1990).

The above developments notwithstanding, policy research, i.e. scientific research related to policies, has acquired a twofold epistemic status (Lasswell 1951):

- 'research *of* policy' sought to understand the policy cycle: how problems are defined, agendas set, policy formulated, decisions made, and policy implemented, evaluated and changed); and
- 'research *for* policy' aimed to supply policymakers with appropriate information and understanding at the various stages of the policy-making process (Becker and Bryman 2004; Nutley et al. 2003).

In this chapter, and in general in this book, we refer to this second meaning as 'policy-oriented research'.

## 1.2 THE 'WHAT': TOWARDS A WORKING DEFINITION

Policy-oriented research looks at one or more aspects of the public and social policy process to provide information and understanding of how policy works, and 'what works' (Becker and Bryman 2004). Following the argument of Weimer and Vining (2015), policy studies can provide fundamental knowledge for policy researchers and academics aiming to improve their general and abstract understanding or, on the other hand, for policymakers who have more politically motivated reasons regarding strategy and implementation.

The distinction between fundamental and applied policy studies mainly refers to the audience they have, since both have strong similarities in terms of methodological constraints. Applied policy-oriented research is interested in solving specific public problems synthesising already existing research to estimate consequences and present alternative options. While

fundamental policy research speaks to policymakers as well as academic colleagues and related disciplines, applied policy research speaks to the specific decision maker. Other distinctions exist, for instance, between research of policy process and for recommendations (Majchrzak 1984).

However, the distinction between fundamental and applied policy-oriented research is sometimes blurred in practice: ‘It is often difficult in practice to determine whether these researchers better fit the policy analysis or the policy research paradigms’ (Weimer and Vining 2015: 12). Accordingly, this distinction should be seen as heuristic along a continuum where a clear-cut distinction does not exist.

The emphasis on the different audience put convincingly by Weimer and Vining (2015) aims to highlight the importance of the ‘client’ to distinguish between professionals working for public administrations, and academics interested in the fundamental understanding of the policy process. A lot has been said on the nature of policy-relevant research (cf. Becker and Bryman 2004; Dunn 2007; Majchrzak 1984; Weimer and Vining 2015); a working definition might be formulated as follows:

the process of providing (producing/transferring) new, usable, and action-oriented knowledge about fundamental collective/social problems, containing options for solutions (and their consequences) for users who have to different degrees the power to take decisions affecting the public arena.

### 1.3 THE ‘WHO’: THE AGENCIES OF POLICY-ORIENTED RESEARCH

Policy-oriented research is best conducted by specialised units close to the policymakers but ‘at the same time sufficiently independent to allow critical analysis’ (Etzioni 1978: 2). In their study of think tanks, McGann and Johnson (2005) classify policy-oriented research agencies by institutional position (Table 1.1).

While these different structures share the objective to ‘bridge the gap between knowledge and power’, their existence is mainly justified by the ‘unavoidable weakness’ in all modern political systems, mainly constraint of time. McGann and Johnson point out limits of decision makers who have no time to carry out research and, on the other hand, academics that might not always be able to cover all policy needs. Etzioni also highlights the constraints on policymakers, creating a demand for policy-oriented research:

The need for policy research lies not in the fact that policy makers are personally inept, unable to conduct research, or unable to review their assumption critically – although these deficiencies may exist – but in the fact that policy makers do

not have prerequisites for conducting research. Time, training, books, and computers are all lacking. While the staff directly subordinate the most policy makers could be assigned to conduct some studies, they tend to suffer from similar limitations. (Etzioni 1978: 2)

It might sound like a paradox, but policymakers are not different from policy researchers: they do not lack capabilities and knowledge to run policy-oriented research; what they lack are some other prerequisites. Policymakers can be extremely clever and skilled people. Often, at the high level, they do not need researchers because they already know the issue, nor because scholars are smarter than they are. On the contrary, most of the policymakers have in-depth knowledge, competences and even strong methodological capabilities to run a good policy-oriented research project. Some researchers might be surprised, but policymakers are often good at understanding charts, theories, graphs, regressions, etc. They are fast, smart, keen on grabbing ideas; and therefore they are very effective in guessing, listening and learning. They can become confident with the even more complex concepts and able to manage advanced knowledge that scholars can offer them.

*Table 1.1 Policy-oriented research agencies*

Category	Definition
Autonomous and independent	Independent from interest groups or donors, autonomous in its operation and funding from government
Quasi-independent	Autonomous from government, but controlled by an interest group and/or donor that provides a majority of the funding agency
University affiliated	A policy research centre at a university
Political party affiliated	Formally affiliated with a political party
Government affiliated	A part of the structure of government
Quasi-governmental	Funded by government, but not part of the formal structure of government

*Source:* McGann and Johnson 2005: 14.

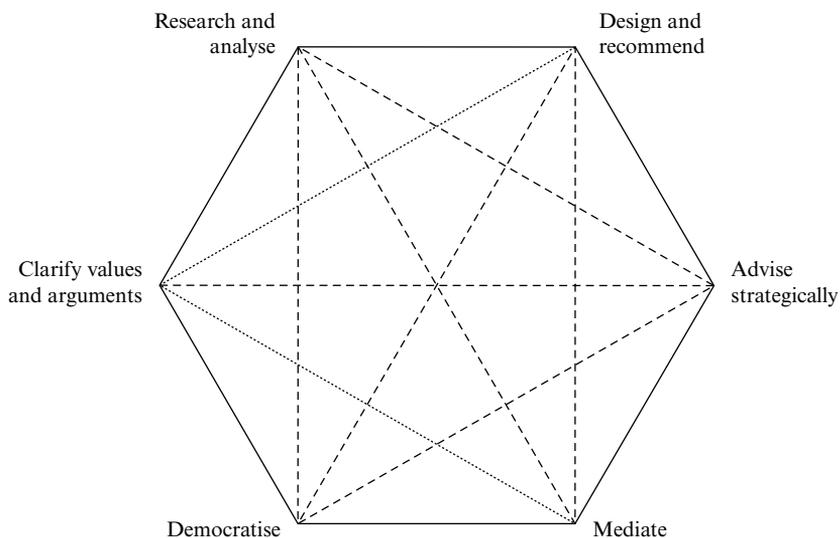
## 1.4 THE 'WHEN': THE ROLE OF POLICY-ORIENTED RESEARCH IN THE POLICY CYCLE

Policy-oriented research occurs in different stages of the policy cycle. Policymakers need both reliable information and scientific insights

and interpretations in almost every step of their responsibility. Before mentioning what the role of policy-oriented research in each phase of the classical policymaking cycle is, it might be useful to mention that this kind of research has functions, activities and styles that justify its use. While there are different classifications (e.g. van der Sluijs and Craye 2005: 58–67), we refer to Mayer and colleagues (2004), who argue there are six kinds (or activities) of policy analysis:

- research and analysis;
- design and recommend;
- provide strategic advice;
- clarify arguments and values;
- democratise; and
- mediate.

Associated with the activities above, they also present six different styles of policy analysis: rational, argumentative, client advice, participatory, process and interactive. By combining activities and styles (and their relationships), Mayer and colleagues come up with the diagram shown in Figure 1.1.



Source: Mayer et al. 2004: 179.

*Figure 1.1 Functions and styles of policy-oriented research for policymaking*

The ‘policy cycle’ can be defined as ‘a set of interrelated stages through which policy issues and deliberations flow in a more or less sequential fashion from “inputs” (problems) to outputs policies’ (Howlett et al. 2009: 10). Research impacts each stage of the policy cycle (Colombo 2010): problem identification and issue definition, agenda-setting, negotiation, deliberation, decision making, implementation, feedback/evaluation (Howlett et al. 2009).

- *Problem identification and agenda-setting*: Politicians, bureaucrats, the mass media, interest groups and experts, can all identify current policy issues. In this phase, research is fundamental. On one side, policy actors can draw ideas and evidence from research to push their policy through. On the other hand, researchers themselves may point out problems with the policymakers’ attention (Kosicki 1993). Because of their distance from policy and practice, moreover, researchers can investigate wider sets of ideas, challenge current thinking and identify tomorrow’s problems (Boaz and Nutley 2009).
- *Negotiation/deliberation*: Research can provide an understanding of the non-institutional views and interests at stake: ‘consultation exercises and market research are often used, alongside more formal research, to explore the views and priorities of key stakeholders and the public’ (Boaz and Nutley 2009: 329).
- *Decision-making*: Decision-making is probably the least research-intensive stage: ‘when it comes time to decide on adopting a particular option, the relevant group of policy actors is almost inevitably restricted to those with authority to make binding decisions’ (Howlett et al. 2009: 140).
- *Implementation*: Bureaucrats – the primary actors in the implementation of any public policy – often need external expertise and knowledge to set and use policy instruments: policymakers often identify only the objectives and general settings of policies. Research at this stage is ‘action research’: researchers support and ‘accompany’ practitioners daily, in a continuous knowledge transfer, which put the practitioners ‘in a position to integrate learning into their work as it emerges’ (Boaz and Nutley 2009: 331).
- *Feedback*: Evaluation requires very robust methods of analysis, but also, at the same time, a clear understanding and awareness of the intentions, objectives and targets to be evaluated. Indeed, many problems stem from the lack of clarity regarding the outputs/outcomes to be measured and evaluated. Another crucial aspect of evaluating effectiveness is the difficulty in measuring outcomes. This applies in particular in many social interventions ‘which are only really understood by those experiencing them’ (Boaz and Nutley 2009: 331).

## 1.5 THE ‘HOW’: DIFFERENCES BETWEEN FUNDAMENTAL AND POLICY-ORIENTED RESEARCH

Based on the arguments presented so far, I would like to propose a set of dichotomies to understand the distinction between fundamental and policy-oriented research. Those working in agencies dedicated to policy research are usually trained in fundamental research methods, and are often motivated by the prospect of academic tenure:

hence many such researchers are keen to keep their ‘basic’ credentials, although often they are unaware of the special methodology that policy research requires or are untutored in carrying it out in the first place because they are trained in basic research modes instead. (Etzioni 1978: 841)

The distinction between fundamental research and applied research can be illustrated through a series of antithesis as follows (cf. Colombo 2016). Needless to say, these antithesis are not ‘radical’; they are presented for the sake of clarity.

### **Understanding vs Changing**

Fundamental research seeks to understand the world, while applied policy-oriented research is always dedicated to changing the world (Etzioni 2008). As seen above, ‘policy’ has constituted four elements: A decision (1 – legitimation) to take action (2 – power) to tackle a collective (3 – public) problem (4 – change) (present or anticipated). In other words: something has to be done.

### **Truth vs Decision**

While academic research has ‘truth’ as its aim (Weimer and Vining 2015), applied research has ‘decision’ as the aim. Policy-oriented research helps to determine what the policy decision ought to be (Etzioni 2008). Therefore, applied research consists in providing options for decisions (Spicker 2000), advice that informs public policy decisions (Weimer and Vining 2015).

### **Researcher’s Interest vs Client Need**

Fundamental research follows researchers’ interests; applied research is orientated to the commissioner’s needs. Practitioners should be aware there is a professional activity with a client; their task is to meet clients’

perspectives and needs adequately. Specifically, it consists of ‘client-oriented advice relevant to public decisions and informed by social values’ (Weimer and Vining 2015: 24); products, time and writing style are closely determined by the client.

### **Robust, but also Relevant**

To be helpful, policy-oriented research must be not just robust, but also relevant. Policy-oriented research should be driven more by the needs and requirements of policymakers than by the preferences of inquisitive researchers (Burton 2006). The ability to ‘identify those criteria that are central to the problem under analysis and most relevant to key participants in the decision process’ (Patton and Sawicki 1993: 58) is of paramount importance.

### **Primary vs Secondary Analysis**

Fundamental research consists largely of primary research, while policy-oriented research draws mainly upon secondary sources – information which has already passed the scholarly scrutiny of peer reviews (Becker et al. 2006).

### **Collecting vs Interpreting**

The information assembled by the policy researcher must be structured and interpreted in terms of the client’s original question. The client will ‘see’ reality in the way the analyst has made sense of and presented it.

### **Disciplinary vs Multidisciplinary**

While fundamental research follows its own disciplinary field, policy-oriented research is ‘inherently interdisciplinary’ (Hudson and Lowe 2009: 5). The former is grounded and developed over its own ‘paradigm’, whereas the latter is grounded and developed over the ‘need’. It is an ‘applied sub-field whose content cannot be determined by disciplinary boundaries but by whatever appears appropriate to the circumstances of the time and the nature of the problem’ (Wildavsky 1979: 15).

### **Analytical Slices vs All Major Facts**

As for the scope of analysis, Etzioni points out that policy-oriented research ‘at its best encompasses all the major facets of the social phenomenon it is trying to deal with. In contrast, fundamental research proceeds

by fragmenting the world into abstract, analytical slices which are then studied individually' (Etzioni 2008: 838).

### **Public vs Confidential**

'Basic research is a public endeavour [. . .] in contrast, the findings of policy research are often not published' (Etzioni 2008: 839).

### **Ready vs Needed**

Fundamental research can be delivered when ready, but a piece of policy-oriented research should be delivered when needed by policymakers. Research time and policy time are rarely the same. Feldman (1989) observes that policy analysts often find that their assignments require much more time than they originally estimated. Bardach noticed that 'time pressure is as dangerous an enemy of high-quality policy analysis as politically motivated bias, if not more so' (Bardach 2009: 10). However, policy analysts should learn to live with time constraints. 'Any imperfect analysis delivered one hour before your client must take a decision will almost always be more valuable to your client than a perfect analysis delivered an hour after the decision has been made' (Weimer and Vining 2015: 358). More to the point, time limit does not necessarily imply bad result. As Le Grand noted 'papers in Downing Street are written over 24 hours (if you're lucky), instead of 24 months. Moreover, in fact, they often do not suffer very much from being done that way: I was surprised how good a job can be done in those circumstances' (Le Grand 2006: 320).

### **Published vs Readable and Comprehensible**

Fundamental researchers are concerned with publishing their findings in specialised journals where colleagues read and understand technical and jargon terms. On the contrary, policy-oriented researchers and policy analysts must prepare themselves for 'a long campaign potentially involving many players' (Etzioni 2008: 839); they should also develop a proper style of communication, presenting their findings 'clearly, concisely and coherently' (Burton 2006: 185) while avoiding specialised jargon.

### **Communication vs . . . Communication!**

All kinds of researchers aim to communicate their results. However, in policy-oriented research communication plays a more structural,

*Table 1.2 Antithesis between fundamental and policy-oriented research*

Fundamental research	Policy-oriented research
Understanding	Changing
True	Decision
Interest	Need
Robust	Relevant
Primary	Secondary
Collecting	Interpreting
Analytical slices	Major facts
Public	Confidential
Ready	Needed
Published	Readable
Communication	Communication!
Useful	Usable

constitutional role. It is produced on demand, to be effective and persuasive; its use by clients is indispensable. To a large extent, the research utilisation literature has adopted the ‘two communities’ view (Caplan 1979), which suggests that direct use of policy research by decision makers is unlikely because of the competing world views and belief systems of policy researchers and policymakers: ‘The usual recommendation for increasing use is to improve the communication and interaction between the two groups’ (Lester and Wilds 1990: 314). Therefore, policy analysts must be willing to invest a significant amount of their time and energy in communicating, and for a greater dialogue with policymakers (Burton 2006). They must learn how the world looks to the policymakers, how best the policymakers will absorb the new ideas, which means of documentation and presentation will be most successful, and in what sequences the findings should be offered (Table 1.2).

## 1.6 TEN GOLDEN RULES FOR POLICY-RELEVANT RESEARCHERS

To some extent, policy-relevant research is the process of putting policymakers in the condition to reach evidence they could have reached if they had had time and instruments to do so. In this perspective, policy analysis is indeed an ‘art and craft’ (Wildavsky, 1979); even more, I would suggest an art and craft ‘of persuasion’: to let policymakers get to where they can see their own conclusions. In Majone’s effective words:

Like surgery, the making of policy and the giving of policy advice are exercises of skills, and we do not judge skilful performance by the amount of information stored in the head of the performer or by the amount of formal planning. Rather, we judge it by criteria like good timing and attention to details; by the capacity to recognise the limits of the possible, to use limitations creatively, and to learn from one's mistakes; by the ability not to show what should be done, but to persuade people to do what they know should be done. (Majone 1989: 20)

Inspired by my experience, the crafting of policy analysis can be presented in ten golden rules for dealing with your policymakers. They can shortly be listed as follows (no hierarchical order):

1. *Be brave*: Put yourself in your client's shoes; but do not stick where your policymakers put you. Ask for more, show them more. They will respect you more.
2. *Be connected*: You do not know everything, and you do not always know more than your client. But you know people in academia and other research and intellectual bodies. You must be up to date and provide your policymakers with the best, updated, available knowledge from these people. Otherwise, sooner or later, your policymakers will find somebody else.
3. *Be narrative*: Tell the story. Do not limit yourself to facts and numbers. Start from the 'so what?' rule and search for evidence, argumentation and interpretation. It is your responsibility to provide theory and interpretation creatively using the good-enough evidence at your disposal (Le Grand 2006). Be vivid, because the story is what matters (Pearl 2016).
4. *Be rigorous*: Robustness is a basic pre-condition. Follow the scientific method. Be explicit and declare the sources, methodology, limits and constraints of your research. Your products should be always replicable and falsifiable. The vast majority of your job is based on secondary sources: you are supposed to carefully and rapidly assess their reliability and validity.
5. *Be on time*: 'Any imperfect analysis delivered one hour before your client must take a decision will almost always be more valuable to your client than a perfect analysis delivered an hour after the decision has been made' (Weimer and Vining 2015: 358).
6. *Be clear*: Avoid jargon, sophisticated technical language as well as complicated arguments. policymakers have the right to be distracted, in a rush, bored. If the policymaker does not understand, this is never their fault. You cannot blame your policymakers for not understanding your piece of work. It is your responsibility to find the way, the right time, the right communication tools to be understood.

7. *Be present*: Always answer when you are called. Be reachable.
8. *Be objective*: Tell the truth to your policymakers. Put yourself in their shoes; identify your perspective with theirs. This does not mean you have to agree on everything. It simply means fully taking into account their needs and questions. If you feel morally challenged, then say no. This is the only time you can say no. This is not only your right; it is your duty.
9. *Be concise*: Go straight to the point. Present your conclusions and suggested options first, do not dwell on details. Leave the less relevant elements (although fundamental) for appendices. If something can be said in ten words, do not use eleven. The rigor and completeness of the analysis does little good if analysts cannot present their process and results clearly, concisely and confidently.
10. *Be relevant*: Keep focused on your policymakers' questions. You are supposed to deal less with your own interests (even if important) than with your client's needs. Even when the policymakers' question is not entirely adequate, do not dismiss it: start from it and patiently lead you audience to change perspective.

## 1.7 CONCLUSIONS

Four main suggestions for discussion can be drawn from the analysis:

1. Applied policy-oriented research is a profession in its own right. Being a good, traditional researcher is not enough. Highly effective policy analysts should possess not only excellent technical expertise but also excellent skills, in so far as policy-oriented research draws on intuition as much as on method (Bardach 2009). It is therefore decisive to develop skills in practice, more than simply presenting theoretical frameworks of good qualities.
2. The common denominator of all the 'Whats', 'Whos', 'Whens' and 'Hows' presented in this chapter is the structural link between robust research and the collective problem interpreted by the specific need of a policymaker. A bond must be established between research and this need, and – more precisely and practically – between the two actors: the researcher and the individual policymaker expressing the need. This is the focal point of any effective policy-oriented research.
3. Plato and Dionysius the tyrant of Syracuse; Aristotle and Alexander the Great: the relationship between knowledge and power dates back to our millenary history; it cannot be solved, it can only be dealt with. Even nowadays, effectiveness in knowledge transfer has probably less

to do with rational, consistent, frameworks than with persuasion, intimacy and trust.

4. That is why policy-oriented research is less an applied social science than an art; it 'is synonymous with creativity, which may be stimulated by theory and sharpened by practice, which can be learned but not taught' (Wildavsky 1979: 3).

## REFERENCES

- Bardach, E. (2009), *A Practical Guide for Policy Analysis. The Eightfold Path to More Effective Problem Solving*, 3rd edition, CQ Press.
- Becker, S. and A. Bryman (2004), *Understanding Research for Social Policy and Practice: Themes, Methods and Approaches*, Policy.
- Becker, S., A. Bryman and J. Sempik (2006), *Defining 'Quality' in Social Policy Research: Views, Perceptions and a Framework for Discussion*, Social Policy Association, accessed at <http://www.social-policy.org.uk/downloads/defining%20quality%20in%20social%20policy%20research.pdf>.
- Boaz, A. and S. Nutley (2009), 'Evidence-based Policy and Practice', in T. Bovaird and E. Löffler (eds), *Public Management and Governance*, 2nd edition, Routledge, pp. 327–44.
- Bridgman, P. and G. Davis (2003), 'What Use is a Policy Cycle? Plenty, if the Aim is Clear', *Australian Journal of Public Administration*, **62** (3), 98–102.
- Burton, P. (2006), 'Modernising the Policy Process', *Policy Studies*, **27** (3), 173–95.
- Campbell, C. (2014), 'Improv to Improve Interprofessional Communication, Team Building, Patient Safety, and Patient Satisfaction', *Doctor of Nursing Practice (DNP) Projects*, accessed at <http://repository.usfca.edu/dnp/27>.
- Caplan, N. (1979), 'The Two-Communities Theory and Knowledge Utilization', *American Behavioral Scientist*, **22** (3), 459–70.
- Colombo, A. (2010), *Policy Research in a Complex Context*, accessed at <https://doi.org/10.4236/iim.2010.211071>.
- Colombo, A. (2016), 'Policy Analysis as Client Advice', *Journal of Comparative Policy Analysis: Research and Practice*, **18** (3), 307–11.
- Dunn, W. N. (2007), *Public Policy Analysis: An Introduction*, 3rd edition, Prentice Hall.
- Etzioni, A. (1978), *Policy Research*, Brill.
- Etzioni, A. (2008), 'The Unique Methodology of Policy Research', in M. Moran, M. Rein and R. E. Goodin (eds), *The Oxford Handbook of Public Policy*, Oxford: Oxford University Press, pp. 833–43.
- Feldman, M. S. (1989), *Order Without Design: Information Production and Policy Making*, Stanford University Press.
- Hill, M. (2014), *Policy Process: A Reader*, Routledge.
- Howlett, M., M. Ramesh and A. Perl (2009), *Studying Public Policy: Policy Cycles & Policy Subsystems*, Oxford University Press.
- Hudson, J. and S. Lowe (2009), *Understanding the Policy Process: Analysing Welfare Policy and Practice*, Policy Press.
- Kosicki, G. M. (1993), 'Problems and Opportunities in Agenda-Setting Research', *Journal of Communication*, **43** (2), 100–27.

- Lasswell, H. D. (1951), 'The Policy Orientation', in D. Lerner and H. D. Lasswell (eds), *The Policy Sciences: Recent Development in Scope and Method*, Stanford CA: Stanford University Press.
- Le Grand, J. (2006), 'Academia, Policy and Politics', *Health Economics, Policy and Law*, **1** (4), 319–22.
- Lester, J. P. and L. J. Wilds (1990), 'The utilization of public policy analysis: A conceptual framework', *Evaluation and Program Planning*, **13** (3), 313–9.
- Lindblom, C. (1965), *The Intelligence of Democracy: Decision Making Through Mutual Adjustment*, New York, NY: Free Press.
- Lindblom, C. E. and D. K. Cohen (1979), *Usable Knowledge: Social Science and Social Problem Solving*, Yale University Press.
- Majchrzak, A. (1984), *Methods for Policy Research*, Sage.
- Majone, G. (1989), *Evidence, Argument, and Persuasion in the Policy Process*, Yale University Press.
- March, J. G. and J. P. Olsen (1976), *Ambiguity and Choice in Organizations*, Universitetsforlaget.
- Mayer, I. S., C. E. van daalen and P. W. G. Bots (2004), 'Perspectives on Policy Analyses: A Framework for Understanding and Design', *International Journal of Technology, Policy and Management*, **4** (2), 169–91.
- McGann, J. G. and E. C. Johnson (2005), *Comparative Think Tanks, Politics and Public Policy*, Edward Elgar Publishing.
- Nowotny, H. (1990), *In Search of Usable Knowledge: Utilization Contexts and the Application of Knowledge*, Westview Press.
- Nutley, S., I. Walter and H. T. O. Davies (2003), 'From Knowing to Doing: A Framework for Understanding the Evidence-into-Practice Agenda', *Evaluation*, **9** (2), 125–48.
- Patton, C. V. and D. S. Sawicki (1993), *Basic Methods of Policy Analysis and Planning*, Prentice Hall.
- Pearl, D. (2016), *Story for Leaders*, London Business Forum.
- Simon, H. A. (1957), *Models of Man: Social and Rational; Mathematical Essays on Rational Human Behavior in Society Setting*, Wiley.
- Spicker, P. (2000), *The Welfare State: A General Theory*, Sage.
- van der Sluijs, J. and M. Crayé (2005), *Uncertainty Assessment*, EU Commission – Joint Research Centre.
- Weimer, D. L. and A. R. Vining (2015), *Policy Analysis: Concepts and Practice*, Routledge.
- Weiss, C. H. (1977), *Using Social Research in Public Policy Making*, Lexington Books.
- Weiss, C. H. and M. J. Bucuvalas (1980), *Social Science Research and Decision-Making*, Columbia University Press.
- Wildavsky, A. B. (1979), *Speaking Truth to Power: The Art and Craft of Policy Analysis*, Little, Brown; Transaction Publishers.
- Young, E. and L. Quinn (2002), *Writing Effective Policy Papers: A Guide for Policy Advisers in Central and Eastern Europe*, Open Society Institute.