



The Evidence Decision-Makers Want

Literature Review

Bronwyn Clarke¹, MPhil Comparative Social Policy

Summary of findings

From March to June 2019, we conducted a literature review to learn about what types of evidence policymakers say they want or need to make decisions. Our review of 27 articles and reports led to the following findings:

- 1. Very little research has been done about what evidence policymakers want or need.** We could only find 6 research studies that addressed this question directly.
- 2. Policymakers are open to multiple forms of evidence.** They draw on a range of information—including agency data, constituent feedback, and research—to make decisions.
- 3. Policymakers reject a hierarchy across these forms of evidence.** They value both qualitative and quantitative evidence.
- 4. Policymakers are skeptical about the relevance of much academic research to their everyday decisions.** They're concerned about timing (*research too old to help*), context (*not sure it applies to us*), and failure to generate actionable recommendations (*it's interesting, but it doesn't help me figure out what to do*).
- 5. Policymakers want evidence that is timely, context-relevant (or even better, locally-generated), and accompanied by clear recommendations.** The converse of Finding #4.
- 6. Policymakers prefer brief and clear presentations of evidence.** 1-2 page executive summaries and *short* reviews of bodies of research are great. But they must be jargon-free—no academese.
- 7. Policymakers find stories combined with empirical data compelling and useful.** While data might inspire action, real people's stories illustrating the problem help them get others on board.
- 8. Policymakers rely on relationships for evidence.** Information comes to them via other colleagues, staff, trusted academics, or representatives from think tanks and interest groups. Trusted and credible people from these various organizations translate evidence for policymakers, helping them to understand what is relevant to them, what it means, and actionable propositions.
- 9. Policymakers have a hard time finding unbiased and credible information.** Policymakers are aware that much of the information coming at them is biased, of mixed methodological rigor, or cherry-picked to support their own views. They want help sorting through this 'mixed economy of evidence' and screening out bad or misleading information.
- 10. Policymakers' approach to evidence is informed by their roles.** At the end of the day, policymakers—unlike most researchers—have to make decisions, whether they have good information or not. This responsibility, combined with related time constraints and political realities, informs their pragmatic approach to evidence.

¹ This report was prepared for the Center for the Study of Social Policy under the supervision of Steven D. Cohen.

Summary Paper

The Evidence Decision-Makers Want Literature Review

Introduction

This summary paper considers the main themes identified from a literature review of 27 sources related to the evidence needs of policymakers. This sample was selected according to a prioritization rationale² following a bibliographic search process that yielded 70 potentially relevant articles. For the sake of time, only sources that received either a ‘High’ or ‘High-to-Medium’ prioritization were read. These sources explicitly asked what kinds of information policymakers desire, employing direct data collection methods or systematic reviews.

The purpose of this study is to investigate the research evidence on what types of information policymakers want and need to make social policy decisions, broadly defined. In other words, we are interested in the demand side of this issue. This differs significantly from most discussions of ‘evidence-based’ policy, where the supply side (e.g. dissemination strategies, research use in decision-making, etc.) is the overriding concern. In those studies, a predominant question is how to get policymakers to use the vast quantities of research evidence already available. There appears to be considerably less discussion of what types of evidence policymakers want or need in the first place. Accordingly, we set out to find what literature *does* exist on that question.

It is worth mentioning that while policymakers’ needs for evidence in the human services fields was the focus of this review, literature in these contexts was rare. The table below breaks out the disciplinary distribution of articles read:

Field	Sources read in-depth:
Family services	Bogenschneider et al. (2013)
Juvenile justice	Waddell et al. (2005), DuMont (2015), Tseng (2012)
Human services/welfare	Head et al. (2014), Ingold & Monaghan (2016), Monaghan & Ingold (2019)
Child welfare	Jack et al. (2010), DuMont (2015), Tseng (2012)
General legislative processes	Reece & Belcher (2015), Edwards (2009), Rutter (2012), Urahn et al. (2018), Lugo-Gil et al. (2019)
Public health	Innvaer et al. (2002), Mitton & Patten (2004) , Petticrew et al. (2004) , Stoneham & Dodds (2014), Dobbins et al. (2007), Hyder et al. (2011), McGregor (2006), Gollust et al. (2017); Apollonio & Bero (2017) , Dodson et al. (2015)
International relations	Avey & Desch (2014)
Education policy	Jabbar et al. (2014)
Environment	McNie (2007)

²The sample of 27 sources includes four non-academic reports produced by think tanks or intermediary organizations. These were identified and prioritized following an extensive search of the grey literature, covering 16 different research-to-policy intermediary organizations. For more details on prioritization, see the [notes on methodology](#).

Overall, despite what some abstracts indicated, very few articles addressed the question of policymakers' demand for evidence directly. Of the 27 sources read, only 6 explicitly sought to understand what types of evidence policymakers want or need (see **bolded** citations in table above). Since only one of these was found in the welfare/human services field (excepting public health), some of the conclusions in this report are drawn from studies of this topic in other fields (e.g. international relations).

The lack of research on policymakers' preferences for *types of evidence* they find useful in decision-making is an important finding. It stands in stark contrast to the large volume of material focused on the supply side of evidence, which - at the risk of overgeneralization - asks essentially, "We [researchers] have all this evidence. Why aren't policymakers using it?"³ Countless studies have sought to understand how to get policymakers to make better use of existing evidence. Clearly, there is more scope to assess policymakers' needs for evidence.

The focus of this study also departs somewhat from the literature on research utilization, which gets at the question of policymakers' evidence preferences indirectly. That literature mainly examines how, and under what circumstances, policymakers use evidence. To the extent that such research identifies what types of evidence are valued by policymakers and actually used in their decision-making processes, it may be a proxy measure of demand. It might even be more useful than what policymakers say they need, if measures of policymakers' behaviors when using evidence are indeed reliable. However, the challenge here is that what policymakers really need/want may not exist, or they may not be able to access it in a way that works for them. Hence the need for the study at hand.

Despite the paucity of studies on this subject, some relevant insights can be gleaned from the related literature. A substantial research literature has identified preferred presentation formats for evidence and sources of information used in decision-making. Additionally, a robust literature found a range of facilitators and impediments to research use in policymaking. Standout findings from each of these categories will be described in this summary paper.

One surprising finding from this review was policymakers' apparently sophisticated epistemological approach to evidence. In contrast to some academic proponents of the evidence-based policy movement who promote 'gold standards' of research, policymakers in numerous studies strongly rejected a hierarchy of evidence⁴. Instead, they valued multiple forms of evidence, including qualitative research, professional wisdom, and local feedback (Monaghan & Ingold, 2019). For example, the policymakers in Petticrew et al. (2004) described a 'mixed economy' of evidence:

"There was much doubt among the group [senior policy advisors in the U.K.] about the value of a 'hierarchy of evidence' in public health as used in evidence based health care. They noted again the problem with 'high concept' notions of evidence preferred by academics, and pointed out that in policy circles a 'mixed economy' of evidence actually prevailed, in which different types of experimental and non-experimental evidence are brought to bear on policy questions. It was felt that researchers therefore needed to help policymakers with managing this mixed economy; for example, to help deal with many small pieces of evidence, of variable quality, (and with many gaps), but all pointing in the same direction." (813)

A participant in this study memorably asserted: *'Give up gold standards! We need methods appropriate to the problem, appropriate to the resources, and appropriate to the public health sector'* (Petticrew et al., 2004:813). Other studies affirmed this insight that policymakers may have a wider definition of what constitutes 'evidence', than, for example, many researchers do (Tseng, 2012:6; Jabbar et al., 2014). As Mitton & Patten (2004:151) observed: "decision-makers draw on multiple sources and define evidence broadly...the key for the decision-maker seems to be in recognizing that evidence comes in different forms."

It is clear that policymakers may be inclined to adopt a catholic approach to evidence. A possible explanation for this orientation is policymakers' pragmatic desire to collect *any* information that may help them prioritize

³ See Tseng's (2012) discussion of Nutley et al.'s (2007) concept of producer-push models.

⁴ One study reviewed (Apollonio & Bero, 2017) contradicted this, showing that policymakers prefer quantitative/randomized evidence. However, it is likely that selection bias occurred in this study, given that their sample was comprised of former participants in a workshop on evidence-based policymaking.

often limited resources, especially amid ambiguous, complex, or urgent challenges. The nature of policymakers' roles, objectives, and related constraints may inform their epistemological framework(s). Researchers should therefore seek to understand how policymakers define 'evidence'. This finding also adds nuance to the 'two communities/cultures' thesis in the research utilization literature (Weiss, 1977).

This finding will be explored in some detail in this review. Prior to this discussion, we will review findings about the types of evidence demanded by policymakers, presentation preferences, information sources, and facilitators/barriers to research use.

What types of evidence policymakers seek

Only six of the studies reviewed addressed policymakers' demands for evidence directly (Avey & Desch, 2014; Petticrew et al., 2004; Mitton & Patten, 2004; Dodson et al., 2015; Apollonio & Bero, 2017; Monaghan & Ingold, 2019). These studies specifically sought to understand what types⁵ of evidence policymakers found most convincing or helpful within their respective disciplines (i.e. international relations, public health, and benefits policy). Drawing on robust methodologies—including surveys, in-depth interviews, focus groups, and participatory action projects with policymakers—these studies revealed critical insights about policymakers' conceptualizations of and needs for evidence. Eight more studies addressed the demand side of evidence-informed⁶ policymaking tangentially, or even accidentally (Waddell et al., 2005; Bogenschneider et al., 2013; Jack et al., 2010; Hyder et al., 2011; Gollust et al., 2017; Ingold & Monaghan, 2016; Jabbar et al., 2014; Lugo-Gil et al., 2019). Piecemeal discoveries about specific types of evidence sought by policymakers emerged amidst other findings about dissemination, presentation, institutional factors affecting research use, etc. The remainder of the articles either didn't address types of evidence at all, mentioned it in passing in a discussion section, defined 'demand' in binary terms or without reference to policymakers' desires/needs (c.f. Rutter, 2012; McNie, 2007), or studied a niche research tool (such as health technology assessments or diabetes economic models (c.f. McGregor, 2006; Grove et al., 2019)).

Overall, it is safe to say that the question of what types of evidence policymakers prefer is understudied in the scholarly literature. Past exhortations to understand the types of evidence valued by decision makers have largely gone unheeded (Petticrew et al., 2004). As such—and especially given the momentum gained by the evidence-informed policy movement in recent years—this review reaffirms Mitton and Patten's (2004:150) observation that “asking decision-makers about their experiences in applying evidence is a logical, yet largely unexplored area.” It also echoes Tseng's (2012:5) call to attend to demand-side needs in the process of research production.

Several findings about policymakers' needs for evidence did however emerge. The review affirmed policymakers' general regard for high quality and rigorous research (Bogenschneider et al., 2013; Innvaer et al., 2002; Mitton & Patten, 2004; Petticrew et al., 2004; O'Brian & Martinez-Vidal, 2016)⁷. Yet policymakers' definition of 'rigorous' or 'quality' evidence may differ significantly from the conceptualization frequently espoused by proponents of evidence-informed policy. In contrast to a graded scale of evidence—wherein RCTs or sophisticated quantitative analyses occupy the upper echelon of rigor—policymakers define 'evidence' more broadly (Mitton & Patten, 2004; Petticrew et al., 2004:813; Chatterji et al., 2014; Jabbar et al., 2014; Monaghan & Ingold, 2019). They value multiple forms of evidence, including stories/testimonials encountered in client or constituent meetings, community feedback, practitioner knowledge, expert

⁵ The terms 'types' or 'kinds' of evidence could be interpreted two ways: first, as categories of information (such as peer-reviewed studies, administrative data, or different methodological studies (e.g. quantitative v. qualitative). Alternatively, it could be interpreted to mean content areas—e.g. evidence about child abuse and neglect prevention, evidence about effective hiring practices, etc. In this review, I mainly focus on the first meaning, largely owing to the diversity of practice fields in the literature.

⁶ Following critiques that the term 'evidence-based' implies a positivist, linear, and instrumentally-rational policy-making process, throughout this report Chalmers's (2005) term 'evidence-informed' is used to convey the deeper complexity of competing influences.

⁷ One study contradicted this finding (Jabbar et al., 2014), in which policymakers relied on dubious 'evidence' filtered by interest groups when considering charter school reforms. Policymakers did seem to be aware this information was biased. However, from the perspective of disadvantaged interest groups, these decision-makers didn't seem particularly interested in seeking out more rigorous research.

testimonies, internal agency data/analyses, and their own professional wisdom gained from experience (Waddell et al., 2005; Mitton & Patten, 2004; Edwards, 2009; Head et al., 2014; Stoneham & Dodds, 2014; Jack et al., 2010; Petticrew et al., 2004; Gollust et al., 2014; Tseng, 2012; Honig & Coburn, 2008; Apollonio & Bero, 2017; Moreland-Russell et al., 2015; Ingold & Monaghan, 2016).

Analysis conducted on administrative data is an emerging, yet highly valued practice (Urahn et al., 2018). According to a joint Brookings/Pew Research study, administrative data is comprised of necessary information collected in the course of program operations, such as participation rates, demographics, routine records collection, and (potentially) associated outcomes (Urahn et al., 2018:1). This data is primarily used for the purposes of program management, operations, compliance, reporting, and monitoring, not research necessarily. However, several states have recently taken administrative data to the ‘next level’, carrying out sophisticated analyses on administrative data and drawing out insights to inform decisions (Urahn et al., 2018).

There are indications that for some policymakers, this type of analysis is equally important as peer-reviewed, academically-produced research (in some instances, it might be perceived as on par in terms of quality too). For example, policymakers in Jabbar et al.’s (2014:1023) study talked often about ‘research’ and ‘analysis’ undertaken within their own education departments: “*We’ve got an analytics group here that is always analyzing our data...*”, data that mainly pertained to teacher and student evaluations. Subsequent analyses on discrepancies between district results using this data informed policymakers’ decisions on contested reforms, such as merit-based pay. Yet as Jabbar et al. note, such analyses may only go surface deep, confusing population-level trends for explanatory research (1023). In some cases, policymakers may prefer this type of analysis to externally-produced research. DuMont (2015:27) hypothesizes that in high-uncertainty contexts amid tenuous institutional settings—in fields like child welfare or education—leaders may grant more weight to internal evaluations or reviews carried out by staff on the relevance of external research literature. If accurate, this dynamic may be interpreted in several ways: first, and most critically, as a self-preservative and instrumental use of research to support their own agendas. Alt, given policymakers’ concern for context, as attunement to local factors/nuances when interpreting non-local research. More likely, it may be a necessary exercise where no relevant research exists. Whichever way, internally-produced administrative data and analysis is clearly one useful tool in policymakers’ toolkit.

This leads us to the varied methodologies valued by decision-makers. In numerous studies, policymakers strongly asserted the value of qualitative research⁸ in their decision-making (Avey & Desch, 2014; Petticrew et al., 2004; Hyder et al., 2011; Jack et al., 2010; Mitton & Patten, 2004; Stoneham & Dodds, 2014; Lugo-Gil et al., 2019). (Qualitative research, while not explicitly defined in the studies reviewed, ranged from focus groups, country or program case studies, ethnographic research, or interview studies with frontline-workers.) For instance, policymakers in studies reviewed by Lugo-Gil et al. (2019) considered qualitative research on program design and implementation to be highly relevant to their decision-making, in addition to quantitative analyses of program outcomes (p. xi). In international relations, a survey of 234 high-ranking foreign policy officials in three U.S. presidential administrations revealed their preference for detailed qualitative case studies that explicated possible causal mechanisms (Avey & Desch, 2014). In this research, policymakers were also skeptical about large-N quantitative analyses, particularly in regards to their local applicability and tendency to brush over complex within-case causal dynamics. At first, this concern may appear uniquely situated in the international relations field. But other studies in child welfare, public health, and juvenile justice demonstrate that these concerns about transferability and generalizability are shared by policymakers in other fields too (Waddell et. al., 2005; Mitton & Patten, 2004; McGregor, 2006; Reece & Belcher, 2015; Hyder et al., 2011; Dobbins et al., 2007; Petticrew et al., 2004). Policymakers in Petticrew et al.’s (2013:813) study, for instance, wanted more causal analyses on how exactly social determinants of health translate into discrepant health outcomes, particularly within their respective contexts. Similarly,

⁸ Two studies contradicted this, both of which were conducted in the context of universal credit amid austerity in the U.K. (Ingold & Monaghan, 2016; Monaghan & Ingold, 2019). These studies found that policymakers were perceived by civil servants to value quantitative evidence to the detriment of qualitative evidence. One participant stated that there was a “*reluctance to go for anything other than numbers*” (10). However, the authors attributed this to the overarching austerity context—with its obsessive economic focus—rather than methodological preference.

state legislators in Dodson et al.'s (2007:846-847) study were hesitant to transpose findings from national economic analyses to their state, much less their specific districts.

Evidently, skepticism of complex quantitative analyses arises from policymakers' sensitivity to local context. As such, they value locally-generated—often qualitative—evidence in addition to macro, national-level research (Petticrew et al., 2004:812; Mitton & Patten, 2004; Dobbins et al., 2007; Hyder et al., 2011; McGregor, 2006; Reece & Belcher, 2015; Innvaer et al., 2002; Nelson et al., 2009; Palinkas et al., 2014; Dodson et al., 2007; Ingold & Monaghan, 2016). These insights correspond to Nowell & Albrecht's (2019) findings that qualitative research is uniquely suited to uncovering precise causal mechanisms underlying statistical correlations, adding nuance to existing theory, and developing new theoretical frameworks via specific case studies (350-351). The endemic attunement to subtle contextual factors in qualitative research can also provide the local sensitivity and analysis absent from large-scale quantitative analyses that policymakers clearly desire.

While policymakers do appear to value mid-range theoretical development⁹—particularly contributions that have explanatory or predictive potential (Avey & Desch, 2014; Petticrew et al., 2004)—they also appreciate research with a practical orientation. Several studies noted decision-makers want scholars to include specific policy recommendations with their research (Dobbins et al., 2007; McGregor, 2006; Bogenschneider et al., 2013; Reece & Belcher, 2015; Innvaer et al., 2002; DuMont, 2015). Ubiquitous fiscal constraints also prompted decision-makers to seek research that illuminated cost effectiveness (Hyder et al., 2011; Petticrew et al., 2004; McGregor, 2006; Mosley & Gibson, 2017; Dodson et al., 2015:843; Lugo-Gil et al., 2019), capacity to benefit (Mitton & Patten, 2004), funding options (Bogenschneider et al., 2013), opportunity costs (Dodson et al., 2015:843), and outcomes as opposed to outputs (Waddell et al., 2005; Jack et al., 2010).

Research that considers the practical constraints associated with a particular course of action or provides decision-makers with insights to aid in their deliberations about prioritization is therefore important. Two studies also highlighted decision-makers' desire for equity-informed research that disaggregates impacts and illuminates disparities amongst populations (Hyder et al., 2011; Petticrew et al., 2004). Overall, policymakers appear to value research that provides insights to help them make an informed decision amid their various institutional constraints. At times, depending on the availability of research in their local contexts, their definition of 'evidence' will encompass so-called 'soft' forms of evidence as they marshal all available information to manage ambiguities endemic to the policymaking process.

How policymakers want their evidence presented

There is a significant literature on policymakers' preferences for evidence presentation. Although this literature was not specifically sought out in this review, some findings arising from this research base nevertheless surfaced.

Unsurprisingly, given policymakers' limited time and action orientation, they prefer concise and clear presentations of evidence. Numerous studies have noted the importance of brevity (Jack et al., 2010; Dobbins et al., 2007; Hyder et al., 2011; McGregor, 2006; Mitton & Patten, 2004; Gollust et al., 2017; Dodson et al., 2015) and jargon-free communication of research findings (Avey & Desch, 2014; Dobbins et al., 2007; Hyder et al., 2011; McGregor, 2006; Ellen et al., 2016). Policymakers in one study said they wanted researchers to combine data analysis with real-life stories or personal testimonies, a practice they viewed as adding weight and relevance to otherwise uninspiring information (Dodson et al., 2015:842; c.f. Apollonio & Bero, 2017:2).

Policymakers also seem to want rigorous syntheses of existing research on particular issues (Waddell et al., 2005; Hyder et al., 2011; McGregor, 2006; Petticrew et al., 2004; Mitton & Patten, 2004), with attention paid to how findings from other contexts (or national studies) may or may not be generalizable to their locality (Hyder et al., 2011; Jack et al., 2010; McGregor, 2006; Edwards, 2009; Reece & Belcher, 2015; Innvaer et al., 2002; Mitton & Patten, 2004; Petticrew et al., 2004; Dodson et al., 2015). But these high-quality and thorough reviews should be prefaced with clear summaries. According to several scholars

⁹ I.e. theoretical development about particular issues emerging from empirical evidence, as opposed to 'grand theories' that attempt to provide comprehensive explanations of multiple phenomena.

(Innvaer et al., 2002; Mitton & Patten, 2004; Dobbins et al., 2004, 2007; Gollust et al., 2014), policymakers appreciate well-written abstracts and executive summaries — the shorter the better.

Information sources in decision-making

Policymakers rely on a range of information sources in addition to academic research. Depending on how one defines ‘evidence’, these varied information sources could be interpreted as a constellation of data points policymakers draw upon to make decisions.

As noted above, internal agency reviews and local administrative data provide decision-makers with context-relevant information (Waddell et al., 2005; Mitton & Patten, 2004; Edwards, 2009; Head et al., 2014; Stoneham & Dodds, 2014). Beyond civil servant analysis, these internal sources of information can also include feedback from frontline workers and direct meetings with clients. As a quote from a participant in Petticrew et al.’s (2004) study illustrates, political decision-makers glean information from a wide range of experiences: “*What health ministers call ‘evidence’ is what they get from their constituents at their Saturday surgery*” (812). Thus in addition to privileged internal information sources, policymakers are also likely to give weight to anecdotal information sources from their constituents and/or clients (Stoneham & Dodds, 2014). Likewise, wisdom and insights gained from decision-makers’ own professional experiences inform their frames of reference (Jack et al. 2010; Mitton & Patten, 2004; Rutter, 2012; Monaghan & Ingold, 2019). Professional conferences and associations are more formal channels which consolidate and circulate knowledge derived from practice (Dobbins et al., 2007; Head et al., 2014; Jack et al., 2010; Dodson et al., 2015; Jabbar et al., 2014).

In addition to their personal experiences, policymakers source information from their informal networks (Waddell et al., 2005; Head et al., 2014; Stoneham & Dodds, 2014; Dobbins et al., 2007; Tseng, 2012; Gollust et al., 2017; DuMont, 2015; Apollonio & Bero, 2017; Jabbar et al., 2014; Dodson et al., 2015). Sometimes, this includes learning directly from colleagues carrying out similar work in other jurisdictions (Waddell et al., 2005; Jack et al., 2010; Head et al., 2014; Stoneham & Dodds, 2014; Mitton & Patten, 2004; Dodson et al., 2015; Ingold & Monaghan, 2016:10). Sharing best practices across regions likely addresses specific and contextualized implementation concerns not investigated in the empirical literature (Dodson et al., 2015). Policymakers also establish relationships with trusted experts—such as intermediary ‘knowledge brokers’ translating academic research into practical terms (Edwards, 2009; Jack et al., 2010; DuMont, 2015; Dodson et al., 2015; Jabbar et al., 2014), academics who actively seek opportunities to engage in the policy process (Waddell et al., 2005; Mitton & Patten, 2004; Dodson et al., 2015), and/or highly regarded clinicians with extensive expertise (Stoneham & Dodds, 2014). Policymakers in Dodson et al.’s (2015) study strongly asserted their appreciation for academics who reach out to them to share research findings, even if just to open up lines of communication (845). Numerous studies also identify research-to-policy partnerships and intermediary organizations which facilitate interactions between policymakers and scholars as fruitful avenues to fostering these relationships (Waddell et al., 2005; Dobbins et al., 2007; Hyder et al., 2011; Edwards, 2009; Jack et al., 2010; Reece & Belcher, 2015; Lugo-Gil et al., 2019; Corluka et al., 2015; Tseng, 2012; DuMont, 2015; Gollust et al., 2017).

Lastly, this discussion of policymakers’ information supply routes would be incomplete if online—e.g. search engines, websites, social media (Dobbins et al., 2007; Head et al., 2014; Dodson et al., 2015)—and journalistic sources were not mentioned. Beyond research staff, the first port of call for policymakers seeking information is likely to be the internet, whether by Googling or looking at agency websites (Dodson et al., 2015:843). Information gleaned from news reporting was another pervasive influence, in fields as diverse as foreign policy (Avey & Desch, 2014), public health (Stoneham & Dodds, 2014), education (Jabbar et al., 2014), child welfare (Jack et al., 2010), and juvenile justice (Waddell et al., 2005).

As noted with research briefs above, factual data linked with compelling human stories are likely to stand out. Sometimes, investigative reporting constructs a media crisis, which might then lead to public outcries and demands for action (Jack et al., 2010; Head et al., 2014; Waddell et al., 2005; Mitton & Patten, 2004). This dynamic transforms grey, mundane information into ‘colorful’ and emotion-laden information that decision-makers must respond to (Jones & Baumgartner, 2005:12). In this sense, a public relations crisis may not produce much ‘evidence’ in the sense of new information about what’s going on in a system. However, it does create new facts that administrators have to deal with, largely in the form of demands from

oversight bodies, elected officials, and the public (Waddell et al., 2005:1653). Perhaps for this reason, policymakers might regard public opinion data as being on a similar level to empirical research in terms of its objective reality (Monaghan & Ingold, 2019:12). On a more mundane level, preference for simplified storytelling may also correspond to policymakers' level of skill and comfort (or lack thereof) with "the language of research", wherein those "not trained to interpret research prefer stories" (Apollonio & Bero, 2017:2; Monaghan & Ingold, 2019).

Overall, it appears that policymakers rarely lack information. As one participant in Waddell et al.'s (2005:1651-1652) study noted, "*the first thing you realize is that decision-makers have an immense amount of competing information coming at them on an immense range of subjects.*" This observation corresponds to Jones & Baumgartner's (2005) seminal insight that policymaking institutions are primarily "information-processing instruments" comprised of boundedly rational agents, who constantly grapple with the inescapable "inefficiencies of human cognition" (ix). Policymakers in several studies recognized the biased nature of the information coming at them from interest groups and intermediary organizations (Gollust et al., 2017:5), but struggled to evaluate competing information within time constraints of the policy process (Apollonio & Bero, 2017:5-7; Jabbar et al., 2014; Gollust et al., 2017:4). Clearly, a major challenge is sorting through the volume and noise to identify highly relevant, credible information.

Impediments and facilitators of research use

A substantial literature investigates barriers and facilitators of research use in the policy process. Some findings from this literature surfaced in the search to learn about the types of evidence desired by policymakers. A couple themes from this body of work will be discussed briefly here, with more weight given to empirically robust findings identified across numerous studies.

Beyond straightforward impediments—such as lack of access to research literature (Dobbins et al., 2007; Reece & Belcher, 2015; Stoneham & Dodds, 2014) or individuals' underdeveloped research skills (Hyder et al., 2011; Rutter, 2012; Monaghan & Ingold, 2019; Urahn et al., 2018)—various institutional constraints and environmental factors impede the role of research in decision-making processes. First, as previously discussed, policymakers cite time and fiscal constraints as perennial barriers (Bowen et al., 2009; Petticrew et al., 2004; Mitton & Patten, 2004; Stoneham & Dodds, 2014; Edwards, 2009; McGregor, 2006; Jack et al., 2010; Hyder et al., 2011; Dobbins et al., 2007; Head et al., 2014; Waddell et al., 2005; Innvaer et al., 2002; Gollust et al., 2017; Dodson et al., 2015; Urahn et al., 2018). Political factors—such as party or leadership interests, political feasibility, economic recession or austerity, and public opinion—also delimit the range of possibilities for building policy on robust evidence bases (Jack et al., 2010; Waddell et al., 2005; Head et al., 2014; Hyder et al., 2011; Petticrew et al., 2004; Monaghan & Ingold, 2019; Ingold & Monaghan, 2016).

An example of this can be found in the field of juvenile justice. When Waddell et al. (2005) interviewed 32 Canadian politicians and civil servants directly involved with addressing children's conduct disorder, they found that decision-makers were aware of and strongly affirmed research that promoted mental health interventions (as opposed to punitive responses to anti-social behavior). Yet in spite of decision-makers' knowledge of the most effective policies backed by empirical research, they faced recurring public outcries over violent incidents and media narratives promoting a 'tough on crime' approach. Such crises created an action-oriented and pressured institutional culture (see also Bowen et al., 2009). Politicians in particular faced electoral consequences for taking an evidence-backed approach which ran contrary to (ill-informed) public opinion. The policymakers in this study therefore called on researchers to actively engage the public on these issues and help reverse long-standing myths about punishment and restoration.

This example illustrates multiple political and environmental barriers that constrain evidence use in policymaking, even when the desire for evidence-informed interventions exists amongst decision-makers. Nevertheless, some barriers to research use in policymaking derive from the academy itself. Numerous studies noted the slow pace of university research compared to policymakers' accelerated action timelines (Waddell et al., 2005; McGregor, 2006; Jack et al., 2010; Petticrew et al., 2004; Innvaer et al., 2002; Reece & Belcher, 2015). On one hand, rigorous research takes time to develop and carry out to a high standard—more time than policymakers might have in a pressured decision-making environment (Apollonio & Bero, 2017:8). What gets published reflects work done several years ago, and so may be out-of-date. Given these realities, while an academic may be happy to receive a request from a policymaker to study a particular issue

using robust methodologies, by the time it takes to do so, the political window for evidence-informed decision-making may have closed. Along these lines, Lugo-Gil et al. (2019) talk about a "misalignment in timing", where "by the time evidence becomes available, decisions may have already been made and/or the perception of its usefulness may have diminished."

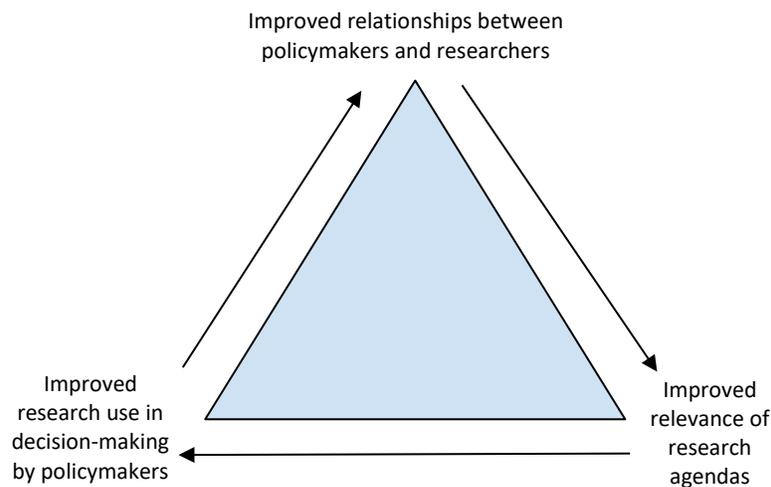
But beyond these practical constraints, institutional norms in the academy may serve to disincentivize—or at least not adequately reward—rigorous scholarship that also strives for relevance (Tseng & Gamoran, 2017). Incentives within academia to publish in peer-reviewed scholarly journals—the target audience of which is other scholars, not policymakers (Reece & Belcher, 2015)—and advance long-term knowledge development appears to leave some policymakers struggling to grasp the direct relevance of scholarship to their work (Dobbins et al., 2007; Avey & Desch, 2014; Hyder et al., 2011; Edwards, 2009; DuMont, 2015). Scholars who neglect to provide specific policy recommendations in their work or engagements with policymakers reinforce this divide (Innvaer et al., 2002; Reece & Belcher, 2015; Petticrew et al., 2004). However, effective dissemination takes additional effort on top of what is required to get research published. Nuanced and detailed information must be condensed into jargon-free language, preferably in a one-page format. Research dissemination strategies that policymakers find valuable—such as researchers scheduling one-on-one meetings with relevant decision-makers or presenting expert testimony (Dodson et al., 2015:845)—also take time away from producing new research (let alone teaching!). Reflecting on this, Gollust et al. (2017:4) note that universities' tenure and promotion criteria rarely incentivize academics to spend time on research dissemination and engagement with policymakers. Consequently, they recommend adding measures of 'public impact' to tenure/promotion criteria, formally recognizing these worthwhile endeavors.

Research that strives for relevance amid academia's institutional structures is likely to be well-received by policymakers. Engaged methodologies that develop research questions in tandem with community priorities may meet policymakers' demand for locally-generated and context-sensitive research (Petticrew et al., 2004; Mitton & Patten, 2004; Dobbins et al., 2007; Hyder et al., 2011; McGregor, 2006; Reece & Belcher, 2015; Innvaer et al., 2002; Edwards, 2009; Lencucha et al., 2010). The research on facilitative factors strongly affirmed the importance of research-to-policy partnerships in creating opportunities for personal contact and relationship-building between policymakers and researchers (Reece & Belcher, 2015; Edwards, 2009; Jack et al., 2010; Hyder et al., 2011; Dobbins et al., 2007; Waddell et al., 2005; Innvaer et al., 2002; Bogenschneider et al., 2013; Head et al., 2014; DuMont, 2015; Lugo-Gil et al., 2019). Several studies identified frequent interactions between both groups as a crucial strategy for breaking down mutual mistrust and misunderstandings (Petticrew et al., 2004; Mitton & Patten, 2004; Innvaer et al., 2002; Gollust et al., 2017; Ellen et al., 2016; Haney et al., 2003). Indirectly, this may also improve researchers' ability to tailor their research agendas to local conundrums, thereby enhancing the perceived relevance of their research. Involving policymakers in setting research priorities also appears to enhance research use in local decision-making (Reece & Belcher, 2015). Either way, research-to-policy partnerships and interactive forums¹⁰ likely improve timely communication between both groups, enabling researchers to frame their findings to address immediate issues, and increasing policymakers' opportunities to alert researchers to their future concerns (Head et al., 2014; Hyder et al., 2011; McGregor, 2006; Innvaer et al., 2002; Gollust et al., 2017). Overall, frequent personal contact and relationships between decision-makers and researchers are widely recognized as critical facilitators of evidence-informed policymaking (Innvaer et al., 2002; Reece & Belcher, 2015; Rutter, 2012; Tseng, 2012; Gollust et al., 2017).

¹⁰ For analysis of what characteristics/factors make for effective partnerships, see Palinkas et al. (2015) and Lencucha et al. (2010).

It is possible that there is a mutually reinforcing cycle at play here (see diagram below). When policymakers and researchers develop relationships, not only are cultures of distrust and skepticism bridged, but researchers may also gain a deeper understanding of issues of concern to policymakers. Whether directly or indirectly, they might begin to shape their research agendas around questions policymakers want to understand immediately or in the future. Policymakers, in turn, may be able to grant researchers access to administrative data to help these questions get answered quicker, without having to do substantial data collection. Once the research is carried out, policymakers who have established trusted relationships with the researchers involved are more likely to learn from and act on the research findings, which in doing so may reinforce the relationship. This is just a hypothesis. But it seems to be borne out in pieces of the evidence base on this subject discussed above.

These are just some of the most prominent barriers and facilitators in the research use literature. There are other empirically-demonstrated facilitators—such as individual policymakers’ levels of personal dedication



to research (Jack et al., 2010; Bogenschneider et al., 2013) and levels of graduate education (Avey & Desch, 2014; Asen et al., 2013). Organizational leadership and culture around research use in policymaking can have a strong effect both ways, either positively or negatively (Jack et al., 2010; Edwards, 2009; Hyder et al., 2011; Rutter, 2012). Without going into too much detail, it’s clear that institutional factors in both the academy and policymaking environments can impact the relevance of research to decisions.

Epistemological communities

A tentative finding from this review is the influence of environment and participant roles on epistemology. Much has been written about the two cultures/two communities theory, which posits that policymakers and researchers are members of decidedly different—and distanced—groups (Waddell et al., 2005; Hyder et al., 2011; Bogenschneider et al., 2013; Edwards, 2009; Innvaer et al., 2002). Frequently, distinctions between these supposed ‘two communities’ are sociocultural, leading scholars to call for renewed efforts to ‘bridge’ the cultural divide (Petticrew et al., 2004; Mitton & Patten, 2004; Innvaer et al., 2002).

Whether this divide is as severe as some hypothesize is a question for another day. However, findings from this review indicated that a sophisticated epistemology governs (at least some) policymakers’ approach to evidence. This epistemology is practically-oriented, ambiguity-conscious, context-attuned, and complexity-informed. It recognizes the limitations of various types of evidence—including quantitative studies sometimes framed as ‘gold standard’ research—but ultimately employs what information is on hand to manage pervasive uncertainties. This epistemological framework also acknowledges the inherently subjective nature of priority-setting in public policy, recognizing political and public pressures as inescapable forces in the decision-making process (Monaghan and Ingold, 2019:10). Responding to real-

time and sometimes urgent problems with decisive action—irrespective of information availability or quality—is the *modus operandi*.

Epistemological distinctions have been touched on by some scholars of evidence-informed policymaking. Monaghan and Ingold (2019:8) cite a distinction between different ways of knowing discussed by Maybin (2015) and Tenbesel (2006). According to their account, policymakers and civil servants frequently practice *phronesis* (“deliberation over values”) and *techne* (“knowledge about how to ‘do’ policy work”) in their daily decision-making. In contrast, *episteme* (“rational analytic knowledge”) is present, but may take a backseat to the other two knowledge forms when time, feasibility, political capital are on the line. Overall, policymakers don’t have the luxury of inhabiting a singular—often positivist—epistemology. They are involved, and responsible.

Consequently, policymakers in the studies reviewed often defined ‘evidence’ differently from commonplace definitions in the academy. Whether information was timely, context-relevant, or locally-generated significantly impacted decision-makers’ assessments of its utility (Hyder et al., 2011; Mitton & Patten, 2004; Stoneham & Dodds, 2014; Petticrew et al., 2004). Where quantitative evaluations were judged to be insufficient for the decision-making process—due to perceived lack of causal within-case analysis, lack of connections from macro to local, context-bound situations, or irreducible complexity of an issue—policymakers actively valued qualitative evidence, including anecdotal information and wisdom derived from professional experience. Acknowledging ever-present ambiguities and the limitations of deductive reasoning in a complex world also led some to express support for participatory and non-Western indigenous epistemologies (Reece & Belcher, 2015; Jack et al., 2010). Ultimately, as Avey & Desch (2014) observed, decision-makers seem to seek conceptual frameworks that help them pattern out potential courses of action amid uncertain, interconnected problems.

At the end of the day, decision-makers must make decisions. They do so with multiple objectives. Cost effectiveness, political viability, public popularity, and responsiveness are just some of the many goals they pursue *in addition to* implementing evidence-informed policies. In contrast, most would agree that an overriding objective of academics is knowledge generation. Scholars’ secondary goals must contend with methodological rigor. And decision-making on a large-scale is not commonplace in their job descriptions.

This gap in the objectives and roles of policymakers versus researchers likely undergirds their respective epistemological approaches. Greenhalgh (2004:906) discusses this issue, referencing Dobrow et al. (2004):

“[D]oes research evidence pertain to an objective reality with transferable truths, or does it reflect a socially constructed reality with negotiated and context-dependent meanings? Dobrow et al (2004) distinguish the philosophical-normative orientation (that there is an objective reality to be discovered and that the critical dimensions of ‘evidence’ are validity and reliability) from the practical-operational orientation in which evidence is defined in relation to a specific decision-making context, is never static, and is characterized by emergence, ambiguity and incompleteness.”

Greenhalgh goes on to suggest these epistemological differences (between researchers who often adopt the former orientation, versus policymakers who seem to adopt the latter) are rooted in “different conceptual worlds...meaning systems and values.” Whether policymakers and researchers depart significantly from each other on these fronts is debatable.

But given the varied demands policymakers face, it is logical to infer that their approach to evidence is at least partially shaped by the nature of their environments and roles. And vice versa for researchers.

Both epistemological frameworks have insights to share. Both should be considered in discussions about evidence-informed policy. Initiatives that attempt to reduce distances between research producers/users can catalyze shared learning between these epistemological communities.

Limitations of this review

At the conclusion of this review, it is worthwhile noting a couple limitations, mainly related to the heterogeneity of the sample. The studies reviewed defined policymakers very differently. And some didn’t define them at all. Consequently, a wide variety of different types of policymakers at different levels of government (e.g. local, state, federal) and within different institutions (e.g. school districts, legislatures,



administrative agencies, civil service ministries) comprise the data collected by the studies analyzed in this review. The findings drawn out here are an attempt to identify themes across this incredible diversity. However, as Bogenschneider et al. (2013) so compellingly argue, the specific institutional cultures and the exact *type* of policymaker are important factors in how research evidence is used to inform decisions. Future studies would do well to bear this in mind.



References

- Asen, R., Gurke, D., Conners, P., Solomon, R., and Gumm, E. (2013). Research Evidence and School Board Deliberations: Lessons from Three Wisconsin School Districts. *Educational Policy* 27(1): 33-63.
- Avey, P. C., & Desch, M. C. (2014). What do policymakers want from us? Results of a survey of current and former senior national security decision makers. *International Studies Quarterly*, 58(2), 227-246. Retrieved from: https://carnrank.nd.edu/assets/294806/isq_final.pdf
- Bogenschneider, K., Little, O. M., & Johnson, K. (2013). Policymakers' use of social science research: Looking within and across policy actors. *Journal of Marriage and Family*, 75(2), 263-275. Retrieved from: <https://doi.org/10.1111/jomf.12009>
- Bowen, S., Erickson, T., Martens, P. J., & Crockett, S. (2009). More than "using research": the real challenges in promoting evidence-informed decision-making. *Healthcare policy/ Politiques de sante*, 4(3), 87-102. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2653695/>
- Chalmers, I. (2005). If evidence-informed policy works in practice, does it matter if it doesn't work in theory? *Evidence & Policy: A Journal of Research, Debate and Practice*, 1(2), 227-242. Retrieved from: <https://doi.org/10.1332/1744264053730806>
- Chatterji, M., Green, L. W., Kumanyika, S. (2014). L.E.A.D.: A Framework for Evidence Gathering and Use for the Prevention of Obesity and Other Complex Public Health Problems. *Health Education & Behavior* 41(1): 85-99.
- Corluka, A., Hyder, A. A., Segura, E., Winch, P., & McLean, R. K. (2015). Survey of Argentine health researchers on the use of evidence in policymaking. *PloS one*, 10(4), e0125711. Retrieved from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0125711>
- Dobbins, M., Rosenbaum, P., Plews, N., Law, M., & Fysh, A. (2007). Information transfer: what do decision makers want and need from researchers? *Implementation Science*, 2(1), 20. Retrieved from: <https://doi.org/10.1186/1748-5908-2-20>
- Dobrow, M. J., Goel, V., & Upshur, R. E. G. (2004). Evidence-based health policy: context and utilization. *Social Science & Medicine*, 58(1), 207-217. Retrieved from: <http://www.icb.utoronto.ca/people/publications/ssm2004.pdf>
- Dodson, E. A., Geary, N. A., & Brownson, R. C. (2015). State legislators' sources and use of information: bridging the gap between research and policy. *Health Education Research*, 30(6), 840-848. Retrieved from: <https://academic.oup.com/her/article-pdf/30/6/840/7143075/cyv044.pdf>
- DuMont, K. (2015). *Leveraging Knowledge: Taking Stock of the William T. Grant Foundation's Use of Research Evidence Grants Portfolio*. New York, NY: William T. Grant Foundation. Retrieved from: <http://wtgrantfoundation.org/library/uploads/2015/09/Leveraging-Knowledge-Taking-Stock-of-URE.pdf>
- Edwards, M. (2009). In search of useful research: demand and supply challenges for policy makers, 21st World Congress of Political Science, Santiago, Chile, July. Retrieved from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.470.7522&rep=rep1&type=pdf>
- Ellen, M. E., Horowitz, E., Vaknin, S., & Lavis, J. N. (2016). Views of health system policymakers on the role of research in health policymaking in Israel. *Israel Journal of Health Policy Research*, 5(1): 24. Retrieved from: <https://doi.org/10.1186/s13584-016-0088-1>
- Gollust, S. E., Kite, H. A., Benning, S. J., Callanan, R. A., Weisman, S. R., Nannery, M. S. (2014). Use of Research Evidence in State Policymaking for Childhood Obesity Prevention in Minnesota. *American Journal of Public Health* 104(10): 1894-1900.
- Greenhalgh, T. (19 April, 2004.) How do policymakers use evidence--What's the evidence? *BMJ*, 328:906. [Editorial]. Retrieved from: <https://doi.org/10.1136/bmj.328.7445.906>
- Grove, A., Sanders, T., Salway, S., Goyder, E., & Hampshaw, S. (2019). A qualitative exploration of evidence-based decision making in public health practice and policy: the perceived usefulness of a diabetes economic model for decision makers. *Evidence & Policy: A Journal of Research, Debate and Practice*. Retrieved from: <https://doi.org/10.1332/174426418X15245020185055>
- Head, B., Ferguson, M., Cherney, A., & Boreham, P. (2014). Are policy-makers interested in social research? Exploring the sources and uses of valued information among public servants in Australia. *Policy and Society*, 33(2), 89-101. Retrieved from: <https://doi.org/10.1016/j.polsoc.2014.04.004>
- Honig, M. I., & Coburn, C. (2008). Evidence-based decision-making in school district central offices: Toward a policy research agenda. *Educational Policy*, 22, 578-608. DOI: [10.1177/0895904807307067](https://doi.org/10.1177/0895904807307067)



- Hyder, et. al. (2011). National policy-makers speak out: are researchers giving them what they need? *Health Policy and Planning* 26(1), pp. 73–82. Retrieved from: <https://doi.org/10.1093/heapol/czq020>
- Ingold, J. and Monaghan, M. (2016). Evidence translation: an exploration of policy makers' use of evidence. *Policy and Politics*, 44(2), pp.171-190. Retrieved from: <https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/21322/3/Evidence%20translation%20without%20TC%2018%20Feb.pdf>
- Innvær, S., Vist, G., Trommald, M., & Oxman, A. (2002). Health policy-makers' perceptions of their use of evidence: a systematic review. *Journal of Health Services Research & Policy*, 7(4), 239-244. Retrieved from: <https://doi.org/10.1258/135581902320432778>
- Jabbar, H., La Londe, P. G., Debray, E., Scott, J., & Lubienski, C. (2014). How Policymakers Define 'Evidence': the politics of research use in New Orleans. *Policy Futures in Education*, 12(8), 1013-1027. Retrieved from: <https://journals.sagepub.com/doi/pdf/10.2304/pfie.2014.12.8.1013>
- Jack, S., Dobbins, M., Tonmyr, L., Dudding, P., Brooks, S., & Kennedy, B. (2010). Research evidence utilization in policy development by child welfare administrators. *Child Welfare*, 89(4). Retrieved from: <http://eds.b.ebscohost.com/eds/pdfviewer/pdfviewer?vid=0&sid=8135b71d-903b-46f4-883c-42df6881bb81%40pdc-v-sessmgr01>
- Jones, B. D., & Baumgartner, F. R. (2005). *The Politics of Attention: How Government Prioritizes Problems*. Chicago, IL: University of Chicago Press.
- Lencucha, R., Kothari, A., & Hamel, N. (2010). Extending collaborations for knowledge translation: lessons from the community-based participatory research literature. *Evidence & Policy: A Journal of Research, Debate and Practice*, 6(1), 61-75. Retrieved from: <https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1005&context=healthstudiespub>
- Lugo-Gil, J., Jean-Baptiste, D., & Frasso Jaramillo, L. (2019). *Use of Evidence To Drive Decision-Making in Government*. Washington, D.C.: Mathematica Policy Research. Retrieved from: <https://aspe.hhs.gov/system/files/pdf/260881/UseOfEvidenceInDecisionMaking.pdf>
- Maybin, J. (2015). Policy analysis and policy know-how: a case study of civil servants in England's Department of Health. *Journal of Comparative Policy Analysis: Research and Practice*, 17(3): 286-304. Retrieved from: <https://www.tandfonline.com/doi/abs/10.1080/13876988.2014.919738>
- McGregor, M. (2006). What decision-makers want and what they have been getting. *Value in Health*, 9(3), 181-185. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/16689712>
- McNie, E. C. (2007). Reconciling the supply of scientific information with user demands: an analysis of the problem and review of the literature. *Environmental Science & Policy*, 10(1), 17-38. Retrieved from: https://sciencepolicy.colorado.edu/admin/publication_files/resource-2486-2007.03.pdf
- Mitton, C., & Patten, S. (2004). Evidence-based priority-setting: what do the decision-makers think? *Journal of Health Services Research & Policy*, 9(3), 146–152. Retrieved from: <https://doi.org/10.1258/1355819041403240>
- Monaghan, M. & Ingold, J. (2019) Policy Practitioners' Accounts of Evidence-Based Policy Making: The Case of Universal Credit. *Journal of Social Policy*, 48 (2). pp. 351-368. Retrieved from: <https://doi.org/10.1017/S004727941800051X>
- Mosley, J. E., & Gibson, K. (2017). Strategic use of evidence in state-level policymaking: matching evidence type to legislative stage. *Policy Sciences*, 50(4): 697-719. Retrieved from: <http://wtgrantfoundation.org/library/uploads/2017/07/MosleyGibson.EvidenceStateLevelPolicymaking.2017.pdf>
- Moreland-Russell, S., Barbero, C., Andersen, S., Geary, N., Dodson, E. A., & Brownson, R. C. (2015). "Hearing from all sides": How legislative testimony influences state level policy-makers in the United States. *International Journal of Health Policy and Management*, 4(2), 91. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4322632/>
- Nelson, S.R., Leffler, J.C., & Hansen, B.A. (2009). *Toward a Research Agenda for Understanding and Improving the Use of Research Evidence* (Final report to the William T. Grant Foundaton.) Portland, OR: Northwest Regional Educational Laboratory. Retrieved from: <https://educationnorthwest.org/sites/default/files/toward-a-research-agenda.pdf>
- Nowell, B., & Albrecht, K. (2019). A Reviewer's Guide to Qualitative Rigor. *Journal of Public Administration Research and Theory* 29(2): 348–363. Retrieved from: <https://doi.org/10.1093/jopart/muy052>
- Nutley, S., Walter, I., & Davies, H. T. O. (2007). *Using evidence: how research can inform public services*. Bristol, United Kingdom: Policy Press.
- O'Brian, E., & Martinez-Vidal, E. (June 2016). *Evidence Based State Health Policymaking: Research and Policymaker perspectives*. Washington, D.C.: Academy Health. Retrieved from:



- <http://www.academyhealth.org/sites/default/files/AH%20Evidence%20Based%20State%20Health%20report.pdf>
- Palinkas, L. A., Short, C., and Wong, M. (2015). *Research-Practice-Policy Partnerships for Implementation of Evidence-Based Practices in Child Welfare and Child Mental Health*. New York, NY: William T. Grant Foundation. Retrieved from: http://wtgrantfoundation.org/library/uploads/2015/10/Research-Practice-Policy_Partnerships.pdf
- Palinkas, L. A., Garcia, A. R., Aarons, G. A., Finno-Velasquez, M., Holloway, I. W., Mackie, T. I., ... & Chamberlain, P. (2016). Measuring use of research evidence: the structured interview for evidence use. *Research on Social Work Practice*, 26(5): 550-564. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5014436/>
- Petticrew, M., Whitehead, M., Macintyre, S. J., Graham, H., & Egan, M. (2004). Evidence for public health policy on inequalities: the reality according to policymakers. *Journal of Epidemiology & Community Health*, 58(10), 811-816. Retrieved from: <https://jech.bmj.com/content/jech/58/10/811.full.pdf>
- Reece, J., & Belcher, M. (2015). *An Overview of the Literature on Policy Makers' Awareness, satisfaction and effective use of research* (INASP Working Paper). Oxford, U.K: INASP. Retrieved from: https://www.researchgate.net/publication/281347213_An_overview_of_the_literature_on_policy_makers'_awareness_satisfaction_and_effective_use_of_research
- Rutter, J. (Sept. 2012). *Evidence and Evaluation in Policy Making: A Problem of Supply or Demand?* London, U.K.: Institute for Government. Retrieved from: <https://www.instituteforgovernment.org.uk/publications/evidence-and-evaluation-policy-making>
- Stoneham, M., & Dodds, J. (2014). An exploratory study identifying where local government public health decision makers source their evidence for policy. *Health Promotion Journal of Australia*, 25(2), 139-142. Retrieved from: https://espace.curtin.edu.au/bitstream/handle/20.500.11937/16665/219265_219265.pdf?sequence=2
- Tenbesel, T. (2006). Policy knowledge for policy work. In H. K. Colebatch (Ed.), *The Work of Policy: An International Survey* (pp. 199-216). Latham, MD: Lexington Books.
- Tseng, V. (2012). The Uses of Research in Policy and Practice. *Social Policy Report* 26(2): 1-13. Retrieved from: <http://wtgrantfoundation.org/library/uploads/2015/10/The-Uses-of-Research-in-Policy-and-Practice.pdf>
- Tseng, V., & Gamoran, A. (2017). *Bringing Rigor to Relevant Questions: How Social Science Research Can Improve Youth Outcomes in the Real World*. New York, NY: William T. Grant Foundation. Retrieved from: http://wtgrantfoundation.org/library/uploads/2017/05/How-Social-Science-Research-Can-Improve-Youth-Outcomes_WTG2017.pdf
- Urahn, S., Bergh, S., Davis, A., Ivey, A., Kitson, D., & Thornton, J. (2018). *How States Use Data to Inform Decisions: A national review of the use of administrative data to improve state decision-making*. Washington, D.C.: The Pew Charitable Trusts. Retrieved from: <https://www.pewtrusts.org/en/about/news-room/opinion/2018/08/13/using-data-to-improve-policy-decisions>
- Waddell, C., Lavis, J. N., Abelson, J., Lomas, J., Shepherd, C. A., Bird-Gayson, T., Giacomini, M., & Offord, D. R. D. (2005). Research use in children's mental health policy in Canada: Maintaining vigilance amid ambiguity. *Social Science & Medicine*, 61(8), 1649-1657. Retrieved from: <https://doi.org/10.1016/j.socscimed.2005.03.032>
- Weiss, C. (1977). Research for Policy's Sake: The Enlightenment Function of Social Research. *Policy Analysis*, 3(4), 531-545. Retrieved from: <http://www.istor.org/stable/42783234>