

RESEARCH ARTICLE **OPEN ACCESS**

Organizational and Individual Factors of Evidence Informed Policy Making in Public Organizations

Pieter Raymaekers¹ | Koen Migchelbrink² | Valérie Pattyn³ | Peter De Smedt⁴

¹Public Governance Institute, KU Leuven, Leuven, Belgium | ²Department of Public Administration and Sociology, Erasmus University Rotterdam, Rotterdam, the Netherlands | ³Institute of Public Administration, Leiden University, The Hague, the Netherlands | ⁴Strategic Insights and Analysis Unit, Flemish Government, Brussels, Belgium

Correspondence: Koen Migchelbrink (migchelbrink@essb.eur.nl)

Received: 28 February 2024 | **Revised:** 5 February 2025 | **Accepted:** 11 February 2025

Keywords: evidence informed policy making | NERD | organizational culture | organizational resources | person-organization fit

ABSTRACT

Understanding the use of evidence by public organizations and public officials is a key issue for public administration scholars and practitioners. In this study, we examine how individual- and organizational-level factors relate to evidence informed policy making. Using the Norm of Evidence and Research in Decision-making (NERD), we conduct an online survey to analyze evidence informed policy making perceptions of public officials ($n = 438$) holding policy responsibilities within the Flemish (Belgian) government. The results highlight the importance of a rational, results- and production-oriented organizational culture, adequate access to information, sufficient time, and appropriate personnel. At the individual level, person-organization fit and public sector experience are associated with evidence use. Enhancing our knowledge of these organizational and individual factors is crucial for advancing the theory and practice of evidence informed policy making in public organizations.

1 | Introduction

Contemporary policy making has reached unprecedented levels of complexity. Consider the pressing climate crisis, which demands an urgent and appropriate government response, including the careful selection of policy instruments and instrument mixes that effectively reduce emissions while minimizing negative side effects (Leong et al. 2022; van den Bergh et al. 2021). Similarly, the COVID-19 pandemic highlighted the critical role of both biomedical and behavioral science evidence in shaping effective policies (Ruggeri et al. 2024; Lancaster et al. 2020). These complex challenges place new and growing demands on public officials to rely on the best available information, knowledge, and data to determine which policies are most effective, for whom, and under which circumstances. In response, the idea of evidence informed policy making (EIPM) has become a focal point in both public administration and policy science

research (Jennings and Hall 2012; Pedersen 2023; Head 2016; Howlett 2009) and has secured a central position on the agendas of international organizations such as the OECD (2020) and the European Commission (2022).

Meanwhile, research shows that the mere availability of policy-relevant evidence, whether from scientists or other experts, is no guarantee that it finds its way into the policy process (Jennings and Hall 2012). Weiss (1995, 146) stated that “most policy research is probably born to die unseen and waste its sweetness on the desert air”. While research (Capano and Malandrino 2022; Cairney 2016; Oliver et al. 2014) highlights a myriad of factors that can help us understand the (mis)match between evidence and policy, it is crucial to determine the relative importance of specific meso (organizational) and micro (individual) level factors affecting evidence use. As articulated by Hall and Van Ryzin (2019), the field of EIPM research requires deeper

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). *Public Administration Review* published by Wiley Periodicals LLC on behalf of American Society for Public Administration.

Summary

- Evidence informed policy making in public organizations is shaped by a combination of organizational and individual factors.
- A rational, results-, and production-oriented organizational culture can foster evidence informed policy making.
- Public organizations can facilitate evidence informed policy making by ensuring that adequate resources, including accessibility, time, and personnel are allocated and readily available.
- A strong alignment between individual and organizational values and goals is positively related to the incorporation of evidence into policy-making processes.

explanatory insights into the factors that influence EIPM adoption, use and success, and we need to increase our knowledge about the individual and organizational correlates of EIPM in terms of its causes, potential mediators, and consequences. This study is among the first to systematically examine the relationship between perceived EIPM in public organizations and a range of organizational- and individual-level factors, which are commonly held important in the EIPM discourse. We formulate the following research question:

Which organizational and individual factors are associated with evidence informed policy making in public organizations?

We measure EIPM in public organizations using the Norm of Evidence and Research in Decision-making (NERD) scale, developed by Hall and Van Ryzin (2019). Evidence, in this context, encompasses different types of information, such as scientific research (the R in the NERD scale), monitoring data, program analysis and policy evaluations. Below, we further unpack what counts as evidence. Method-wise, we fielded an online cross-sectional survey among all public officials with policy responsibilities employed by the Flemish (Belgian) government ($N=1556$). Our results show that public organizations with a rational, results- and production-oriented culture and adequate resources in terms of accessibility, time, and personnel are more inclined to engage with evidence. Additionally, individual-level factors such as person-organization fit and working experience in the public sector are associated with evidence use in policy making.

Our study addresses both a theoretical and empirical gap in the literature on EIPM, which is primarily characterized by conceptual, descriptive and normative studies (Parkhurst 2017; Cairney 2016; Head 2016). Additionally, the limited number of existing empirical studies reveals a significant divergence across outcome variables (Amara et al. 2004), sets of explanatory variables (Landry et al. 2003), levels of analysis (Newman et al. 2017) and policy contexts (Nelson et al. 2023). As such, our study makes at least three contributions to this field. First, to our knowledge we are the first to replicate and further validate the above-mentioned NERD scale, originally built by Hall and Van Ryzin (2019) as a measure of perceived

EIPM within public organizations. Before NERD, the closest thing to a quantitative EIPM measurement instrument would probably be the “utilization scale,” developed by Knott and Wildavsky (1980), composed of the seven research-utilization stages, that is. reception, cognition, reference, adaption, effort, influence and application (Belkhdja et al. 2007; Landry et al. 2003). However, this scale takes a narrow approach to evidence, only accounting for scientifically grounded evidence, and is deemed “unrealistically linear and direct”, according to Nelson et al. (2023, 1509). By replicating the NERD scale and further validating it, we contribute to the robustness of such measurement instruments and enable future comparative studies on EIPM.

Second, we deepen the understanding of drivers and barriers to EIPM in public organizations by exploring the relationship between perceived EIPM as an outcome variable and a comprehensive set of specific explanatory organizational- and individual-level factors. Building on the foundational work of Hall and Van Ryzin (2019), which already included factors such as organizational culture or person-organization fit, we also draw on general literature reviews (Capano and Malandrino 2022; Nelson et al. 2023; Cantarelli et al. 2023; Oliver et al. 2014) to extend their study. Specifically, we incorporate additional factors commonly associated with EIPM, such as organizational resources, individual policy capacities, and personal networks, and introduce new factors, such as policy autonomy and politicization, that have not yet been robustly tested. This explanatory approach expands the range of variables that may correlate with evidence use in public organizations.

Third, we note that the NERD scale has been developed in an American setting. This is illustrative for the broader EIPM literature, which predominantly concentrates on Anglo-American administrative and policy contexts. Nelson et al. (2023, 1511) highlight that approximately 90% of the studies on EIPM originate from the United States, United Kingdom, Canada, and Australia. Despite increasing scholarly attention to evidence use in other settings (e.g., Capano et al. 2023; Vesely et al. 2014), we still have comparatively limited knowledge about EIPM in a more diverse range of political-administrative contexts and evidence cultures (Bandola-Gill et al. 2024). Our study addresses part of this gap by focusing on evidence use, and applying the NERD scale, in a Napoleonic administrative tradition, characterized by a consensus-style and neo-corporatist knowledge regime (Pattyn et al. 2022; Strassheim and Kettunen 2014; Fraussen and Pattyn 2023; Pollitt and Bouckaert 2017). This setting is strongly deviating (Flyvbjerg 2011) from the contentious (e.g., United States, Australia) or communitarian (e.g., the United Kingdom) civic epistemologies or knowledge regimes (Strassheim and Kettunen 2014; Jasanoff 1990). Applying the NERD scale in such a context presents a theoretical opportunity to test the explanatory value of individual- and organizational-level factors identified in Anglo-oriented exploratory research, while also incorporating additional factors relevant to EIPM studies.

In the next section, we define our model and formulate hypotheses on the factors of evidence use in public organizations. We

then describe our methods, including the survey instrument and data collection. Finally, we present our findings, discuss limitations, and outline future research directions.

2 | Theory

2.1 | From Evidence Based to Evidence Informed Policy Making

There is both enthusiasm and skepticism among policy scholars and policy professionals about the move to rationalize policy making through evidence use (Boswell 2018; Capano and Malandrino 2022; Parkhurst 2017). Advocates of evidence based policy making (EBPM) highlight the numerous benefits associated with it. Evidence can inform governments about which policy instruments and measures are truly effective (“what works”), thereby enhancing the efficient allocation of public resources (Bogenschneider and Corbett 2010; French 2019; Cairney 2016). Additionally, evidence is purported to encourage governments to operate more objectively and transparently, thereby providing a “remedy” to counteract political arbitrariness and a means to enhance political accountability (Dorren and Wolf 2023, 3; Bundi and Pattyn 2022). Evidence is also seen as crucial to better inform citizens, thereby enhancing the quality of democratic discourse and fostering trust in government (Bundi and Pattyn 2022; Schlauffer et al. 2018).

However, for every EBPM proponent, one can find a skeptic or opponent questioning its feasibility and highlighting numerous serious challenges associated with effectively integrating evidence into policy making (Boswell 2018; Bozeman et al. 2023; Cairney 2016). After all, policy making is essentially political and involves confronting and counterbalancing various and sometimes conflicting preferences, interests, and values (Bolsen and Druckman 2015; Cairney 2016; Jasanoff 1990). Its political nature also stimulates the symbolic use of evidence in order to justify prior decisions made for other reasons (Mavrot and Pattyn 2022; Amara et al. 2004; Nutley et al. 2007), or to encourage the intentional or unintentional misinterpretation of evidence to support prior policy beliefs and objectives (Blom-Hansen et al. 2021, 2016; Botterill and Hindmoor 2012; Migchelbrink et al. 2024). Indeed, evidence rarely provides a one-dimensional and clear-cut answer to policy questions, often leaving room for nuance and enabling multiple, or competing, interpretations, and frames of reference (Pielke 2007; Schlauffer et al. 2018). Adding to the complexity is that public officials often feel insufficiently equipped in terms of time, resources, access to information, expertise, and capabilities to use and integrate evidence in policy making (Newman et al. 2017; Oliver et al. 2014; Howlett 2009; Cheng et al. 2024). In light of these challenges, the idea of evidence based policy making, as a rational process where evidence directly determines or even dictates policy, gives way to a more modest and realistic notion of evidence informed policy making (EIPM). This perspective acknowledges that evidence is only one of many sources that can inform and influence the policy process (Nutley et al. 2003; Schlauffer et al. 2018; Head 2008, 2016; Dorren and Wolf 2023; Newman et al. 2016). This study is also grounded in this more nuanced approach.

2.2 | A Broad Conceptual Approach to EIPM

Scholarship on the evidence and policy relationship is dispersed over different streams of literature, resulting in a lack of conceptual clarity (Capano and Malandrino 2022; Bundi and Trein 2022; Nelson, et al. 2023). As discussed by Blum and Pattyn (2022), evidence can range from a broad to a more narrow interpretation. Studies with a narrow understanding of evidence only include scientific evidence and research evidence, referring to information that is produced in a particular and systematic way using robust methods with randomized control trials and meta-analyses at the top of the scientific pyramid (Landry et al. 2003; Ouimet et al. 2009; Amara et al. 2004; Cairney 2016; Nutley et al. 2003; MacKillop and Downe 2023). Studies applying a broader approach to evidence typically consider many different kinds of information such as knowledge, data, evaluations, expertise, and citizen feedback (Jennings and Hall 2012; Hall and Van Ryzin 2019; Kislov et al. 2019; Head 2010; Munteanu et al. 2024).

In our study, we capture evidence and policy in their broadest sense and adopt the OECD (2020, 12) definition of EIPM: “Evidence informed policy making can be defined as a process whereby multiple sources of information, including statistics, data and including the best available research evidence and evaluations, are consulted before making a decision to plan, implement, and (where relevant) alter public policies, programs and deliver quality public other services”. This broader definition very much aligns with the six items comprising the NERD scale. To qualify as EIPM-oriented, organizations are not required to rely exclusively on “gold standard” research methods such as experimental or quasi-experimental studies (MacKillop and Downe 2023; Cheng et al. 2024). Rather, they should systematically integrate relevant evidence into policy making processes, moving beyond ad hoc applications. This process may involve conducting in-house research as well as critically assessing external data and reviews.

2.3 | Individual and Organizational Factors of EIPM

What determines whether policy makers and public officials rely on evidence or not? There is a growing body of literature that identifies, catalogs, and sometimes measures factors associated with EIPM (Nelson et al. 2023; Nelson et al. 2024). These studies employ a wide range of methods, including ethnography (Dorren and Wolf 2023; Bogenschneider and Bogenschneider 2020), document analysis (Kelstrup and Jørgensen 2024), participant observation (Bogenschneider and Corbett 2010), interviews (Ouimet et al. 2009; Oliphant and Howlett 2010; Cheng et al. 2024), surveys (Landry et al. 2003; Amara et al. 2004; Wellstead et al. 2011; Cherney et al. 2015; Capano et al. 2023), online conjoint experiments (Xu et al. 2024) and systematic literature reviews (Capano and Malandrino 2022; Oliver et al. 2014; Nelson et al. 2023). The factors, drawn from these studies, can either act positively as drivers or facilitators promoting the use of EIPM or negatively as barriers or obstacles hindering its adoption (Capano and Malandrino 2022; Cairney 2016). In broad terms, we can categorize the factors related to EIPM into two overarching groups: individual and organizational factors.

2.4 | Organizational Factors

Organizational factors typically refer to aspects or elements of an organization that can influence its functioning and outcomes. Recurring examples of such factors in regard to EIPM are public organizations' culture and resources (Capano and Malandrino 2022; Oliver et al. 2014). We also introduce two novel organizational-level factors into the equation: policy autonomy and politicization.

2.4.1 | Organizational Culture

Organizational culture can be understood as a specific set of standards, values, attitudes, assumptions, beliefs, traditions, language, and practices that are particular to a given organization and which can influence how evidence is perceived, valued, and utilized in the policy making process (Cairney 2016; Moynihan and Pandey 2010). In relation to evidence use, Quinn and Kimberly (1984) distinguish between four culture types: group, hierarchical, rational, and developmental culture. Group culture prioritizes personal relationships, social cohesion, and morale, while hierarchical culture centers on control, information management, procedures, and organizational stability. In the context of this study, we are primarily interested in rational and developmental cultures, as these were shown in the research by Hall and Van Ryzin (2019) to correlate positively with perceived evidence use in public organizations. Rational culture, characterized by a focus on control, planning, and productivity, provides a structured environment where individuals prioritize evidence as an important asset for achieving organizational goals. Developmental culture, characterized by flexibility, growth, and adaptability, fosters an environment where individuals seek new information and remain open to evidence, aligning with the organization's emphasis on innovation and learning (Moynihan and Pandey 2007, 2010). Therefore, we formulate the following hypotheses:

H1. *The stronger the perceived level of rational culture, the higher the perceived level of evidence use within the organization.*

H2. *The stronger the perceived level of development culture, the higher the perceived level of evidence use within the organization.*

2.4.2 | Organizational Resources

Insufficient resources frequently emerge as a key barrier to evidence use in public organizations (Oliver et al. 2014). Public organizations require a certain threshold of human and financial resources enabling them to carry out the tasks associated with conducting and commissioning relevant policy research (Howlett 2009). Public organizations with adequate resources, such as access to evidence, budget, time allocation and dedicated personnel, are better positioned to create an environment where individuals can meet the conditions necessary to effectively integrate evidence into policy making (Jennings and Hall 2012; Cherney et al. 2015; Shaxson et al. 2024; Cheng et al. 2024). Building on previous research, we therefore expect a positive association between all these types of resources and organizational evidence use.

H3. *The more access public officials have to evidence, the higher the perceived level of evidence use within their organization.*

H4. *The more time public officials have to engage with evidence, the higher the perceived level of evidence use within their organization.*

H5. *The more staff public officials have to engage with evidence, the higher the perceived level of evidence use within their organization.*

H6. *The more budget public officials have to engage with evidence, the higher the perceived level of evidence use within their organization.*

2.4.3 | Policy Autonomy

Policy autonomy, in this context, refers to the degree of discretion a public organization possesses in steering both the formulation and implementation of policies, encompassing aspects such as setting the policy agenda, selecting target groups, choosing policy instruments, and achieving desired policy outcomes (Newman et al. 2017, 160; Verhoest et al. 2004, 116; Verschuere and Vancoppenolle 2012, 250). When autonomy is restricted, public officials may feel pressured to bypass evidence in favor of political demands (Dekker and Hansén 2004; Bekkers et al. 2017). Thus, policy autonomy acts as a mechanism that mitigates or amplifies political pressure, potentially affecting the likelihood of EIPM.

H7. *The more policy autonomy public officials have, the higher the perceived level of evidence use within their organization.*

2.4.4 | Politicization

Politicization, the growing political influence on public administrations, requiring public officials to be more sensitive to political considerations, can undermine evidence use (Peters and Pierre 2004). In highly politicized environments, evidence may be selectively used, misinterpreted, or manipulated to align with political interests (Cairney 2016; Parkhurst 2017). As politicization increases, public officials are likely to place less emphasis on evidence and more on political priorities and agendas.

H8. *The more politicization public officials experience, the lower the perceived level of evidence use within their organization.*

2.5 | Individual Factors

Furthermore, the literature considers individual-level factors crucial for shaping EIPM (Nelson et al. 2023). Key elements include public officials' policy analytical capacities, interpersonal contacts with evidence suppliers, work experience, and person-organization fit.

2.5.1 | Policy Analytical Capacities

Previous research has highlighted the importance of adequate policy analytical capacities for enabling EIPM (Newman

et al. 2017; Fobé 2021). These capacities refer to public officials' technical competences and skills to access, evaluate, produce, and disseminate policy-relevant information (Howlett 2009; Howlett and Newman 2010; Wellstead et al. 2011). We expect that public officials skilled in data analysis and research interpretation are better equipped to integrate evidence into the policy process (Newman et al. 2017).

H9. *The higher the perceived level of policy analytical capacities of public officials, the higher the perceived level of evidence use within their organization.*

2.5.2 | Personal Relationships

While some studies highlight communication difficulties between policy makers and researchers (Bozeman et al. 2023), others argue that the disconnect is exaggerated (Newman et al. 2016). However, mutual trust and exchanges through formal and informal networks are widely considered key to improving evidence use in policy (Ouimet et al. 2009; Nelson et al. 2023; Capano and Malandrino 2022; Oliver et al. 2014). Open communication facilitates a better and more nuanced understanding of each other's needs and practices, leading to more effective evidence integration. We expect that public officials who invest in building personal relationships with scientists and experts will enhance evidence use in their public organizations.

H10. *The more public officials invest in their personal network with evidence suppliers, the higher the perceived level of evidence use within their organization.*

2.5.3 | Public Sector Working Experience

Public officials' experience of working in the public sector can work both ways when it comes to fostering EIPM (Nelson et al. 2023). More experienced public officials may be more familiar with the role of evidence in policy and have broader networks (Howlett and Newman 2010; Newman et al. 2017). However, Hall and Van Ryzin (2019) found that senior public officials are less likely to use evidence, possibly due to reliance on tacit knowledge and intuition. In contrast, Nelson et al. (2024) suggest that newer public officials, particularly those who are younger, may have more recent experiences and relations with academic researchers and are more accustomed to the latest advancements in data-driven technologies. Therefore, we formulate the following hypothesis:

H11. *The higher the level of public officials' working experience, the lower the perceived level of evidence use within the organization.*

2.5.4 | Person-Organization Fit

We include a measure of person-organizational fit, which Hall and Van Ryzin (2019) found to be strongly associated with evidence use. Person-organization fit refers to the alignment of an individual's values and goals with those of the organization

(O'Reilly et al. 1991). Strong fit tends to increase motivation, collaboration and innovation (Kristof-Brown et al. 2005; Afsar et al. 2015), and we anticipate a similar pattern for evidence use, leading to the following hypothesis:

H12. *The higher the perceived level of person-organizational fit, the higher the perceived level of evidence use within the organization.*

3 | Methods

3.1 | Data Collection

To test our hypotheses and answer our research question, we conducted a cross-sectional survey between June 13th and July 14th, 2022. The sampling frame was constructed based on the personnel register of the Flemish government and contained $N=1556$ middle and top managers, supervisors, policy workers, data analysts, and policy staff officials. All targeted respondents have experience in analyzing and interpreting policy information and are responsible for applying policy information to new policy plans and proposals. The survey was conducted online, using the survey program Qualtrics (Qualtrics 2005). Invitations were sent to all members of the sampling frame. To optimize the response rate, we sent out up to two reminder emails to nonresponders. The analyses were conducted using ordinary least squares regression analysis in the statistical software environment R. The design of the survey received ethical approval from the Social and Societal Ethics Committee of KU Leuven (G-2022-5244). Out of $n=1556$ public officials that were invited to participate, $n=438$ public officials submitted a completed survey and were included in the analysis, constituting a response rate of 28.2%. The sample comprises the responses of $n=225$ women and $n=206$ men ($n=7$ identified otherwise or preferred not to say), with a mean age of 49 years and predominantly university educated (92%). Participants are employed in all policy domains of the Flemish government, ranging from $n=11$ in the Finances and Budgeting department to $n=98$ in the Environment department. We use a mixed-effects regression analysis (Bates et al. 2015; González-Romá and Hernández 2023) to estimate the associations between our series of predictor variables on the one hand and perceived EIPM on the other, while controlling for respondents' department of employment.

We focus on public officials from the Flemish regional government. As mentioned, Belgium stands out as a consensus democracy with neo-corporatist traits (Brans et al. 2022; Pattyn et al. 2022; Pollitt and Bouckaert 2017; Strassheim and Kettunen 2014; Fraussen and Pattyn 2023). In such setting, decision-making tends to be relatively closed and heavily reliant on the input by institutionalized representatives of major societal interest groups. This is fundamentally different from the anglophone context, where the "foundations of expertise" are generally considered to be based on technically most-qualified experts and empirical science (Strassheim and Kettunen 2014; Pattyn et al. 2022). Whereas neo-corporatism has been in decline in other consensus-style countries, in Belgium this has remained persistently strong (Fraussen and Pattyn 2023), or even increased (Jahn 2016).

Furthermore, political parties and well-equipped ministerial cabinets hold considerable sway in influencing the policy making process, to the extent that scholars have labeled Belgium a “partitocracy” (Brans et al. 2022). Consequently, it has been suggested that policy decisions in Flanders are often the product of political bargaining and prioritizing political feasibility rather than being driven by objective evidence and policy analysis (Fobé et al. 2017, 51). At the same time, previous survey research has also indicated that individual public officials in Flanders are relatively well versed in EIPM practices (Fobé 2021). Particularly in recent years, the COVID-19 crisis has acted as a catalyst in prioritizing EIPM, pushing it higher on the political and policy agenda, at least in terms of discourse. These features create an interesting setting, holding strong theoretical potential for understanding the factors that explain organizational variation on the NERD scale.

Both the dependent and independent variables were measured in the same survey instrument, raising the possibility of common source bias. Addressing such concerns for common source bias requires a balanced approach in both research design and method of analysis (George and Pandey 2017; Jakobsen and Jensen 2015). When both dependent and independent variables capture respondents’ perceptions, beliefs, or judgments, surveys are an appropriate measurement method (George and Pandey 2017; Podsakoff et al. 2012). We conducted a post hoc analysis for common source bias, using variance inflation factors, and found no evidence indicating that common source bias affected our results (see Appendix A).

3.2 | Measures

Our outcome variable, EIPM, is measured using Hall and Van Ryzin’s (2019) six-item NERD scale (NERD-6). The NERD-scale lends itself well to this purpose, since it measures the degree to which public organizations are perceived to use research findings, scientific evidence, monitoring data, and evaluation results, considering all subtypes of evidence, which align with the above-mentioned OECD (2022) definition of evidence. The NERD-scale gauges how respondents perceive their organization’s commitment to, and utilization of, evidence informed policy and decision making. Therefore, these assessments reflect individuals’ subjective perceptions of EIPM, rather than objective measures of its actual implementation. All responses, both the outcome (NERD) and explanatory variables, were measured on a seven-point Likert scale ranging from 1 “completely disagree” to 7 “completely agree.” The internal consistency of the NERD scale was strong with $\alpha=0.86$. We further assessed the validity of the measurement instrument using factor analysis (DeVellis and Thorpe 2022), the results of which are included in the Appendix B and show solid support for the validity of the original Hall and Van Ryzin (2019) measurement instrument.

First, organizational cultures were measured based on Moynihan and Pandey’s (2010) operationalized scales of organizational cultures. Rational culture was measured using two items on the perceived degree to which an organization is results- and production-oriented ($\alpha=0.87$). Developmental culture was measured using two items measuring the entrepreneurial nature of the organization and whether people were willing to

stick their necks out and take risks ($\alpha=0.72$). Second, organizational resources were measured using four items which previously fielded by Jennings and Hall (2012). The items measured respondents’ perceived access to information, time, staff, and budget to engage with evidence. Third, policy autonomy was measured using two items, measuring respondents’ perceived degree of their organization’s autonomy in the formulation and implementation of policies ($\alpha=0.81$). Fourth, politicization was measured using one item on the perceived interference of politicians in the organization’s day-to-day operations.

We further included four individual-level characteristics. First, public officials’ policy-analytical capacities were measured using three items developed by Newman et al. (2017). Respondents were invited to self-assess their skills in interpreting statistical

TABLE 1 | Descriptive statistics.

Item	N	Mean	SD	Max	Min
Norm of Evidence and Research in Decision-making (NERD)	438	5.26	0.97	7	2.5
Analytical capacities	438	5.21	1	7	2
Personal network	438	5.10	1.56	7	1
Person-organization fit	438	5.27	1.21	7	1
Rational organizational culture	438	5.41	1.05	7	1.5
Group organizational culture	438	4.28	1.04	7	1
Development organizational culture	438	4.69	1.22	7	1
Hierarchical organizational culture	438	4.65	1.37	7	1
Resources—Accessibility	438	5.06	1.27	7	1
Resources—Time	438	3.88	1.63	7	1
Resources—People	438	4.97	1.41	7	1
Resources—Budget	438	4.21	1.65	7	1
Policy autonomy	438	3.19	1.34	7	1
Politicization	438	4.23	1.65	7	1
Age (years)	438	49.05	9.25	65	17
Gender (Female)	438	225 (51.4%)			
Education (> MA)	438	403 (92%)			
Experience working in the public sector (Years)	438	19.99	9.65	44	0.01

analyses, collecting and analyzing policy related data and information, and applying the results of research studies. The internal consistency among these items was strong ($\alpha=0.82$). Second, respondents' professional network with experts and academics was measured using a single item on whether respondents intentionally search for and establish connections with experts and academics outside of the public sector. Third, person-organization fit was measured using a single self-assessment item on the congruence between individual and organizational values and goals, derived from Gould-Williams et al. (2015) and also applied by Hall and Van Ryzin (2019) in an EIPM context. Fourth, working experience was measured as the number of years a respondent has worked in the public sector.

Finally, we control for respondents' age, gender, level of education, and the policy domain in which respondents were active. A complete list with all survey items is included in the Appendix C.

4 | Results

This study examines the organizational- and individual-level factors of public officials' assessments of EIPM in their

organization. Overall, our respondents are relatively positive about their organization's use of EIPM ($m=5.26$, $SD=0.967$). According to our analysis, individual factors explain about 30% (conditional $R^2=0.300$) of the variance in perceived organizational use of EIPM (Model 2) and individual and organizational factors together explain about 48.5% (conditional $R^2=0.485$) of perceived organizational use of EIPM (Model 3). The descriptive statistics of our analysis are presented in Table 1.

Our results, presented in Table 2, provide evidence for correlates of EIPM at both the organizational and individual levels. In terms of organizational-level factors, we find a statistically significant and positive association between rational organizational culture (Est. = 0.178, $p<0.000$) and perceived EIPM by public organizations, while the levels of group, developmental, and hierarchical culture are not statistically significantly related to EIPM in public organizations. With its adherence to results and efficiency, a rational organizational culture appears to be associated with EIPM. Furthermore, we find a statistically significant association between three types of organizational resources and the perceived use of EIPM by public organizations. More specifically, we find that accessibility to evidence (Est. = 0.235, $p<0.000$), sufficient time (Est. = 0.070, $p=0.020$),

TABLE 2 | Results of mixed-effects regression analysis.

Variable	Model 1		Model 2		Model 3	
	Coef	s.e.	Coef	s.e.	Coef	s.e.
Intercept	4.700***	(0.319)	2.478***	(0.387)	1.600***	(0.435)
Analytical capacities			0.078	(0.048)	−0.028	(0.043)
Personal network			0.061*	(0.030)	0.047	(0.027)
Person-organization fit			0.359***	(0.033)	0.162***	(0.037)
Experience working in the public sector (Years)			0.014*	(0.006)	0.014*	(0.006)
Culture—Rational					0.178***	(0.039)
Culture—Group					−0.001	(0.042)
Culture—Developmental					0.051	(0.040)
Culture—Hierarchical					−0.005	(0.027)
Resources—Accessibility					0.235***	(0.034)
Resources—Time					0.070*	(0.030)
Resources—People					0.069**	(0.030)
Resources—Budget					−0.084**	(0.029)
Policy autonomy					0.030	(0.030)
Politicization					−0.006	(0.024)
Age (Years)	0.008	(0.005)	−0.002	(0.007)	−0.009	(0.006)
Gender (Female)	−0.097	(0.093)	−0.032	(0.081)	0.001	(0.072)
Education (> MA)	0.225	(0.169)	−0.006	(0.150)	0.057	(0.133)
ICC (departments)	0.043		0.040		0.028	
N participants	438		437		437	
Conditional R^2	0.056		0.300		0.485	

Note: Significance codes: * <0.05 , ** <0.01 , *** <0.001 .

and adequate staff (Est. = 0.069, $p=0.003$) are statistically significantly and positively associated with perceived EIPM. Among these, easy access to evidence appears to be the most influential factor. Surprisingly, we find a statistically significant and negative association between available budget and perceived EIPM (Est. = -0.084 , $p=0.004$). Additionally, we find no statistically significant association between the level of perceived policy formulation and implementation autonomy and perceived EIPM (Est. = 0.030 , $p=0.308$) nor between the perceived extent to which politicians interfere in the day-to-day operations of organizations (politicization) and perceived EIPM by those organizations (Est. = -0.006 , $p=0.798$).

In terms of individual-level factors of perceived use of EIPM, we only find a statistically significant (positive) association between person-organization fit and perceived use of EIPM (Est. = 0.162 , $p<0.000$) and between a person's years of experience working in the public sector and their assessment of organizational use of EIPM (Est. = 0.014 , $p=0.014$). We find no statistically significant association between individuals' analytical capacities or personal network and perceived EIPM. Interestingly, a persons' network appears mediated by organizational factors, as a statistically significant positive association between personal network and perceived EIPM disappears when organizational factors are added to the model. Finally, we observe that department of employment only accounts for a small amount of variance of respondent's perceived attachment to EIPM: about 3% (ICC = 0.028).

5 | Discussion

The primary objective of this study was to deepen our understanding of how organizational- and individual-level factors are associated with the use of evidence in public organizations. It is important to note that our focus is on perceived levels of organizational evidence use, which are measured subjectively through self-reporting. The results show that policy officials in Flanders are relatively positive about the utilization of evidence within their organization. They indicate that, overall, the public organizations for which they work value proven results, track the outcomes they create, evaluate the programs they develop, analyze the programs they implement, and use research findings to guide decision and policy making.

The study provides evidence for multiple organizational- and individual-level correlates of perceived organizational EIPM. Regarding the organizational-level factors, we found a positive and significant association between the perceived level of rational culture within an organization and its perceived use of EIPM (H1 supported). This association was not observed for development culture (H2 not supported). These findings partially align with previous research by Hall and Van Ryzin (2019) and reinforce the notion that goal-oriented organizations prioritizing rational and efficient work processes tend to be more inclined toward EIPM. Furthermore, we found a positive and statistically significant association between respondents' perceptions of easy access, sufficient time, and adequate staff and their assessment of organizational EIPM use (H3–H5 supported). Of these, the ready availability of evidence emerges as the most influential factor.

Yet, contrary to our expectations, we observe a negative and statistically significant association between perceived budget and perceived evidence use (H6 not supported). This outcome is surprising and puzzling. At least it suggests that even when budgets are perceived to be smaller, it does not necessarily preclude the perception of working in an evidence informed manner. It underscores the need for enhanced empirical understanding of how public officials negotiate and manage budgets to support evidence use in public organizations (Shaxson et al. 2024). Additionally, we included novel organizational variables into the model, including policy autonomy and politicization, which, contrary to our initial expectations, displayed no significant associations with perceived levels of EIPM within the organization (H7 and H8 not supported). This result could imply that political influence on the use of evidence within administrative decision making is less decisive.

Regarding the individual-level factors, we found a positive and statistically significant association between person organizational fit and perceived organizational EIPM (H12 supported). We add to the existing evidence that person organization fit is a crucial element to stimulate EIPM within public organizations (Hall and Van Ryzin 2019). Contrary to our expectations, we found a positive, statistically significant association between public officials' years of experience in the public sector and their perceptions of organizational EIPM use (H11 not supported) (we hypothesized a negative association). It appears that officials with more seniority are more acquainted with the role of evidence in the policy process (Howlett and Newman 2010; Newman et al. 2017). Finally, we did not find a positive and statistically significant association between policy officials' analytical capacities and personal network, and their perceptions of organizational EIPM use (H9 and H10 not supported). Interestingly, policy officials' personal network appears mediated by organizational factors, as it loses statistical significance when including organizational factors into the model.

We interpret and discuss our results in light of four important nuances. First, we cannot discount the possibility of social-desirability bias. Self-report questionnaires are susceptible to respondents' tendencies to provide answers that are perceived as socially acceptable (Kim and Kim 2016). In the context of EIPM research, respondents may inflate their responses to present themselves and their organizations in a manner that they perceive as more in line with contemporary evidence-based norms and rhetoric. Second, the results may be influenced by self-selection bias, as individuals with a stronger commitment to EIPM might have been more inclined to take part, potentially leading to an overrepresentation of pro-EIPM perspectives. When comparing the FTE distribution across policy domains in the Flemish Government, we notice that policy domains with a strong focus on policy and evidence informed work, such as Economy, Science, and Innovation, are overrepresented in our sample, while domains with a higher proportion of technical and operational staff, such as Mobility and Public Works, are underrepresented. A detailed table covering all 10 policy domains is included in the Appendix D. Third, given the relatively recent introduction of the NERD scale and the absence of subsequent field research, we lack comparative benchmarks with other policy regimes in different contexts and countries, to fully interpret the self-reported level of Flemish public organizations. Without

a standardized scaling instrument preceding the NERD scale, it is challenging to determine whether these self-reported scores align above, around, or below average compared to other policy contexts (Nelson et al. 2023). Building upon the findings of this study, future research could commence assessing and comparing EIPM levels across various public organizational contexts and cultures (Bandola-Gill et al. 2024).

The aim of the study was to gain insights into how organizational and individual factors are associated with evidence use in public organizations. Our contribution stems from replicating and validating the NERD scale, expanding the range of explanatory factors for EIPM, and applying this in a consensus-based and neo-corporatist administrative context. Further research could expand upon this study in various ways. First, by employing more objective measures and independent data sources (e.g., the explicit uptake of evidence in policy documents) to assess the variables used in this study, complementing the results of self-reporting with actual evidence-related behaviors and practices (see e.g., Jørgensen 2023). Second, by integrating new explanatory variables into the model, such as public leadership type, red tape, or data maturity. Third, by unpacking the underlying mechanism of the factors driving EIPM in more depth through methods such as within-case process tracing (Beach 2016) and mixed-methods approaches (Hendren et al. 2018). Fourth, by conducting comparative studies, we could comprehend how evidence use differs across countries or regions, considering cultural, political, and institutional factors. Fifth, by extending the scope to the political dimension of EIPM, examining how evidence is used by political actors, such as executive politicians, members of parliament, and members of ministerial cabinets.

6 | Conclusion

Public organizations' and public officials' use of evidence in policy making is influenced by a combination of organizational and individual factors. By exploring a wide range of variables, we provide a more nuanced understanding of the factors driving evidence use in public administration. These insights offer guiding principles for public organizations committed to EIPM, showing that establishing a rational organizational culture, allocating adequate resources, and optimizing person-organization fit are essential steps in fostering an environment that supports evidence use. To advance the EIPM field, future research could explore new data sources, variables, contexts, and actors.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- Afsar, B., Y. Badir, and M. M. Khan. 2015. "Person-Job Fit, Person-Organization Fit and Innovative Work Behavior: The Mediating Role of Innovation Trust." *Journal of High Technology Management Research* 26, no. 2: 105–116. <https://doi.org/10.1016/j.hitech.2015.09.001>.
- Amara, N., M. Ouimet, and R. Landry. 2004. "New Evidence on Instrumental, Conceptual, and Symbolic Utilization of University Research in Government Agencies." *Science Communication* 26, no. 1: 75–106. <https://doi.org/10.1177/1075547004267491>.
- Bandola-Gill, J., N. A. Andersen, R. Leng, V. Pattyn, and K. E. Smith. 2024. "A Matter of Culture? Conceptualizing and Investigating 'Evidence Cultures' Within Research on Evidence-Informed Policymaking." *Policy and Society* 43, no. 4: 397–413. <https://doi.org/10.1093/polsoc/puae036>.
- Bates, D. M., M. Mächler, B. Bolker, and S. Walker. 2015. "Fitting Linear Mixed-Effects Models Using Lme4." *Journal of Statistical Software* 67, no. 1: 1–48. <https://doi.org/10.18637/jss.v067.i01>.
- Beach, D. 2016. "It's All About Mechanisms—What Process-Tracing Case Studies Should be Tracing." *New Political Economy* 21, no. 5: 463–472.
- Bekkers, V., M. Fenger, and P. Scholten. 2017. "Public Policy in Action." In *Perspectives on the Policy Process*. Edward Elgar Publishing Limited.
- Belkhdja, O., N. Amara, R. Landry, and M. Ouimet. 2007. "The Extent and Organizational Determinants of Research Utilization in Canadian Health Services Organizations." *Science Communication* 28, no. 3: 377–417.
- Blom-Hansen, J., M. Baekgaard, and S. Serritzlew. 2016. "Shaping Political Preferences: Information Effects in Political-Administrative Systems." *Local Government Studies* 42, no. 1: 119–138. <https://doi.org/10.1080/03003930.2015.1084925>.
- Blom-Hansen, J., M. Baekgaard, and S. Serritzlew. 2021. "How Bureaucrats Shape Political Decisions: The Role of Policy Information." *Public Administration* 99, no. 4: 658–678. <https://doi.org/10.1111/padm.12709>.
- Blum, S., and V. Pattyn. 2022. "How Are Evidence and Policy Conceptualised, and How Do They Connect? A Qualitative Systematic Review of Public Policy Literature." *Evidence & Policy* 18, no. 3: 1–20. <https://doi.org/10.1332/174426421x16397411532296>.
- Bogenschneider, K., and B. N. Bogenschneider. 2020. "Empirical Evidence From State Legislators: How, When, and Who Uses Research." *Psychology, Public Policy and Law* 26, no. 4: 413–424.
- Bogenschneider, K., and T. J. Corbett. 2010. *Evidence-Based Policymaking: Insights From Policy-Minded Researchers and Research-Minded Policymakers*. Routledge/Taylor & Francis Group.
- Bolsen, T., and J. N. Druckman. 2015. "Counteracting the Politicization of Science." *Journal of Communication* 65, no. 5: 745–769. <https://doi.org/10.1111/jcom.12171>.
- Boswell, J. 2018. "What Makes Evidence-Based Policy Making Such a Useful Myth? The Case of NICE Guidance on Bariatric Surgery in the United Kingdom." *Governance* 31, no. 2: 199–214. <https://doi.org/10.1111/gove.12285>.
- Botterill, L. C., and A. Hindmoor. 2012. "Turtles All the Way Down: Bounded Rationality in an Evidence-Based Age." *Policy Studies* 33, no. 5: 367–379. <https://doi.org/10.1080/01442872.2011.626315>.
- Bozeman, B., S. Lindsay, J. P. Nelson, and S. Bretschneider. 2023. "Speaking Truth to Power ... or to the Ivory Tower? Public Affairs Researchers' Reports of Practitioners' Use of Their Research." *Public Management Review* 27, no. 3: 572–597. <https://doi.org/10.1080/14719037.2023.2252819>.
- Brans, M., D. Aubin, C. de Visscher, E. Fobé, A. Meert, and P. Squevin. 2022. "The End of the Party Politicisation of Public Administration. A Fata Morgana?" In *The Winter of Democracy. Partitocracy in Belgium*, edited by P. Baudewyns, M. Brans, M. Reuchamps, B. Rihoux, and V. Van Ingelgom, 137–164. Presses Universitaires de Louvain.
- Bundi, P., and V. Pattyn. 2022. "Trust, but Verify? Understanding Citizen Attitudes Toward Evidence-Informed Policy Making." *Public Administration* 101, no. 4: 1227–1246. <https://doi.org/10.1111/padm.12852>.

- Bundi, P., and P. Trein. 2022. "Evaluation Use and Learning in Public Policy." *Policy Sciences* 55, no. 2: 283–309. <https://doi.org/10.1007/s11077-022-09462-6>.
- Cairney, P. 2016. *The Politics of Evidence-Based Policy Making*. Palgrave Macmillan.
- Cantarelli, P., N. Belle, and J. L. Hall. 2023. "Information Use in Public Administration and Policy Decision Making: A Research Synthesis." *Public Administration Review* 83: 1667–1686. <https://doi.org/10.1111/puar.13735>.
- Capano, G., A. Cavalieri, and A. Pritoni. 2023. "Bureaucratic Policy Work and Analytical Capacities in Central Administrations in Greece, Italy, Portugal and Spain: The Results of a Comparative Survey." *International Review of Administrative Sciences* 90, no. 2: 385–401. <https://doi.org/10.1177/00208523231188506>.
- Capano, G., and A. Malandrino. 2022. "Mapping the Use of Knowledge in Policymaking: Barriers and Facilitators From a Subjectivist Perspective (1990–2020)." *Policy Sciences* 55, no. 3: 399–428. <https://doi.org/10.1007/s11077-022-09468-0>.
- Cheng, Y., L. Thompson, S. Wang, et al. 2024. "Evidence-Based Practices and US State Government Civil Servants: Current Use, Challenges, and Pathways Forward." *Public Administration Review* 85: 1–12. <https://doi.org/10.1111/puar.13878>.
- Cherney, A., B. Head, J. Povey, M. Ferguson, and P. Boreham. 2015. "Use of Academic Social Research by Public Officials: Exploring Preferences and Constraints That Impact on Research Use." *Evidence & Policy* 11, no. 2: 169–188. <https://doi.org/10.1332/174426514X14138926450067>.
- Dekker, S., and D. Hansén. 2004. "Learning Under Pressure: The Effects of Politicization on Organizational Learning in Public Bureaucracies." *Journal of Public Administration Research and Theory* 14, no. 2: 211–230. <https://doi.org/10.1093/jopart/muh014>.
- DeVellis, R. F., and C. T. Thorpe. 2022. *Scale Development: Theory and Applications*. 5th ed. SAGE Publications Inc.
- Dorren, L., and E. E. A. Wolf. 2023. "How Evidence-Based Policymaking Helps and Hinders Policy Conflict." *Policy & Politics* 51, no. 3: 486–507. <https://doi.org/10.1332/030557321x16836237135216>.
- European Commission. 2022. *Commission Staff Working Document. Supporting and Connecting Policymaking in the Member States With Scientific Research*. European Commission.
- Flyvbjerg, B. 2011. "Case Study." In *The Sage Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln, 301–316. Sage.
- Fobé, E. 2021. "Boosting the Capacity for Policy Analysis Among Public Officials." In *New Representative Evidence From Belgium*. Public Governance Institute.
- Fobé, E., B. De Peuter, M. Petit Jean, and V. Pattyn. 2017. "Analytical Techniques in Belgian Policy Analysis." In *Policy Analysis in Belgium*, edited by M. Brans and D. Aubin, 35–56. Bristol University Press.
- Fraussen, B., and V. Pattyn. 2023. "The Niche of Think Tanks in a Consensus—Seeking and Neo-Corporatist Policy Advisory System." *International Review of Administrative Sciences* 90, no. 3: 1–15. <https://doi.org/10.1177/00208523231211541>.
- French, R. D. 2019. "Is It Time to Give Up on Evidence-Based Policy? Four Answers." *Policy and Politics* 47, no. 1: 151–168. <https://doi.org/10.1332/030557318X1533033508220>.
- George, B., and S. K. Pandey. 2017. "We Know the Yin—But Where Is the Yang? Toward a Balanced Approach on Common Source Bias in Public Administration Scholarship." *Review of Public Personnel Administration* 37, no. 2: 245–270. <https://doi.org/10.1177/0734371X17698189>.
- González-Romá, V., and A. Hernández. 2023. "Conducting and Evaluating Multilevel Studies: Recommendations, Resources, and a Checklist." *Organizational Research Methods* 26, no. 4: 629–654. <https://doi.org/10.1177/10944281211060712>.
- Gould-Williams, J. S., A. M. S. Mostafa, and P. Bottomley. 2015. "Public Service Motivation and Employee Outcomes in the Egyptian Public Sector: Testing the Mediating Effect of Person-Organization Fit." *Journal of Public Administration Research and Theory* 25, no. 2: 597–622. <https://doi.org/10.1093/jopart/mut053>.
- Hall, J. L., and G. G. Van Ryzin. 2019. "A Norm of Evidence and Research in Decision-Making (NERD): Scale Development, Reliability, and Validity." *Public Administration Review* 79, no. 3: 321–329. <https://doi.org/10.1111/puar.12995>.
- Head, B. W. 2008. "Three Lenses of Evidence-Based Policy." *Australian Journal of Public Administration* 67, no. 1: 1–11. <https://doi.org/10.1111/j.1467-8500.2007.00564.x>.
- Head, B. W. 2010. "Reconsidering Evidence-Based Policy: Key Issues and Challenges." *Policy and Society* 29, no. 2: 77–94. <https://doi.org/10.1016/j.polsoc.2010.03.001>.
- Head, B. W. 2016. "Toward More 'Evidence-Informed' Policy Making?" *Public Administration Review* 76, no. 3: 472–484. <https://doi.org/10.1111/puar.12475>.
- Hendren, K., Q. E. Luo, and S. K. Pandey. 2018. "The State of Mixed Methods Research in Public Administration and Public Policy." *Public Administration Review* 78, no. 6: 904–916. <https://doi.org/10.1111/puar.12981>.
- Howlett, M. 2009. "Policy Analytical Capacity and Evidence-Based Policy-Making: Lessons From Canada." *Canadian Public Administration* 52, no. 2: 153–175. https://doi.org/10.1111/j.1754-7121.2009.00070_1.x.
- Howlett, M., and J. Newman. 2010. "Policy Analysis and Policy Work in Federal Systems: Policy Advice and Its Contribution to Evidence-Based Policy-Making in Multi-Level Governance Systems." *Policy and Society* 29, no. 2: 123–136. <https://doi.org/10.1016/j.polsoc.2010.03.004>.
- Jahn, D. 2016. "Changing of the Guard: Trends in Corporatist Arrangements in 42 Highly Industrialized Societies From 1960 to 2010." *Socio-Economic Review* 14, no. 1: 47–71. <https://doi.org/10.1093/ser/mwu028>.
- Jakobsen, M., and R. Jensen. 2015. "Common Method Bias in Public Management Studies." *International Public Management Journal* 18, no. 1: 3–30. <https://doi.org/10.1080/10967494.2014.997906>.
- Jasanoff, S. 1990. *The Fifth Branch: Science Advisors as Policy Makers*. Harvard University Press.
- Jennings, E. T., and J. L. Hall. 2012. "Evidence-Based Practice and the Use of Information in State Agency Decision Making." *Journal of Public Administration Research and Theory* 22, no. 2: 245–266. <https://doi.org/10.1093/jopart/mur040>.
- Jørgensen, J. V. 2023. "Knowledge Utilisation Analysis: Measuring the Utilisation of Knowledge Sources in Policy Decisions." *Evidence & Policy. A Journal of Research, Debate and Practice* 20, no. 2: 205–225.
- Kelstrup, J. D., and J. V. Jørgensen. 2024. "Explaining Differences in Research Utilization in Evidence-Based Government Ministries." *Policy Sciences* 57, no. 2: 257–280. <https://doi.org/10.1007/s11077-024-09529-6>.
- Kim, S. H., and S. Kim. 2016. "National Culture and Social Desirability Bias in Measuring Public Service Motivation." *Administration and Society* 48, no. 4: 444–476. <https://doi.org/10.1177/0095399713498749>.
- Kislov, R., P. Wilson, G. Cummings, et al. 2019. "From Research Evidence to 'Evidence by Proxy'? Organizational Enactment of Evidence-Based Health Care in Four High-Income Countries." *Public Administration Review* 79, no. 5: 684–698. <https://doi.org/10.1111/puar.13056>.
- Knott, J., and A. Wildavsky. 1980. "If Dissemination Is the Solution, What Is the Problem?" *Knowledge: Creation, Diffusion, Utilization* 1, no. 4: 537–578. <https://doi.org/10.1177/107554708000100404>.

- Kristof-Brown, A. L., R. D. Zimmerman, and E. C. Johnson. 2005. "Consequences of Individuals' Fit at Work: A Meta-Analysis of Person–Job, Person–Organization, Person–Group, and Person–Supervisor Fit." *Personnel Psychology* 58, no. 2: 281–342.
- Lancaster, K., T. Rhodes, and M. Rosengarten. 2020. "Making Evidence and Policy in Public Health Emergencies: Lessons From COVID-19 for Adaptive Evidence-Making and Intervention." *Evidence and Policy* 16, no. 3: 477–490. <https://doi.org/10.1332/174426420X15913559981103>.
- Landry, R., M. Lamari, and N. Amara. 2003. "The Extent and Determinants of the Utilization of University Research in Government Agencies." *Public Administration Review* 63, no. 2: 192–205. <https://doi.org/10.1111/1540-6210.00279>.
- Leong, C., M. Howlett, and T. Lai. 2022. "Governing Complex Environmental Policy Mixes Through Institutional Bricolage: Lessons From the Water-Forestry-Energy-Climate Nexus." *Journal of Environmental Policy & Planning* 24, no. 5: 540–552.
- Lüdecke, D., M. Ben-Shachar, I. Patil, P. Waggoner, and D. Makowski. 2021. "Performance: An R Package for Assessment, Comparison and Testing of Statistical Models." *Journal of Open Source Software* 6, no. 60: 3139. <https://doi.org/10.21105/joss.03139>.
- MacKillop, E., and J. Downe. 2023. "What Counts as Evidence for Policy? An Analysis of Policy Actors' Perceptions." *Public Administration Review* 83, no. 5: 1037–1050. <https://doi.org/10.1111/puar.13567>.
- Mavrot, C., and V. Pattyn. 2022. "The Politics of Evaluation." In *Handbook on the Politics of Public Administration*, edited by A. Ladner and F. Sager, 244–255. Edward Elgar Publishing.
- Migchelbrink, K., P. Raymaekers, V. Pattyn, and P. De Smedt. 2024. "Public Officials' Motivated Reasoning and Their Interpretation of Policy Information." *Public Management Review*: 1–27. <https://doi.org/10.1080/14719037.2024.2387178>.
- Moynihan, D. P., and S. K. Pandey. 2007. "The Role of Organizations in Fostering Public Service Motivation." *Public Administration Review* 67, no. 1: 40–53. <https://doi.org/10.1111/j.1540-6210.2006.00695.x>.
- Moynihan, D. P., and S. K. Pandey. 2010. "The Big Question for Performance Management: Why Do Managers Use Performance Information?" *Journal of Public Administration Research and Theory* 20, no. 4: 849–866. <https://doi.org/10.1093/jopart/muq004>.
- Munteanu, I., K. E. Newcomer, and C. Best. 2024. "Building an Evidence Engine to Promote More Responsive Government." *Public Administration Review*, no. (August): 1–15. <https://doi.org/10.1111/puar.13880>.
- Nelson, J. P., B. Bozeman, S. Bretschneider, and S. L. Lindsay. 2024. "How Do Academic Public Administration and Public Policy Researchers Affect Policymaking? Functional Groupings From Survey Data." *Scientometrics* 129, no. 1: 65–93. <https://doi.org/10.1007/s11192-023-04860-w>.
- Nelson, J. P., S. Lindsay, and B. Bozeman. 2023. "The Last 20 Years of Empirical Research on Government Utilization of Academic Social Science Research: A State-of-the-Art Literature Review." *Administration and Society* 55, no. 8: 1479–1528. <https://doi.org/10.1177/00953997231172923>.
- Newman, J., A. Cherney, and B. W. Head. 2016. "Do Policy Makers Use Academic Research? Reexamining the 'Two Communities' Theory of Research Utilization." *Public Administration Review* 76, no. 1: 24–32. <https://doi.org/10.1111/puar.12464>.
- Newman, J., A. Cherney, and B. W. Head. 2017. "Policy Capacity and Evidence-Based Policy in the Public Service." *Public Management Review* 19, no. 2: 157–174. <https://doi.org/10.1080/14719037.2016.1148191>.
- Nutley, S., I. Walter, and H. Davies. 2007. *Using Evidence: How Research Can Inform Public Services*. Policy 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, no. 2: 125–148. <https://doi.org/10.1177/1356389003009002002>.
- OECD. 2020. *Building Capacity for Evidence-Informed Policy-Making. Lessons From Country Experiences*. OECD Publishing.
- Oliphant, S., and M. Howlett. 2010. "Assessing Policy Analytical Capacity: Comparative Insights From a Study of the Canadian Environmental Policy Advice System." *Journal of Comparative Policy Analysis: Research and Practice* 12, no. 4: 439–445. <https://doi.org/10.1080/13876988.2010.495510>.
- Oliver, K., S. Innvar, T. Lorenc, J. Woodman, and J. Thomas. 2014. "A Systematic Review of Barriers to and Facilitators of the Use of Evidence by Policymakers." *BMC Health Services Research* 14, no. 1: 2. <https://doi.org/10.1186/1472-6963-14-2>.
- O'Reilly, C. A., J. Chatman, and D. F. Caldwell. 1991. "People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit." *Academy of Management Journal* 34, no. 3: 487–516.
- Ouimet, M., R. Landry, S. Ziam, and P. O. Bédard. 2009. "The Absorption of Research Knowledge by Public Civil Servants." *Evidence and Policy* 5, no. 4: 331–350. <https://doi.org/10.1332/174426409X478734>.
- Parkhurst, J. 2017. *The Politics of Evidence. From Evidence-Based Policy to the Good Governance of Evidence*. Routledge.
- Pattyn, V., S. Blum, E. Fobé, M. Pekar-Milicevic, and M. Brans. 2022. "Academic Policy Advice in Consensus-Seeking Countries: The Cases of Belgium and Germany." *International Review of Administrative Sciences* 88, no. 1: 26–42. <https://doi.org/10.1177/0020852319878780>.
- Pedersen, D. B. 2023. "An Evaluation Framework for Institutional Capacity of Science-for-Policy Ecosystems in EU Member States."
- Peters, B. G., and J. Pierre. 2004. "Politicization of the Civil Service: Concepts, Causes, Consequences." In *Politicization of the Civil Service in Comparative Perspective. The Quest for Control*, edited by B. G. Peters and J. Pierre, 1–14. Routledge.
- Pielke, R. 2007. *The Honest Broker: Making Sense of Science in Policy and Politics*. Cambridge University Press.
- Podsakoff, P. M., S. B. MacKenzie, and N. P. Podsakoff. 2012. "Sources of Method Bias in Social Science Research and Recommendations on How to Control It." *Annual Review of Psychology* 63: 539–569.
- Pollitt, C., and G. Bouckaert. 2017. *Public Management Reform: A Comparative Analysis-Into the Age of Austerity*. 4th ed. Oxford University Press.
- Qualtrics. 2005. "Qualtrics." Provo, Utah, USA.
- Quinn, R. E., and J. R. Kimberly. 1984. "Paradox, Planning, and Perseverance: Guidelines for Managerial Practice." In *Managing Organizational Translations*, edited by J. R. Kimberly and R. E. Quinn, 295–313. Dow Jones/Irwin.
- Ruggeri, K., F. Stock, S. A. Haslam, et al. 2024. "A Synthesis of Evidence for Policy From Behavioural Science During COVID-19." *Nature* 625, no. 7993: 134–147. <https://doi.org/10.1038/s41586-023-06840-9>.
- Schlauffer, C., I. Stucki, and F. Sager. 2018. "The Political Use of Evidence and Its Contribution to Democratic Discourse." *Public Administration Review* 78, no. 4: 645–649. <https://doi.org/10.1111/puar.12923>.
- Shaxson, L., R. Hood, A. Boaz, and B. Head. 2024. "Negotiating the Budget for Evidence-Informed Policy-Making: Insights From a UK Government Department." *Public Money & Management* 44, no. 6: 533–542. <https://doi.org/10.1080/09540962.2024.2308003>.
- Strassheim, H., and P. Kettunen. 2014. "When Does Evidence-Based Policy Turn Into Policy-Based Evidence Configurations, Contexts and Mechanisms." *Evidence and Policy* 10, no. 2: 259–277. <https://doi.org/10.1332/174426514X13990433991320>.

- van den Bergh, J., J. Castro, S. Drews, et al. 2021. "Designing an Effective Climate-Policy Mix: Accounting for Instrument Synergy." *Climate Policy* 21, no. 6: 745–764.
- Verhoest, K., B. G. Peters, G. Bouckaert, and B. Verschuere. 2004. "The Study of Organisational Autonomy: A Conceptual Review." *Public Administration and Development* 24, no. 2: 101–118. <https://doi.org/10.1002/pad.316>.
- Verschuere, B., and D. Vancoppenolle. 2012. "Policy-Making in an Era of Agencification: An Exploration of Task Divisions Between Politicians, Core Departments and Public Agencies." *Policy and Society* 31, no. 3: 249–258. <https://doi.org/10.1016/j.polsoc.2012.07.006>.
- Vesely, A., A. Wellstead, and B. Evans. 2014. "Comparing Sub-National Policy Workers in Canada and The Czech Republic: Who Are They, What They Do, and Why It Matters?" *Policy and Society* 33, no. 2: 103–115.
- Weiss, C. H. 1995. "The Haphazard Connection: Social Science and Public Policy." *International Journal of Educational Research* 23, no. 2: 137–150.
- Wellstead, A. M., R. C. Stedman, and M. Howlett. 2011. "Policy Analytical Capacity in Changing Governance Contexts: A Structural Equation Model (Sem) Study of Contemporary Canadian Policy Work." *Public Policy and Administration* 26, no. 3: 353–373.
- Xu, C., Y. Cheng, S. Wang, W. Merrick, and P. Carter. 2024. "Evaluating Use of Evidence in U.S. State Governments: A Conjoint Analysis." *Public Administration Review*: 1–19. <https://doi.org/10.1111/puar.13903>.

Appendix A

Assessment of Common Source Bias Using Variance Inflation Factors

In order to assess whether common source bias or common method bias affected the results of our analysis, we conducted an assessment of common source bias by calculating the generalized variance inflation factors (VIF) for the fixed effects in our three models (Lüdtke et al. 2021). Generalized VIF values provide an indication of common

source bias as they represent the correlations between the fixed effects in the model. Generalized VIF values between 5 and 10 are considered indicative of inflated correlations between the fixed effects, with VIF values above 10 being indicative of problematic correlations. In the tables below, we present the generalized VIF values (within a 95% confidence interval) for our three models. The analysis does not point toward any problematic cases of inflated correlations between the fixed effects. In fact, the highest VIF value does not exceed 2.6.

Variable	Model 1		Model 2		Model 3	
	Gen. VIF	VIF 95% CI	Gen. VIF	VIF 95% CI	Gen. VIF	VIF 95% CI
Analytical capacities			1.49	(1.34–1.71)	1.61	(1.44–1.85)
Personal network			1.44	(1.30–1.65)	1.51	(1.35–1.72)
Person-organization fit			1.03	(1.00–1.60)	1.74	(1.55–2.00)
Experience working in the public sector (Years)			2.46	(2.14–2.87)	2.57	(2.24–2.99)
Culture—Rational					1.46	(1.32–1.67)
Culture—Group					1.67	(1.49–1.92)
Culture—Developmental					2.03	(1.79–2.35)
Culture—Hierarchical					1.15	(1.07–1.33)
Resources—Accessibility					1.62	(1.45–1.86)
Resources—Time					2.00	(1.76–2.31)
Resources—People					1.57	(1.41–1.80)
Resources—Budget					1.90	(1.68–2.19)
Policy autonomy					1.35	(1.23–1.54)
Politicization					1.29	(1.17–1.47)
Age (Years)	1.04	(1.00–1.54)	2.48	(2.16–2.89)	2.60	(2.26–3.02)
Gender (Female)	1.04	(1–1.58)	1.06	(1.01–1.33)	1.12	(1.05–1.30)
Education (> MA)	1.00	(1-inf.)	1.06	(1.01–1.33)	1.10	(1.03–1.29)

Appendix B

Factor Analysis of the NERD Measurement Instrument

We conducted principal components factor analysis with Varimax (orthogonal) rotation of the 6-item questionnaire comprising the NERD measurement instrument. For this analysis, we used the completed questionnaires of all $n=438$ respondents included in the analysis presented in our manuscript. We checked whether the items were sufficiently correlated for a factor analysis using the Kaiser-Mayer-Olkin test for sampling adequacy, which provided us with a very good sampling adequacy of $KMO=0.83$. Next, we analyzed the number of factors we wanted to retain from the factor analysis using a scree-plot analysis. The scree-plot is presented below and indicates that a one-factor solution provides an excellent reduction of variance in the data. We therefore decided to retain the one-factor solution presented in the original Hall and Van Ryzin (2019) article (Figure B1).

Finally, we analyzed the fit of the one-factor solution to the data. The results show that the one-factor solution has an Eigenvalue of 2.37 (well above the 1 threshold of the Kaiser-criterion), explaining about 40% of the variance in the data. Furthermore, all items load sufficiently well on the retained factor, with factor loadings ranging from 0.7 to 0.54. The results of this analysis, including the uniqueness of each item, are included in Table B1. Overall, we contend that the analysis provides solid support for the validity of the original measurement instrument as presented in the manuscript.

TABLE B1 | Factor analysis (NERD instrument), factor loadings, and uniqueness.

Components	Factor 1	Uniqueness
My organization values proven results.	0.64	0.59
My organization regularly evaluates its programs and activities.	0.70	0.51
We take an evidence-based approach to most things in my organization.	0.65	0.57
We don't do much to track our organization's outcomes.	0.65	0.58
Program analysis does little to help my organization get things done.	0.57	0.67
My organization doesn't rely much on research findings to guide the work it does.	0.54	0.71
Eigenvalue.	2.37	
Percentage of total variance.	0.39	

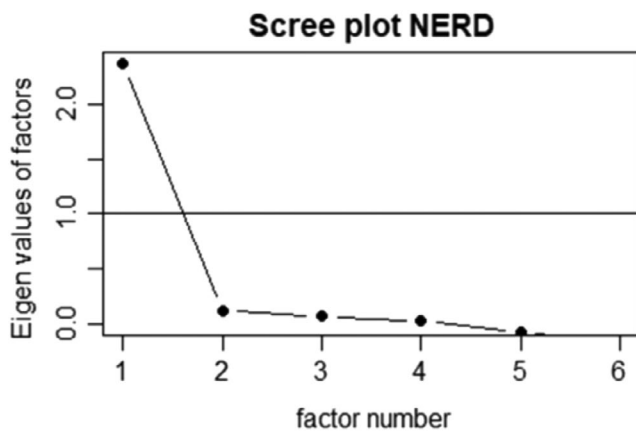


FIGURE B1 | Scree-plot NERD scale.

Appendix C

Survey Instrument

Variable source	
Outcome variable	
NERD-6, adapted by Hall and Van Ryzin (2019)	My organization values proven results. My organization regularly evaluates its programs and activities. We take an evidence-based approach to most things in my organization. We don't do much to track our organization's outcomes. Program analysis does little to help my organization get things done. My organization doesn't rely much on research findings to guide the work it does. (1 = strongly disagree, 7 = strongly agree)
Organizational-level variables	
Organizational culture, adapted by Moynihan and Pandey (2007)	
Rational culture	My organization is very result oriented. Our organization wants to get the job done. (1 = strongly disagree, 7 = strongly agree)
Development culture	My organization is a very dynamic and entrepreneurial place. In my organization people are willing to stick their necks out and take risks. (1 = strongly disagree, 7 = strongly agree)
Group culture	My organization is very people oriented. My organization is an extended family. People seem to share a lot of themselves. (1 = strongly disagree, 7 = strongly agree)
Hierarchical culture	In my organization bureaucratic procedures generally govern what people do. (1 = strongly disagree, 7 = strongly agree)
Organizational resources, adapted by Jennings and Hall (2012)	
Evidence accessibility	Policy-relevant information, data and knowledge are accessible in my organization. (1 = strongly disagree, 7 = strongly agree)
Time availability	In my organization there is sufficient time to gather and assess policy-relevant information, data and knowledge. (1 = strongly disagree, 7 = strongly agree)
Staff availability	In my organization there is adequate staff to gather and assess policy-relevant information, data and knowledge. (1 = strongly disagree, 7 = strongly agree)
Budget availability	In my organization there is sufficient budget to gather and assess policy-relevant information, data and knowledge. (1 = strongly disagree, 7 = strongly agree)
Policy autonomy	My organization has full autonomy in the formulation of policies. My organization has full autonomy in the implementation of policies. (1 = strongly disagree, 7 = strongly agree)
Politicization	In my organization politicians interfere with the day-to-day operations. (1 = strongly disagree, 7 = strongly agree)
Policy domain	Chancellery and Foreign Affairs /Environment/Work and Social Economy/Economy, Science and Innovation/Well-being, Health and Family/Culture, Youth, Sport and Media/Education and Training/Agriculture and Fishing/Mobility and Public works/Finance and Budget
Individual-level variables	
Individual policy analytical capacities, Newman et al. (2017)	I have the necessary skills to interpret results from statistical analyses. I have the necessary skills to collect and analyze policy-related data and information. I have the necessary expertise to apply the results of research studies in policy. (1 = strongly disagree, 7 = strongly agree)
Individual professional network	I deliberately contact and connect with experts and academics outside government. (1 = strongly disagree, 7 = strongly agree)
Person-organization fit	My values and goals match with the values and goals of my organization. (1 = strongly disagree, 7 = strongly agree)
Experience working in the public sector	How many years have you worked in the public sector, including at previous public sector employers
Age	In which year were you born?
Gender	Female/Male/Non-binary/prefer not to say
Education	No or primary education/lower secondary education/upper secondary education/post-secondary, non-tertiary education/short-cycle tertiary education/long-cycle tertiary education

Appendix D

Comparison of Sample Representation and FTE Distribution Across Policy Domains in the Flemish Government in 2023

Policy domain	N sample	Proportion sample	Proportion Flem. Gov.	VTE Flem. Gov. (2023)
Environment	98	22%	15%	4515
Chancellery	89	20%	14%	4114
Work and Social Affairs	48	11%	18%	5367
Economy, Sciences, and Innovation	46	11%	2%	715
Welfare, Health, and Family	37	8%	21%	6077
Culture, Youth, Sports, and Media	32	7%	4%	1166
Mobility and Public Works	27	6%	15%	4432
Education	27	5%	4%	1114
Agriculture and Fisheries	23	5%	3%	827
Finances and Budgeting	11	3%	4%	1190
Total	438	100%	100%	29,517

Note: Based on Statistics Staff Flemish Government on 31/12/2023: <https://www.vlaanderen.be/bedrijfsinformatie-vlaamse-overheid/statistieken/personeelsaantal#cijfers-per-beleidsdomein>.