Mind & Society
https://doi.org/10.1007/s11299-025-00333-0

Integrating behavioural insights in the policy process: on chances and hurdles identified by policy-makers and behavioural scientists

Florian Spitzer[1] · **Kira Abstiens**[1] · **Sophie Karmasin**[2]

Received: 25 February 2025 / Accepted: 7 August 2025

Abstract
This study investigates how behavioural insights are incorporated by policy-makers when designing policy measures. We conducted 81 in-depth interviews with both behavioural insights experts from governments, public administration, public organizations and universities, as well as with policy-makers in Austria interested in applying behavioural insights to their work. Our analysis highlights potential benefits of applying behavioural insights to public policy and discusses ethical considerations, practical challenges and broader hurdles within the public sector, limitations of the approach and methodological concerns. For each of these challenges, we present potential solutions to facilitate the effective integration of behavioural interventions and randomized controlled trials into public policy-making.

Keywords Behavioural insights · Behavioural public policy · Randomized controlled trials · Expert interviews

1 Introduction

Insights from the behavioural sciences have become more and more relevant for policy-makers and for private companies (Wendel 2020). Aside from using scientific knowledge on human behaviour in designing policy measures, incentives, and

✉ Florian Spitzer
Spitzer@ihs.ac.at

Kira Abstiens
Abstiens@ihs.ac.at

Sophie Karmasin
S.karmasin@karmasin.at

1 Research Group Social Sustainable Transformation, Institute for Advanced Studies (IHS), Josefstädter Straße 39, 1080 Vienna, Austria

2 Austrian Center for Psychotherapy and Psychology (ÖZP), Gablenzgasse 11/3/2, 1150 Vienna, Austria

Published online: 08 October 2025

institutions, the use of experimental approaches such as randomized controlled trials to evaluate the effectiveness of interventions or behavioural designs has increased substantially. Concerning the public sector, a pivotal moment for the rise in the application of the behavioural sciences was the foundation of the UK Behavioural Insights Team within the Cabinet Office in 2010 (John 2014). Other European countries such as the Netherlands or Denmark caught up quickly and founded similar units within their administrations (Lourenço et al. 2016). Further countries such as Austria or other Central or Eastern European countries like the Czech Republic, Poland, Slovakia or Bulgaria are not as far in the process and have established applied units for harvesting the knowledge from the behavioural sciences for public policy design just in recent years.

This paper provides a qualitative perspective on the application of behavioural insights (BI) to the public sector. Between May 2019 and January 2020,[1] we conducted in total 81 in-depth interviews with behavioural insights experts from behavioural units in public administrations and with academic researchers in the behavioural sciences in different European countries and the US (twelve countries in total). Moreover, we interviewed politicians, top-ranking public officials as well as managers of public institutions and enterprises in Austria to examine the 'demand' for behavioural insights and randomized controlled trials in a country in which the application of behavioural insights to the public sector has only been established recently. We add to a nascent literature (for a comprehensive overview, see Gofen et al. 2021) that provides an overview of recent developments in the implementation of the behavioural sciences for public policy design in different countries (e.g. Whitehead et al. 2014; Lourenço et al. 2016; OECD 2017; Afif et al. 2018; Kusseven and Yildiz 2021; Naru 2024). More theoretically oriented studies discuss the spread of behavioural insights in governments and international organizations (Strassheim and Korinek 2015; Gopalan and Pirog 2017; Feitsma and Whitehead 2019; John 2019) or take a closer look at experiences and the evolution of specific units (Lunn 2012; Van Bavel et al. 2013; Ball et al. 2017; John 2017; Sanders et al. 2018; Baggio et al. 2021).

Our qualitative, interview-based approach permits us to address a wide range of challenges, concerns and insights from relevant experts. Hence, it allows us to provide both a broad overview of the application of behavioural insights to policy-making as well as specific insights into practical issues associated with their implementation. We focus on questions that have not been discussed in detail in the existing literature such as typical barriers to applying behavioural insights in the public sector, how researchers and behavioural insights experts can address limitations and methodological issues, and strategies to convince public officials to apply behavioural insights and agree to use randomized controlled trials. The majority of our interviewees are based in Austria, but the scope of our study is international.

[1] While the delay between data collection and publication could be seen as a limitation, it also offers the opportunity to compare the earlier perspectives of policy-makers and behavioural insights experts with current trends and debates. We return to this point in the conclusion, where we discuss areas of alignment and divergence.

The few already existing qualitative studies on the topic deal mostly with the experience in a particular country (e.g. John 2014; Einfeld 2019; Feitsma 2018a, b, 2019; Feitsma, Schillemans 2019; Ball and Head 2021), with a comparison between two countries (Ball and Feitsma 2020), or with the private sector (e.g. Ackermann et al. 2020 on Switzerland). Ewert (2020) and Whitehead et al. (2017) conducted interviews with behavioural insights experts in more than two countries; however, the scope of their interviews is more narrowly defined than in this study or has a different focus. Whitehead et al. (2017) coin the term 'Neuroliberalism' and provide a historical and political-philosophical contextualisation of behavioural insights focussing on ethical, economic, political and constitutional implications. Ewert (2020) studies whether the work of behavioural units goes beyond classical nudging interventions. Ball (2021) analyses the different ways in which behavioural insights are adapted into policy-making depending on how practitioners interpret the function of behavioural public policy (BPP). Einfeld (2019) focuses on the relation between nudging and evidence-based policy-making. In a case study, Dewies et al. (2022) identify common challenges with the integration of behavioural insights into policy-making and develop a comprehensive framework on how to overcome them based on experiences within the Behavioural Insights Group in Rotterdam. Fels (2022) and Lecouturier et al. (2024) are two further examples of studies with an international scope; however, their sample size in terms of conducted interviews is considerably lower compared to our study. Lecouturier et al. (2024) concentrate on the conditions that must be fulfilled to ensure the production of high-quality and impactful behavioural research within behavioural science units. Fels (2022) uses a mixed-methods approach based on anonymised survey data as well as in-depth interviews with professionals working in the field of BPP either academically or as public servants, providing insights into the roles and motivations of public employees during collaboration and the consequences for research quality standards and transparency. The focus of this study is specifically on the conduction of field experiments in the public sector.

A unique feature of our study is that we interview top-ranking public officials about their assessments and expectations regarding the application of behavioural insights. Interviewees in this part of the sample have not much knowledge and experience with behavioural insights yet, but they are experts in their respective policy field and have profound insights into the procedures and cultural characteristics of the Austrian public administration. Their knowledge is therefore particularly valuable for identifying application possibilities as well as general chances and hurdles in an administration where behavioural insights are not yet applied systematically. Moreover, they can provide a rather unbiased perspective on the approach and state their expectations regarding the integration of behavioural insights to their work.

The remainder of the paper is structured as follows: Sect. 2 describes our methodology and the interview sample. Section 3 presents the results, i.e. a content analysis of the interviews. In this section, we first discuss the potentials of applying behavioural insights to public policy as well as typical questions and areas of application. We continue with discussing ethical considerations and more general hurdles in the public sector, when it comes to the application of behavioural insights, and how to overcome them. Furthermore, we delineate limitations of the approach, possible implications and how to manage expectations as well as methodological concerns raised by interviewees and how to address them. The final part of Sect. 3 provides an overview of the main results, the number of mentions by the interviewees and a contextualisation within the current literature. Section 4 concludes the paper.

2 Methodology

In this section, we describe in more detail our sample, recruitment of interviewees, content and structure of the interviews and how we analysed them.

Sample and recruitment Our sample is split in two parts: first, a 'demand side' consisting of Austrian representatives from the public sector without necessarily much own experience in applying behavioural insights, but holding high-rank positions in their organizations with the potential to influence whether applied behavioural insights are or will be applied in Austria; and second, a 'supply side' consisting of experts working in behavioural units in the public sector as well as researchers working on applied behavioural economics projects. The reason for having these two samples is to gain insights both from experts actively working on behavioural insights projects and from those potentially commissioning and overseeing projects. A priori, the supply side could have held very different perspectives than the demand side. The demand side consists of representatives from the Austrian federal administration (mostly section heads of ministries), the Austrian federal government (political civil servants, state secretaries and two federal ministers), the regional level (mostly top-rank public officials from the Austrian region Lower Austria) and managers of public institutions and enterprises. The supply side is composed of behavioural insights experts from 15 behavioural units in nine European countries (Austria, Belgium, Denmark, France, Germany, the Netherlands, Poland, Slovakia, UK) and two supranational organizations as well as researchers working on applied behavioural insights projects at universities and research institutions in seven countries (Austria, Denmark, Germany, Switzerland, Portugal, UK, USA). The selection of interview partners was based on intensive internet research with the goal to cover a broad range of policy fields and hierarchies in the public sector and a diverse sample of behavioural units in terms of countries, organizational structure and how long the unit had already existed. Overall, we sent e-mail invitations to 185 experts and received 81 positive replies, implying a return rate of 43.8% (see Table 1 for an overview).

Interview procedures We conducted the interviews between May 2019 and January 2020, mainly in the offices of interview partners, some at the sidelines of international conferences, and few via a video-conference tool. Interviews with German native speakers were held in German, all other interviews in English. Quotations from German interviews are translated to English for this paper (translated quotations are marked with "_tr" and the original German quotations are listed in Appendix D). Interviews were recorded and lasted on average slightly more than one hour. Participants' privacy was protected by pseudonymized data analysis and a separate storage of audio files and personal data. Moreover, quotations could be checked prior to publication to avoid that they contain sensible information. Before the interviews

Table 1 Conducted interviews by subcategories

	Number of invitations	Number of interviews	Interview-ID
Demand side			
Federal public administration (Austria)	35	11	D-PA-nn
Federal government (Austria)	35	10	D-GO-nn
Regional level (Lower Austria)	19	10	D-RE-nn
Public institutions and enterprises (Austria)	18	9	D-PE-nn
Supply side			
Behavioural units (international and in Austria)	45	21	S-U-nn
Academic researchers (international and in Austria)	33	20	S-R-nn

started, we explained procedures, anonymity precautions and data protection standards to the participants and asked for their consent.

Interview guidelines The interviews were based on a pre-defined set of questions (see Appendix A). Demand and supply side had separate interview guidelines; they followed, however, a similar structure to address the same topics from different perspectives. On the demand side, participants received, prior to the interview, a short summary including examples how behavioural insights can be applied in practice. Depending on the development, interviewers could change the order, skip questions or ask additional questions. On the demand side, participants were asked about their prior knowledge, experience and associations with the approach as well as a general assessment of the approach and the relevance for their work. On the supply side, the focus was on personal background, work environment and conducted projects. Topics discussed on both sides included possible areas for application, hurdles and limitations, how to convince stakeholders to apply behavioural insights in their domains, prerequisites for the successful application, the role of organizational structures as well as training on the job. This paper focusses particularly on those parts of the interviews in which participants discussed the potential for behavioural insights for the public sector, possible hurdles, limitations, methodological and ethical considerations, and most importantly, how those could be addressed and overcome.

Analysis To identify recurring themes and patterns in the interview data, we conducted a qualitative content analysis following the principles outlined by Mayring (2015). The analysis was based on audio recordings, interviewer notes taken during and after the interviews and detailed summaries (up to five-pages per interview) which were prepared by research assistants after relistening to the recordings. These summaries paraphrased the interviewees' responses to the interview questions and were then carefully reviewed by the researchers who conducted the interviews. In line with Mayring's approach to inductive category development, initial categories were derived directly from the material by both the researchers who conducted the interviews and research assistants working independently. These preliminary categories were then consolidated through a structured discussion process resulting in the final category system (see Appendix C). Following this, the summaries and relevant quotations from the interviews were systematically coded by the research assistants, assigning them to the agreed-upon categories. This assignment process was also reviewed by the researchers who conducted the interviews to ensure accuracy and coherence across the dataset. Based on the results of the initial analysis, the interview material was subjected to a second round of coding using a more fine-grained category system, in line with the previously outlined steps. These refined categories, which correspond to the rows presented in Table 2, served as the basis for systematically assessing how many interviewees supported each result.

3 Results

In this section, we present the results of the content analysis of the interviews. We discuss different aspects that arise when applying behavioural insights to public policy. Section 3.1 presents the potential of applying behavioural insights to the public sector, advantages of the approach and areas of application. Section 3.2 discusses how ethical considerations such as the claim of manipulation can be addressed. Section 3.3 describes hurdles and barriers in the public sector and how to overcome them, specifically by informing stakeholders (Sect. 3.4). Section 3.5 discusses the limitations of the approach and how to manage expectations. Section 3.6 presents inherent methodological issues of the approach and potential remedies. Section 3.7 provides an overview of the main results, the number of mentions and a contextualisation within the literature.

Generally, the assessments of demand and supply sides are surprisingly similar. Naturally, both sides emphasize different aspects, but for most topics similar aspects are mentioned. Results of demand and supply sides will therefore be presented jointly; however, apparent differences are pointed out when relevant. In the results section, we mostly talk about ‘behavioural interventions’ that include but are not limited to nudging. This view that behavioural insights are much broader than the concept of nudging (e.g. behaviourally informed incentives or tax policies, commitment devices or even the recommendation of hard regulation based on a behavioural analysis of the decision context) is shared by almost all participants on the supply side. By nudging, we mean a manipulation of the choice environment or the choice architecture that does not alter the monetary incentives for the decision maker. We refrain from providing the demand side with a clear-cut definition of a specific concept (such as nudging). Instead, we provide interviewees on the demand side with a rather broad perspective on what it means to apply insights from the behavioural sciences to public policy with a strong focus on practical examples. Given the rather limited experience and lack of theoretical grounding of the demand side, it is conceivable that in some cases the use of behavioural interventions in policy-making and the conduct of randomized control trials (RCTs) is considered together. This perception may be unsatisfactory from a theoretical perspective but fits well with the application of behavioural insights in practice where the design of behavioural interventions and the evaluation of their effectiveness through randomized controlled trials often go hand in hand (OECD 2019a).

3.1 Potential of applying behavioural insights to the public sector

Previous experiences The interviews show that the experience of the demand side with behavioural insights is rather limited in Austria. Some participants have crossed behavioural sciences during their study programs or read popular science books on the topic. Some are aware of the behavioural unit at the Institute of Advanced Studies that had been established shortly before the interviews were conducted or they know prominent behavioural scientists in Vienna. A small fraction has conducted behavioural-insight-related projects, but many of the mentioned projects are only in a broad sense related to behavioural insights.

Advantages of the approach Despite the rather limited experience, participants on the demand side have—based on the short summary they received prior to the interview—a pretty good grasp of the advantages of applying behavioural insights. Most prominently, behavioural insights instruments are seen as an effective alternative to hard regulations, preserving freedom of choice, leading to more sustainable and long-lasting behaviour change by establishing new habits. This seems particularly helpful in policy areas where working with hard regulation is next to impossible.

> Caries prophylaxis for children – there is a lot of potential in Austria, only 50% of children don't have caries. In Scandinavia it's 90%. I'm sure they don't tell parents by law that they have to brush their children's teeth; there have to be some behavioural patterns. (Interview D-PE-6_tr)

There is hope that interventions preserving freedom of choice are perceived more positively by citizens.

> Instead of [non-monetary] incentives you can also use enforcement and control, but at a price that you lose trust, which will lead to negative reactions. (Interview D-GO-10_tr)

Second, behavioural interventions are seen as an alternative to monetary incentives, allowing the public sector to save costs (e.g. by cost-effective interventions), avoid windfall gains or attrition (or alternatively, to improve the effectiveness of financial incentives through experimentation).

> In this context, money did not work. [You do not always need] financial incentives, but an altruistic motivation to donate blood, to do something good (Interview D-PE-6_tr)

Participants also mention the cost-effectiveness of the approach, meaning that small and inexpensive interventions can lead to relatively large behaviour change, as well as the innovativeness. Both aspects are seen as a valuable addition to the existing regulatory toolbox, supporting the modernization of public administration.

> […] it is relatively efficient and cost-effective, which is important for a public administration that is based on principles such as frugality, efficiency and expediency. (Interview D-GO-10_tr)

Evidence-based policy-making is another keyword that is often mentioned. Experiments and randomized controlled trials provide an effective tool to test causal effects of interventions and to detect potentially ineffective or counterproductive policy choices before they are rolled out on a larger scale. While some participants on the demand side see the potential of experimentation, they are generally more sceptical whether experimentation is politically feasible (see Sect. 3.3). It is therefore not surprising that evidence-based policy-making is predominantly mentioned by participants from the supply side.

> I think the key is to demand proper effect evaluations when you propose policies […]. In the end it comes down to whether it works or not. It's ridiculous how much policy is pushed through without any actual evidence for how effective it will be. (Interview S-U-1)

Generally, the advantages discussed above are also stated by the supply side. Beyond that, they see the multi-disciplinarity and variety of methods as important advantages for addressing policy problems from different perspectives and angles. This argument is supported by the fact that most experts in behavioural units work in a very interdisciplinary and diverse environment, both in terms of academic and professional backgrounds. Moreover, several qualitative and quantitative methods are employed in the typical process of behavioural insights projects that usually consist of identifying a behavioural problem first, and then developing and subsequently testing solutions and interventions.

Areas of application Based on the arguments above, participants on the demand side are generally quite open to applying behavioural insights to their work, and many of them intend to do so in the future. When asked about possible areas of application, they mention both specific projects in which behavioural insights could be applied as well as general areas of application that might be suitable. Most projects involve some form of behaviour change on the side of the citizens. This highlights the limited visibility of behavioural insights as applied to stakeholders beyond citizens, such as businesses and policy-makers. Compared to the supply side, suggested topics of application on the demand side are much broader and less related to existing classical behavioural insights. Some examples for topics mentioned on the demand side are increasing electromobility or green investments, creating awareness among farmers for diversity, supporting digitalization in small enterprises, increasing vaccination uptake, addressing old-age poverty of women by reducing part-time work, low-threshold access to art in the public space, or increasing acceptance of all-day schooling.

Aside from specific projects, the supply side also discusses, on a more abstract level, the topics and policy questions that are most suitable for applying behavioural insights. The conclusion often is that they can be applied to almost any topic.

> Any and all? I don't think there's a limit to what behavioural insights can do. (Interview S-U-12)

> […], then, yeah, to my mind, behavioural economics applies to everything. So, there is no sense in which there is subset of problems that are particularly behavioural and a subset of problems that you can still think of as rational. (Interview S-U-3)

Going into further detail, however, certain characteristics for typical questions and applications emerge. The most relevant feature mentioned is that individual human behaviour is at the core of the problem, which is, naturally, the case for most public policy problems. Particularly relevant are situations in which there is a gap between intended and actual behaviour (Sheeran and Webb 2016), which is often the case with health and environmental topics that involve behaviour change. Many participants state that it would be helpful if individuals targeted by the intervention are somewhat open to the intended behaviour change. In contrast, according to the interviews, it is perceived more difficult to apply behavioural insights in situations where people have very strong opinions or preferences.

More generally, interviewees express that behavioural insights can help to improve the communication between the state and its citizens, e.g. by helping to convey information in a clear and comprehensible way or by improving forms and paperwork.

> […] anything where you have a lot of communication, for instance on taxes,

> […] if you ask people every year to submit their taxes, these processes that are already in place offer great opportunities. (Interview S-U-5)

Finally, participants mention that simplifying processes or removing barriers is often at the core of behavioural interventions.

3.2 From manipulation towards transparency and other ethical principles

Manipulation, violation of privacy and reactance One of the most important issues surrounding discussions around behavioural interventions is that they might be perceived as manipulative, particularly if the state tries to nudge their citizens towards certain behaviours without them actually knowing.

> The question is always, when does it become manipulation, there you have to be very careful […] particularly as public administration. (Interview D-GO-10_tr)

Interviewees note that citizens might perceive the state trying to change their behaviour as a paternalistic violation of their freedom of choice, leading to reactance and rejection. Privacy concerns become even more pressing when behavioural instruments are used online, targeting specific groups based on their sociodemographic background. The scepticism in the population might be related to negative experiences in the private sector, where marketing often works with related methods or techniques, sometimes to the consumers' disadvantage.

> Such ‚behavioural techniques' are often used in marketing and they sometimes make consumers buy things they actually do not want to buy. (Interview D-PA-6_tr)

Transparency of policy goals Moreover, participants discuss that underlying policy goals could be perceived as less transparent compared to hard regulation. Interventions that are only effective when the target group is unaware or relying heavily on behavioural biases are therefore seen as problematic by participants on both sides.

> For me it is important that the people whose behaviour is changed do not get the feeling that they are taken advantage of or fooled and that they get informed to some extent if they wish. (Interview S-R-10_tr)

> If nudging only works if you do not inform citizens, or if you deceive them or throw them off the scent – that would be a disaster. (Interview S-R-15_tr)

The German speaking area is often mentioned as a 'special case', where scepticism towards behavioural instruments is particularly prevalent. Aside from structural reasons within the administration, participants speculate that negative experiences with manipulation by the state during the fascist past and its manipulative tools could provide an explanation for the scepticism.

Transparency as a priority Due to these considerations, behavioural insights experts put a very strong emphasis on transparency and ethical principles when conducting behavioural interventions (this view is shared by participants on the demand side). The public administration should inform the public about the underlying policy goals of interventions, psychological mechanisms at work as well as the approach itself, including advantages and disadvantages.

> To me, nudging means that the goal is clear, and transparent and that you communicate that accordingly. […] if you do not communicate the goal transparently, […] then it's manipulation. (Interview S-U-16_tr)

> Generally, I do not think lack of information is a problem, because most things are very transparent […] compared to everything else that is going on in public administration. (Interview S-R-2_tr)

It is also emphasized that policy goals should be the result of a democratic process and are not the responsibility of behavioural insights experts. In practice, they nonetheless have to justify policy goals regularly.

> People who are conducting nudging interventions often have to justify underlying policy goals more intensely compared to when laws, regulation or taxes are introduced, and that's not entirely coherent, because they also have clear goals. (Interview S-U-16_tr)

Focus on educating interventions Participants on the supply side stress that behavioural insights experts should, whenever possible, use educating interventions, focusing on information provision, instead of interventions that exploit or leverage behavioural biases. Such deliberation-promoting nudges that are often referred to as 'boosting' (Hertwig and Grüne-Yanoff 2017)—as an alternative to classical nudging—have the goal to provide individuals with comprehensible information in order to enable them to make better decisions on their own and focus on personal responsibility.

> We have for instance developed fact boxes that help the public to understand what is the benefit and the harm of certain procedures, like mammography, prostate cancer screening, and they enable people to reach an informed decision. (Interview S-R-6_tr)

On the other hand, slightly manipulative interventions are to some extent defended—also by participants on the demand side—in particular in comparison to other policy instruments, due to a specific policy goal that can be reached or because it is difficult to entirely abstain from manipulation when dealing with behaviour change.

> You could say, it's impossible not to manipulate. […] No matter how you design a decision context, it will always influence the decision to some extent. (Interview S-U-18_tr)

> Well, I cannot understand that. […] Excuse me, then every law is manipulation. (Interview D-PA-7_tr)

On the demand side, participants see national and international best-practice examples as an important lever for demonstrating that most interventions are innocuous and not harmful for citizens. The fact that a behavioural approach is applied by the public sector should be communicated openly and explained in detail. It is also suggested that certain ethical principles should be formulated in a code of conduct that is overseen by a board consisting of scientific experts in the area such as an internal review board or an ethics committee.

3.3 Hurdles and barriers in the public sector and how to overcome them

Unlike in other European countries such as the UK, the Netherlands or Denmark, the potential of applying behavioural insights to public policy has not fully been tapped in Austria. The same holds for other Central and Eastern European countries whose officials and scientists have been interviewed for this study. Recently established behavioural units face several obstacles in the public sector, particularly regarding the implementation of experimental evaluations. This section presents details on theses hurdles and barriers as well as suggested ways to overcome them.

Lack of knowledge or tradition In Austria, the biggest obstacle is the lack of knowledge about the potentials of the approach according to the demand as well as the supply side.

> I think, because many do not know about the discipline, they do not know what is possible and what isn't. […] They do not know about the potentials of the subject. (Interview D-GO-8_tr)

This problem is aggravated by the fact that in Austria the tradition of evidence-based policy-making is young and underpinning political decisions with scientific advice is not a general practice.

> Policy innovation is generally not Austria's strong suit. Conservation, however, is one of Austria's strengths – everything else is perceived as a risk. (Interview D-GO-7_tr)

According to the supply side, policy-makers' openness to innovations and willing to take risks are hindered by habits and status quo bias. Furthermore, especially the demand side notes that Austria's lack of a constructive error culture prevents policy-makers from trying new approaches.

Fear of negative publicity According to the interviewees this scepticism is driven by the fact that politicians tend to be afraid of how new approaches are perceived in the public and in the media. Because the behavioural insights approach is frequently associated with manipulation, it tends to provoke aversion and is expected to face limited public acceptance. Politicians are afraid of impairing their chances of re-election, and civil servants fear being made responsible if a project fails or is perceived negatively. New approaches are therefore mainly evaluated regarding their potential risks and less regarding their potentials.

> If something goes wrong, every minister is afraid […]. The media could write 'This is manipulation' […] (Interview D-GO-10_tr)

> Being politically exposed, you're immediately evaluated – in two weeks someone comes and asks how is it going with your pilot project. […] How can we make sure that political decision-makers are not accused of failure. (Interview D-GO-4_tr)

Aside from media and the public, there is also the peril that special interest groups or lobbies mobilize against the approach in case the results of interventions go against their interests. Politics would then have a hard time in defending an innovative policy intervention.

To address the lack of knowledge as well as the general scepticism, the interviewees emphasize that the advantages of the approach and potential benefits (see Sect. 3.1) need to be explained, ideally using national and international best-practice examples through workshops and trainings (see Sect. 3.4 for further details). The fear of negative publicity has to be countered by sensitive communication with the public and the media—explaining the details of the approach with intuitive examples. Interestingly, it turned out that words such as 'nudging' or 'experimentation' trigger negative associations. Further, it seems crucial to focus for initial projects on uncontroversial policy goals that have close to unanimous support.

Experiments take time and cost money A central part of applying behavioural insights to public policy is to conduct experimental evaluations in the form of randomized controlled trials to test whether proposed interventions are effective. Such evaluations have the potential to reduce public spending in the long-run (see Sect. 3.1). In the short-run, however, they need substantial investments and they take time before results are available. Both time and sufficient funding is difficult to get in the fast-moving policy world and in administrations that have a narrow understanding of the economical use of resources.

> The main obstacle is also the time pressure. […] the researcher […] is rather interested in finding out what's going on and carefully designing steps […] on the other side you have this policy-making mindset […], which is really targeted towards delivering solutions very fast. (Interview S-U-11)

Interviewees state that this requires a certain flexibility and concessions from researchers and behavioural insights experts to adapt to the requirements of the public sector and find a compromise between academic rigor and policy demands.

> I think there is also a challenge for the behavioural insight community to think of ways – and again that adaptation of academia and research to the needs of government […] to come up with tools that can actually be adapted to the timing of policy and politics. (Interview S-U-4)

'Wrong' or null results Participants from both sides assume that a certain lack of openness towards evidence-based decision making can create problems, as results of randomized controlled trials might contradict existing ideological convictions.

> I think politicians are somewhat afraid of transparency. If you intervene […] you can get results that contradict your political program. (Interview S-R-17_tr)

The interviews show that if resources have been invested in the development and testing of solutions, it can be difficult to 'justify' null results as this might create the impression that these resources have been wasted. Testing through experimentation can also lead to the impression that policy-makers do not know what they are doing—possibly creating an incorrect perception of incompetence. Here it appears to be important to try to establish a public culture and understanding that values long-term projects, and in which learning through mistakes and not knowing something is not seen as a weakness.

Lawyers, randomization and data protection Participants on both sides suggest that the scepticism towards social science methods and experimental approaches is to some extent driven by the dominance of legal professionals in the public sector.

> The German civil service tends to employ a lot of lawyers. […] And lawyers, given their academic training, might often not have a strong interest or background in evidence-based policy-making. (Interview S-U-21)

This can, at least partly, be related to a more deterministic way of thinking, but also to identifying legal problems with regard to data protection or randomization. Such legal requirements (together with general technical difficulties in terms of data access) are frequently described as practical hurdles when conducting randomized controlled trials. Here participants stress the importance to create a legal environment that allows for applying behavioural insights and conducting experimental evaluations based on randomization.

> […] if we use behavioural instruments, that doesn't fit to thinking in legal titles. […] You cannot just introduce new components without changing the legal framework; this is a new way of political thinking, which needs a legal foundation. (Interview D-PA-1_tr)

Finally, the supply side emphasizes the necessity of data availability and access as well as appropriate infrastructure for conducting experiments.

3.4 How to convince stakeholders to use behavioural insights and experiments

The sometimes-observed scepticism described in the previous section implies the necessity to convince relevant stakeholders in the public sector of the merits of behavioural insights. Participants on both sides comment that high-level political support, also from different groups in the public administration, is essential. This section briefly discusses the experiences of behavioural insight experts (either researchers seeking for cooperation with representatives from the public sector or of behavioural units within the administration trying to work with colleagues in other ministries), as well as the assessment of Austrian policy-makers on how they could be convinced by researchers.

Best-practice examples According to the interviewees, the most important aspect are best-practice examples in order to demonstrate what behavioural insights and RCTs can achieve and how others have been using them successfully. This could also inspire a desire to catch up, e.g. with governments in other countries. Empirical evidence generated through RCTs can be used to calculate potential savings by comparing the most effective intervention to a less successful, more expensive intervention.

> I think the key is to have good, striking examples. […] Ideally, you tell a story, because stories tend to be effective. (Interview D-PA-7_tr)

> I think success stories are very important and I think in the end only with success stories you can proof your added value. (Interview S-U-2)

The necessity of experimental evaluations can be demonstrated by showcasing examples with counterintuitive results that reveal existing biases, unintended consequences or experiments for which it is very difficult to predict the outcome.

> Even before you implement your experiment, go to all your senior leaders, say 'look, you guys are the cleverest people in this building […] what do you think is going to happen. […] they might get the direction right, they might not. They will most certainly […] get the magnitude wrong. (Interview S-U-3)

In general, it is emphasized that it is particularly important to demonstrate the difference between correlation and causation, using straightforward examples.

Workshops and trainings Participants assume that a crucial vehicle for showing best-practice examples and demonstrating the potentials of the approach are workshops and trainings. Well-established units use this approach to find cooperation partners, e.g. in other ministries.

> This is an introduction to behavioural insights for policy, which runs for two days; we run it […] four times a year and it's always full, it has a lot of success. (Interview S-U-13)

These workshops usually involve a short introduction to the theoretical background and a series of best-practice examples to demonstrate advantages and potentials of the approach. Group projects that apply the approach to the participants' policy problems allow participants to experience working with the approach. This seems to provide a good basis for future cooperation.

Specify benefits When communicating with stakeholders and potential cooperation partners in public administration, interviewees highlight the importance to demonstrate how they can benefit from cooperation (also in terms of their career), e.g. by publishing interesting results and to make cooperation as pleasant, engaging and rewarding as possible.

> If the success of a study is also the success of the cooperation partner […]. Then the success is attributed to this person and improves their careers prospects. […] You can reinforce that by saying 'that would not have been possible without the support of so-and-so'. (Interview S-R-5_tr)

This seems to be particularly relevant, as behavioural insights projects and the scientific approach often require personal and financial resources that tend to be scarce in the public sector, and outcomes are rather uncertain. Thus, some interviewees from the supply side suggest offering small initial projects for free.

Testimonials Participants stress the importance of testimonials from successful cooperations.

> Instead of we always telling people what they have to do [...], let somebody else who has worked together with us explain why it was successful for them. […] So, working together with these people and then asking a testimonial and put it on video, […] that is really helpful. (Interview S-U-5)

Interviewees from both the demand and supply side suggest strengthening cooperation between science and policy while fostering transdisciplinarity, for instance by appointing behavioural insights experts as contact points within public administration. Furthermore, they emphasize the importance of collaboration on an equal footing and the need to align research more closely with the requirements of policy-making.

Back doors In particular before developing a strong profile in applying behavioural insights, it can be difficult to attract projects, according to the interviewees. In such situations, a crisis or a problem that has not been solved for a long time can offer a good chance to advance the use of behavioural insights. Alternatively, it can be beneficial to attach oneself with other scientific approaches or frameworks that are already well-established in the public administration. Some participants from the demand side suggest integrating the behavioural approach into government programmes.

> […] use the costume of other already being implemented innovations. […] service design, design thinking and so on, are being more and more introduced into public policies. [...] so just attach yourself to this movement and show them 'okay we are doing something similar.' (Interview S-U-11)

Whom to address In terms of whom to address, participants mention that it might make sense not to focus exclusively on the federal level, as the described hurdles tend to be particularly high there, but on other policy actors as well, e.g. on the local or regional level or within public enterprises, organizations or agencies.

> […] try to find ways of not influencing directly policy-makers or political officials but try to influence or network with other [...] policy actors, who would be easier to attract. (Interview S-U-11)

Many interviewees from the demand side, and some from the supply side, emphasize the need for high-level political support, arguing that a top-down implementation offers the greatest potential for effectively advancing the approach. At the same time, involving the public—and particularly the media—was highlighted as an important additional pillar in advancing the approach.

3.5 Expectation management and limitations of the approach

Not a silver bullet A frequently re-occurring theme during the interviews is that behavioural insight should not be seen as a 'silver bullet', solving each and every policy problem, entirely replacing traditional policy instruments.

> It's expectation management: what BI can and cannot do. You know, we always say 'BI is not a silver bullet' – we cannot solve all problems. (Interview S-U-12)

> […] maybe it is not the solution in this context. You have to be careful not to see it as the solution for every problem. Like, if all you have is a hammer, every problem looks like a nail. (Interview D-GO-10_tr)

Participants on the supply side report that many politicians and civil servants are overly optimistic regarding what behavioural insights can do.

> Either people really do not believe in behavioural science because they think it's really soft or they are really enthusiastic about it and they think I can make magic happen. (Interview S-U-10)

On the other hand, high expectations are often created by the behavioural insights experts themselves, due to the need to 'sell' the approach in order to convince stakeholders to apply behavioural insights in their policy problems (see Sect. 3.4).

> For me behavioural economics is an interesting tool, but only one tool amongst many for policy-makers. […] There are limits of what you can do, obviously, so […] one has to be very careful about what one promises to do with that. (Interview S-R-9)

Behavioural interventions as a complement, not substitute From the perspective of the interviewees, setting the right expectations seems to be particularly important, as effect sizes of behavioural interventions are often comparably small. They might be financially relevant, if the target group is sufficiently large, but behavioural interventions often naturally lead to slower or smaller social changes in the short run than hard regulation. To address major societal challenges, behavioural interventions should therefore ideally be combined with other policy instruments instead of replacing them.

> For many of those really big problems like climate change, there is often another leaver that is not behavioural, right? So, in my mind […] an effective cap-and-trade system would be a much better way to reduce CO2 emissions than nudging people to reuse that towel […]. Behavioural insights […] shouldn't come at the expense of other leavers that may in fact be more effective […] (Interview S-U-3)

> There is the risk that policy-makers, once you have convinced them that behavioural insights is a good idea, now are like 'oh yeah, we can just nudge everyone, you know in the direction we want them to go. And then we don't have to make any bigger changes to the systems. (Interview S-U-21)

This goes along with a remark from the demand side, stating that behavioural insights should not become a political vehicle, e.g. to support the reduction of public spending.

> It should not become a political category; behavioural economics is a scientific discipline that can contribute to modern governance – by being evidence-based and scientific. (Interview D-PA-1_tr)

It is mentioned that often behavioural interventions can only be effective if the appropriate infrastructure exists—hence it is important to emphasize that providing the infrastructure cannot be replaced by behavioural interventions.

> They ask me, we want people to separate their trash […] but then people do not have the right bins in front of their house […], then how do you want me

> to change that? […] The basics should be in order before behavioural sciences can take you to the next level. (Interview S-U-10)

Particularly, in policy areas like criminal law, fighting poverty or organized crime behavioural insights might play a role in designing solutions, but can and should never replace traditional policy instruments, according to the participants. Behavioural interventions, particularly nudging instruments, are moreover less effective whenever targeted individuals have very strong preferences.

Moving beyond small-scale interventions Many participants on the supply side criticize that behavioural interventions are often small-scale, making minor changes to existing policies.

> I think often […] the types and ideas of interventions that are suggested appear to be […] small-cost, making changes to existing communication or the like. (Interview S-R-13)

> It's considered as extra, nice to have, but not need to have (Interview S-U-2)

To move beyond this, interviewees perceive that it is important to invest in a proper analysis of the decision context in order to design solutions tailored to this context and to interpret behavioural interventions broader than just as nudging exercises (e.g. including a behavioural optimization of tax or incentive systems). After the behavioural analysis of the decision problem, it should be evaluated carefully whether a behavioural intervention is indeed the most suitable solution, and behavioural insights experts should be open to recommending traditional policy instruments based on a behavioural analysis if they work better. Interviewees also stress the importance of combining behavioural insights with other disciplines and of using mixed-methods approaches to create sustainable solutions.

> I think there is a danger that if you take a very narrowly behavioural insights focused approach you might misunderstand or misrepresent actually what the causes of the problems are. There will be no single solution to many of these issues. […] But I think behavioural science is most powerful when it's combined with a more systematic approach and other disciplines. (Interview S-R-13)

3.6 Methodological concerns and how to address them

Aside from ethical considerations or other barriers, participants on the supply side also discuss issues more inherent to the method itself.

Scalability and macro effects Reminders might for instance be effective within the framework of a randomized controlled trial. It is, however, not clear whether they are still effective in an environment where reminders are used more frequently.

> But everybody seems to be doing it [sending reminders] and we know people have a limited bandwidth for dealing with information. […] our inter-

> ventions […] may be individually successful but collectively unsuccessful. (Interview S-U-3)

Misuse Even though behavioural interventions, in particular nudges, should, according to their definition (Thaler and Sunstein 2009) serve primarily their addressee, similar interventions are often used by companies in their own interest—to consumers' and citizens' disadvantage. Organizations with conflicting interests might be using behavioural interventions "against each other", impairing the effectiveness of e.g. consumer protection interventions.

> The US, they changed legislation, so it would become a little bit more difficult for people to build additional debts on their credit card […] and then what happened, is that those credit card companies, they fought back using all kinds of behavioural techniques […]. (Interview S-U-2)

Long-term effects According to the interviews, another important issue is long-term effectiveness, in particular when interventions address repeated behaviour. Most experiments demonstrate effectiveness in the short-run, but only few studies investigate whether behaviour change is sustainable in the long-run.

> I think a very big challenge is the […] long-term effects of BI implementations. And when the novelty wears off you need to like reinvent a solution. And I think that it's not a problem, it's just that people need to have in mind that BI is not a magic want, so it's like continuously creating new solutions because there is going to be new problems every day. (Interview S-U-6)

Publication bias Moreover, one participant suggest that the assessment of the effectiveness of behavioural interventions could be impacted by publication bias. Experiments involving successful interventions are more likely to get published in peer-reviewed journals, whereas unsuccessful interventions end up in the drawer with higher probability. Correspondingly, behavioural units showcase mostly successful interventions to convince stakeholders. This issue can be addressed by publishing all interventions, including null results (which behavioural units already do quite frequently, compared to academia; see DellaVigna and Linos 2022).

> I think you can earn credibility by publishing also the results of interventions, that did not have the anticipated effect. (Interview S-U-16_tr)

More research and tailored, scientifically supported solutions Generally, interviewees state that the most effective way to address the issues mentioned above is to invest in research that addresses factors like scalability, long-term effects or potential reactions of other institutions. Moreover, it seems important to be involved early in the policy cycle, to invest in a proper analysis of the decision environment and to cooperate closely with the institution at which the intervention is implemented.

> You really have to think in advance when you are designing, when you are making this diagnostical part, when you are framing the problem you have to tackle, then you really should look into possible behavioural processes, mechanisms that are present there. (Interview S-U-11)

Solutions that specifically target the decision environment instead of just applying standard behavioural interventions tend to have a higher potential for changing behaviour sustainably and for not interfering with other interventions. In this context, many interviewees stress the importance of conducting experiments to test and adapt these solutions effectively.

Finally, participants stress the importance of making sure that interventions receive proper scientific support and are subject to quality control, in order to counteract the impression that behavioural interventions can be implemented by anyone or simply copied from other countries or contexts.

> Since behavioural sciences are really intuitive and […] easy to communicate […], you have the impression that everybody can do that. […] people try to do it without knowing how to do it. So that's really important, to make sure that people with scientific background and knowledge do that and only them. (Interview S-U-13)

> But even the problems that you know have been solved previously with BI, you need to really be testing and understanding in your situation, what works and what doesn't. 'Cause like I said, descriptive norms worked in Mexico but nowhere else. […] Messenger effect works in one country, not in another country. (Interview S-U-12)

3.7 Summary of results, quantification and literature contextualisation

Table 2 provides an overview of the main results discussed in the preceding analysis. Drawing on the coding of our interview material, we indicate the number of interviewees who supported each result, distinguishing between the demand side ('D') and the supply side ('S') (see Table 1 for further abbreviations). While we acknowledge the limitations of quantifying qualitative data, we believe this approach offers a clearer sense of the relative weight of the arguments presented in the paper. For each result, we also include a brief contextualisation within the relevant literature. Given the large number of findings, these brief literature-based reflections are not intended to serve as exhaustive literature reviews. They are rather intended to provide illustrative connections to ongoing academic and practice-oriented discussions relevant to each result. For results concerning strategies to convince stakeholders to apply behavioural insights and conduct experiments, the contextualisation within the literature is provided collectively for all related findings.

Table 2 Summary of the main results

Result	Number of mentions	Discussion in the literature
A) (Expected) advantages of the approach		
Alternative to hard regulations • provides a softer alternative to strict regulatory measures • preserves citizens' freedom of choice	D-RE: 4/10 D-PA: 7/11 D-GO: 2/10 **D (total): 13/40** **S (total): 0/41**	Discussed controversially in the literature. Following Thaler and Sunstein (2009), nudges are often characterised as choice-preserving. However, more critical views (e.g. Dowding and Oprea 2023 or Grüne-Yanoff 2012) emphasise the reduction of citizens' autonomy and liberty due to manipulation. Dupoux et al. (2025) advocate incorporating behavioural interventions as part of a broader policy mix
Effective and sustainable behaviour change • enables effective policies • supports long-term behaviour change	D-RE: 3/10 D-PE: 3/9 D-PA: 4/11 D-GO: 2/10 **D (total): 12/40** S-U: 7/21 **S (total): 7/41**	While many contributions demonstrate the effectiveness of behavioural interventions (see Mertens et al. 2022 for an overview), Chater and Loewenstein (2023) argue that the effect of interventions targeting the individual level are often "disappointingly modest". They posit that focusing on the individual level diverts attention from the necessity of system-level change, which is imperative in order to achieve sustainable behaviour change. A rather critical view regarding the effectiveness of behavioural interventions is also expressed by Maier et al. (2022). Dupoux et al. (2025) present a framework that demonstrates the potential of behavioural insights to contribute to policy design at various levels, ranging from pure behavioural interventions to system-level change. For a direct reply to Chater and Loewenstein (2023), see Hallsworth (2023b)
Cost efficiency • offers an alternative to monetary incentives • increases the effectiveness of financial incentives • provides cost-effective interventions	D-RE: 2/10 D-PE: 3/9 D-PA: 1/11 D-GO: 3/10 **D (total): 9/40** S-U: 2/21 **S (total): 2/41**	There is evidence that behavioural interventions tend to be more cost-effective than traditional policy instruments like financial or tax incentives (Chetty et al. 2014; Benartzi et al. 2017; for a contradicting view and direct reply to Benartzi et al. 2017 see Tor and Klick 2022). In addition, there are many examples indicating that applying behavioural insights to the design of financial incentives can improve their effectiveness (see e.g. Patel et al. 2016 or Fryer et al. 2022)
Evidence through RCTs • tests causal effects of interventions • identifies ineffective or counterproductive policies	D-PE: 2/9 D-GO: 4/10 **D (total): 6/40** S-U: 1/21 S-R: 1/20 **S (total): 2/41**	There are many examples where RCTs provide indication of the ineffectiveness or counterproductivity of specific policy interventions (e.g. in crime prevention, Welsh and Rocque 2014, or prevention of teenage pregnancy, Brinkman et al. 2016)
Innovative, evidence-based approach • supports modernization of public administration	D-RE: 1/10 D-PE: 1/9 D-PA: 2/11 D-GO: 1/10 **D (total): 5/40** S-U: 4/21 S-R: 1/20 **S (total): 5/41**	Given the subjective nature of this assessment, locating examples in the literature that clearly support or contradict this statement is not straightforward

Table 2 (continued)

Result	Number of mentions	Discussion in the literature
Multi-disciplinarity & variety of methods • addresses policy problems from different angles	D-RE: 1/10 D-PE: 1/9 D-PA: 1/11 **D (total): 3/40** S-U: 3/21 S-R: 2/20 **S (total): 5/41**	Multi-disciplinarity & methodological diversity as a key element of applying behavioural insights to public policy is mentioned in most overview reports describing the approach such as OECD (2019a) or WHO (2024)
Broad area of application • applicable across various policy fields	D-RE: 3/10 D-PE: 4/9 D-GO: 1/10 **D (total): 8/40** S-U: 12/21 S-R: 3/20 **S (total): 15/41**	Documented extensively, e.g. in OECD (2017) or OECD (2019b)
B) Ethical considerations		
Transparency & information • public administrations should explain the BI approach • inform the public about policy goals and psychological mechanisms of interventions	D-RE: 2/10 D-PA: 1/11 D-GO: 5/10 **D (total): 8/40** S-U: 4/21 S-R: 4/20 **S (total): 8/41**	Argued for instance in Bruns and Paunov (2021). There is ample evidence that the effectiveness of behavioural interventions is not diminished if the underlying mechanism or the goal of the intervention is communicated transparently (see Bruns et al. 2018 for an example or Bruns and Paunov 2021 for an overview). John (2023) argues that from an ethical point of view awareness and reflection are generally preferable to passivity, though there are some exceptions. With regard to transparent communication, Villegas-Cho et al. (2018) state that "policy-makers should not use behavioural sciences for any purpose that they would not be willing to defend publicly."
Legitimacy of policy goals • policy goals should result from a democratic process • refrain from misuse of behavioural interventions to citizens' disadvantage	D-RE: 1/10 D-PA: 2/11 D-GO: 2/10 **D (total): 5/40** S-U: 2/21 S-R: 4/20 **S (total): 6/41**	Mentioned in Button (2018); John (2018) states that involvement of the public can increase the political legitimacy of behavioural interventions. Regarding potential misuse of behavioural interventions, see publications on the ethical use of behavioural insights, e.g. OECD (2019a) or OECD (2022)
Focus on educational interventions • focus on educating and 'boosting' instead of exploiting biases • view citizens as responsible agents and emphasize personal responsibility • use bias-exploiting interventions only when no alternative exists, and justified by policy goals	D-RE: 1/10 D-PE: 2/9 D-PA: 2/11 D-GO: 2/10 **D (total): 7/40** S-U: 1/21 S-R: 2/20 **S (total): 3/41**	See literature on boosting (e.g. Grüne-Yanoff 2012; Hertwig 2017; Hertwig and Grüne-Yanoff 2017; Paunov and Grüne-Yanoff 2023; Dowding and Oprea 2023; Hertwig et al. 2025). Moreover, Reisch and Sunstein (2016) find that Europeans are in favour of nudges that support legitimate policy goals
Definition of ethical principles • ethical principles should be formulated in a code of conduct	D-PA: 2/11 **D (total): 2/40** S-U: 1/21 **S (total): 1/41**	See OECD (2022) for an example of a good-practice guide for the ethical use of behavioural insight in public policy

Table 2 (continued)

Result	Number of mentions	Discussion in the literature
C) Hurdles and barriers in the public sector		
Lack of knowledge & tradition • Lack of knowledge about the approach • no tradition of incorporating empirical evidence • lack of a constructive error culture • status quo bias, habits • lack of openness & courage for new approaches	D-RE: 4/10 D-PE: 5/9 D-PA: 5/11 D-GO: 8/10 **D (total): 22/40** S-U: 12/21 S-R: 5/20 **S (total): 17/41**	Mentioned also in Curtis et al. (2018), Bandsma et al. (2021), Ghebreyesus (2021), Tomio et al. (2021), Linos (2023), Lecouturier et al. (2024) and Fels (2022)
Scepticism & fear of negative perception • Scepticism towards BI approach & experiments, association with manipulation • fear of negative publicity and expected lack of acceptance from the public • political concerns about undesirable or null results	D-RE: 2/10 D-PE: 2/9 D-PA: 5/11 D-GO: 8/10 **D (total): 17/40** S-U: 7/21 S-R: 6/20 **S (total): 13/41**	According to Pearce and Raman (2014), policy-makers are concerned about negative publicity of RCTs if they lead to null results or reveal unintended consequences. Similarly, Corduneanu-Huci et al. (2021) argue that evaluation studies can entail ideological and credibility costs for politicians and policy-makers. A rather sceptical stance toward experimental approaches in public policy is also reported in Fels (2022) and empirically demonstrated by Cardon and Lopoo (2024)
Limited resources • BI approach, especially experiments, costly and time consuming • political processes often fast-moving and dynamic	D-RE: 2/10 D-PE: 2/9 D-PA: 2/11 **D (total): 6/40** S-U: 13/21 S-R: 4/20 **S (total): 17/41**	Discussed in Maynard and Munafò (2018), mentioned in Oakley et al. (2003) and Bandsma et al. (2021). Fels (2022) highlights the challenges of using experimental approaches in collaboration with public actors, such as differing priorities regarding intervention testing and limited time resources. Hotz et al. (2024) identify limited financial, human, and time resources as barriers for conducting RCTs in a medical context
Legal and data-related restrictions • legal restrictions on randomization and data protection (e.g. through dominance of lawyers in the public sector) • lack of data availability, access and infrastructure	D-PA: 2/11 D-GO: 2/10 **D (total): 4/40** S-U: 5/21 S-R: 8/20 **S (total): 13/41**	Fels (2022) discusses ethical concerns associated with randomization in experiments in public policy. Escobal and Ponce (2020) address broader challenges related to testing public policies in developing countries, with particular emphasis on institutional barriers that emerge when interventions are implemented within state bureaucracies. Hotz et al. (2024) mention lack of infrastructure as a barrier

Table 2 (continued)

Result	Number of mentions	Discussion in the literature
D) How to convince stakeholders to use behavioural insights and experiments		
Use best-practice examples • illustrate the merits of the approach	D-RE: 2/10 D-PE: 5/9 D-PA: 5/11 D-GO: 5/10 **D (total): 17/40** S-U: 7/21 S-R: 4/20 **S (total): 11/41**	To the best of our knowledge, there is no extensive academic literature that directly addresses how policy-makers and stakeholders can be convinced to incorporate behavioural insights and/or experiments into their work. Lecouturier et al. (2024) highlight the importance of building and maintaining relationships with policy-makers, along with the reputation of behavioural insights (BI) units and a clear understanding of policy-makers' priorities and feasibility constraints. Starting with small-scale projects to support the adoption of behavioural insights is recommended—an approach also observed in other BI units (Ball et al. 2017) and in health policy (Curtis et al. 2018). The importance of mutual understanding between the priorities of policy-makers and those of BI groups is likewise emphasized by Fels (2022). The aspects identified in this category reflect key elements of the day-to-day work of behavioural insights (BI) units—particularly centralized units or those situated outside of government (see Lourenço et al. (2016) for a classification)—which routinely engage in efforts to promote the adoption of BI approaches and experimentation among policy-makers. To some extent, this knowledge is captured in guidance documents on how to establish behavioural insights functions within public administration (e.g. WHO 2024 or OECD 2024) or in comparative overviews of BI integration across countries (e.g. Lourenço et al. 2016)
Conduct workshops, trainings and conferences • demonstrate merits of the approach • provide hands-on experience with BI tools	D-RE: 5/10 D-PE: 1/9 D-PA: 1/11 D-GO: 2/10 **D (total): 9/40** S-U: 6/21 S-R: 3/20 **S (total): 9/41**	
Showcase benefits for cooperation partners • publish results • use testimonials • offer small initial projects for free • prove intuition wrong / reveal own biases • show how other interventions failed or backfired	D-RE: 4/10 D-PE: 6/9 D-PA: 2/11 D-GO: 6/10 **D (total): 18/40** S-U: 13/21 S-R: 7/20 **S (total): 20/41**	
Establish cooperation between science and policy • foster transdisciplinarity • make BI experts available as contacts in ministries • ensure cooperation on an equal footing • adapt research to policy needs	D-RE: 3/10 D-PE: 3/9 D-PA: 4/11 D-GO: 4/10 **D (total): 14/40** S-U: 6/21 S-R: 5/20 **S (total): 11/41**	
Consider diversification and embedding • address regional level and public enterprises or institutions • embed BI in existing innovations, frameworks, and government programs	D-RE: 1/10 D-PE: 2/9 D-PA: 3/11 D-GO: 4/10 **D (total): 10/40** S-U: 2/21 S-R: 3/20 **S (total): 5/41**	
Ensure high-level support • ensure strong political or organisational backing for the BI approach	D-RE: 2/10 D-PE: 6/9 D-PA: 4/11 D-GO: 7/10 **D (total): 19/40** S-U: 5/21 S-R: 1/20 **S (total): 6/41**	

Table 2 (continued)

Result	Number of mentions	Discussion in the literature
Use appropriate terminology • avoid or explain terms like "nudging" to address manipulation accusations • avoid the term "experiments"	D-RE: 2/10 D-PE: 1/9 D-PA: 3/11 D-GO: 5/10 **D (total): 11/40** S-U: 4/21 S-R: 6/20 **S (total): 10/41**	
Consider a soft launch • begin with small-scale projects • select topics with broad consensus	D-RE: 1/10 D-PE: 1/9 **D (total): 2/40** S-U: 5/21 S-R: 3/20 **S (total): 8/41**	
Involve the public and media • engage the public in the process • include media to increase awareness and acceptance	D-RE: 3/10 D-PE: 3/9 D-GO: 4/10 **D (total): 10/40** S-U: 7/21 S-R: 5/20 **S (total): 12/41**	
E) Expectation management and limitations of the approach		
Not a silver bullet • not suitable for every policy area • cannot solve every policy problem	D-PE: 1/9 D-PA: 2/11 D-GO: 2/10 **D (total): 5/40** S-U: 8/21 S-R: 3/20 **S (total): 11/41**	There is a consensus on this within the behavioural insights community, see e.g. Troussard and van Bavel (2018) or Benartzi et al. (2017). On a related note, there is also a call to focus not only on behavioural interventions to alter behaviour, but also on properly diagnosing the observed behaviour (e.g. Hansen 2018), and to involve behavioural insights as early as possible in the policy cycle (see Ewert 2020 or Dupoux et al. 2025). Alt et al. (2024a) and Alt et al. (2024b) provide evidence regarding synergies between behavioural and traditional policy interventions. In a similar vein, Dupoux et al. (2025) emphasize the importance of incorporating behavioural interventions as part of a broader policy mix
Complement, not substitute • should be seen as a complement, not a substitute to traditional approaches	D-RE: 1/10 D-PA: 1/11 **D (total): 2/40** S-U: 4/21 S-R: 3/20 **S (total): 7/41**	
Move beyond small-scale interventions • scale up successful interventions • address challenges of small effect sizes to maximize impact	**D (total): 0/40** S-U: 2/21 S-R: 4/20 **S (total): 6/41**	See discussion above related to sustainable and long-term behaviour change (Dupoux et al. 2025; Chater and Loewenstein 2023; Hallsworth 2023b). For an approach combining behavioural insights with systems analysis to fix "broken behavioural systems", see Diaz Del Valle et al. (2024). Methodological concerns and how to address them

Table 2 (continued)

Result	Number of mentions	Discussion in the literature
F) Methodological concerns and how to address them		
Scalability and long-term effects • keep scalability and macro-level impacts in mind • consider and test for long-term effects	D-PE: 1/9 D-PA: 2/11 **D (total): 3/40** S-U: 1/21 S-R: 1/20 **S (total): 2/41**	List (2022) argues that scalability is a key prerequisite for ideas or interventions to achieve high impact. See also Hallsworth (2023a) and DellaVigna and Linos (2022) for related discussions. With regard to the long-term effects of behavioural interventions, many studies (e.g. Allcott and Rogers 2014 or Brandon et al. 2017) find that their effectiveness persists over time. Other studies, such as Foxcroft et al. (2015), report contrasting results. For a comparison of the long-term effects of nudging versus boosting, see Paunov and Grüne-Yanoff (2023). An important prerequisite for achieving long-term behaviour change is the early integration of behavioural insights into the policy cycle (Dupoux et al. 2025)
Invest in research and quality control • develop tailored, scientifically supported solutions • conduct experiments • aim for quality control; interventions should be implemented only by qualified personnel	D-RE: 1/10 D-PE: 1/9 D-PA: 2/11 D-GO: 2/10 **D (total): 6/40** S-U: 14/21 S-R: 8/20 **S (total): 22/41**	OECD (2019b) calls for investing time and resources to scope policy problems and to invest in cross-national and cross-cultural experimentation. For an overview of different experimental methods for policy evaluation, see Varazzani et al. (2023). On a related note, Bryan et al. (2021) advocate a systematic approach to the consideration and study of the heterogeneity of treatment effects

4 Conclusion

This work aims at giving an overview of practical challenges related to the application of behavioural insights to policy-making enriched with profound insights of practitioners and expectations of potentially relevant stakeholders. Even though a sample size of more than 80 interviews allows for a rather comprehensive perspective, it is important to stress that the assessments represent subjective perceptions of the interviewees that provide relevant insights and perspectives of some yet not all relevant agents in the field. With the assessment of the demand side—a rather understudied sample in the context of behavioural insights—we provide valuable insights of experts in policy-making who hold distinctive experiences in the processes and peculiarities of the (Austrian) public administration. The results of this qualitative research reveal a high similarity of experiences, opinions and expectations about the BI approach between the demand and the supply side. This is surprising given the diversity of opinions surrounding behavioural public policy, as practitioners in BI units frequently find themselves having to clarify what it is and what it is not (Naru 2024). Small differences are mainly found in the assessment of areas of application, typical questions, advantages and boundaries of the approach and prerequisites for a successful application—these aspects were addressed more nuanced and with a methodological focus by the supply side, which is not surprising due to their familiarity with the approach.

The views expressed by interviewees on behavioural insights and experimentation in public policy are, with very few exceptions, overwhelmingly positive. This is not surprising, given that the supply-side participants were primarily researchers and policy experts with direct experience in behavioural insights projects. On the demand side, we made an effort to include a diverse range of interviewees within the covered public policy domains; however, it cannot be ruled out that there was some selection bias toward individuals with a generally favourable view of the approach. Given that many interviewees reported limited prior experience and knowledge of behavioural insights, this potential bias is likely to have had only a limited impact. Apart from selection effects, it is also possible that demand effects played a role in the generally positive assessment of the approach. Notably, despite the overall positive attitude, interviewees on both the supply and demand side also raised critical reflections and points of caution.

The interviews were conducted between May 2019 and January 2020. While their delayed publication could be seen as a limitation, it also allows us to compare the earlier perspectives of policy-makers and behavioural insights experts with current trends and debates. It is noteworthy that many interviewees—particularly those on the demand side, but to some extent also on the supply side—express strong beliefs about the advantages of behavioural interventions, several of which are viewed more critically in recent literature. For instance, interviewees frequently described behavioural interventions as viable alternatives to hard regulation (see Dupoux et al. 2025 for a contrasting view), as effective tools for achieving sustainable behaviour change (see Chater and Loewenstein 2023, for an opposing perspective, or Maier et al. 2022), or as particularly cost-effective (see Table 2 for a summary of this debate). Additionally, there appears to be a prevailing focus—at least to some extent—on bias-exploiting interventions, although alternative approaches such as boosting have gained considerable traction in recent years, being applied more frequently and viewed increasingly positively (see Table 2 for relevant references).

Notably, the interviews—particularly on the supply side—also reflect awareness of the main remedies to these limitations. These include early involvement of behavioural insights in the policy cycle, consideration of ethical principles, integration of behavioural approaches into broader policy mixes or system-level change strategies, investment in proper behavioural analysis, and moving beyond small-scale interventions towards more rigorous testing of effectiveness, long-term impact, and the development of tailored solutions. Notably, many of these perspectives—only to some extent present in the academic and policy discourse at the time—have since moved to the centre of current debates on the application of behavioural insights in public policy (see Table 2).

Regarding the barriers and hurdles to applying behavioural insights in public policy, there appears to be no significant shift or emergence of new trends in the recent literature. Most of our findings (lack of knowledge, scepticism or fear of negative perception or limited resources) align well with existing research (see Table 2). However, a few novel insights emerge that may be specific to the German-speaking context. One such example is the presumption that the dominance of lawyers and legal professionals within public administration contributes to the scepticism and constitutes a barrier to the application of behavioural insights and experimental approaches in public policy. This is in line with the frequent mention—particularly by interviewees on the demand side—of an existing lack of tradition and knowledge, scepticism, and concern over negative public perception. Interestingly, explicit references to legal restrictions were relatively rare on the demand side, which may be attributed to the limited practical experience with behavioural approaches at the time of the interviews.

It is also notable that current academic discourse tends to focus more on the potential advantages or drawbacks of behavioural insights, as well as on ethical and methodological concerns, rather than on barriers and hurdles or strategies to convince stakeholders of the value of behavioural insights and experimentation. Especially in the latter area, academic contributions remain scarce, with only a few exceptions (see Table 2 for an overview). It would be an overstatement to claim that the insights in this category are entirely novel. Rather, they reflect key aspects of the routine work of BI units, which consistently promote the use of behavioural insights and experimentation in public policy. While these aspects are reflected to some extent in guidance documents on establishing behavioural insights functions within public administration (e.g. WHO 2024 or OECD 2024) and in comparative overviews of BI integration across countries (e.g. Lourenço et al. 2016), they have yet to be systematically synthesized or examined in a comprehensive manner. Our paper contributes by offering a comprehensive synthesis and structured overview, grounded in the extensive professional experience of our interviewees.

The results of the expert interviews indicate that behavioural interventions have already been established as a valuable, cost-effective tool in the policy toolbox of behavioural scientists. However, most interviewees think that there is much more scope for applications of behavioural insights in public policy-making. Similarly, Hallsworth (2023a) argues that the narrow view of behavioural science as a specialized tool suitable for only certain tasks should be replaced with the recognition that it can serve as a lens to address much broader societal challenges. A broader application and interpretation of behavioural insights is also advocated in a position paper by the Joint Research Centre of the European Commission (Dupoux et al. 2025). They argue that BI should not be limited to policies targeted at individuals or 'soft' interventions but can also aim at systemic changes addressing both individual behaviour and broader societal structures and rules as well as informing traditional policies. On a related note, Diaz Del Valle et al. (2024) advocate for combining the behavioural insights approach with systems analysis in order to move beyond small-scale interventions and enable sustainable behaviour change by fixing "broken behavioural systems." According to the interviewees, one reason for the under-usage of the approach might be that behavioural experts face barriers and hurdles in the public sector, arising from different priorities and expectations in science and in politics. Similarly, Fels (2022) identifies a strong influence of policy-makers' priorities on the choice of policy areas, interventions and research designs which may differ from the perspective of academics—entailing both risks and opportunities.

In addition, the interviewees emphasize the importance of transparency regarding the intervention conducted and its underlying policy goal. To address common criticism such as manipulation and violation of freedom of choice due to a lack of transparency, interviewees suggest avoiding nudges or other behavioural interventions that exploit existing behavioural biases. Instead, interventions should aim to provide information and foster learning (i.e. educative nudges; Sunstein and Reisch 2019), thereby making them more acceptable to policy-makers. In terms of the dual-process theory one should refrain from using interventions targeting only the fast and automatic system 1 (see Kahneman 2011). Banerjee and John (2024) propose a hybrid framework in their recent review, suggesting both systems being able to operate at the same time. Building on this idea, they elaborate the concept *nudge plus*, originally introduced by John and Stoker (2019). This approach incorporates an element of reflection into the delivery of a nudge, making the underlying goal more transparent and respecting individuals' autonomy—a crucial point raised in our interviews. Since several studies (Bruns et al. 2018; Michaelsen 2024) indicate that being aware of a nudge does not diminish its efficacy, incorporating a deliberative prompt could be a promising approach to address common criticism and should be tested in future research.

The behavioural experts on the supply side mention the need for support, openness to experimentation, the willingness to take evidence into account, enough time to design and implement research, research funding, and data access as prerequisites for a successful implementation of BI in policy-making. Moreover, they emphasize the necessity of being able to conduct randomized controlled trials as the gold standard in evaluation, and the need for a legal framework that allows for randomization into different treatments (see Fels 2022 for the example of a Norwegian civil servant who, after conducting an RCT, received bad publicity because he was accused of treating citizens differently). The interviews suggest that informing the public about the methodological foundations and the benefits of using experiments is imperative to fostering a culture in which policy-makers feel confident to employ innovative policy approaches without fear of negative perception. Yet, a recent Dutch study shows that voters are highly supportive of policy experimentation, notably when they hold no strong opinions on the policy itself (Dur et al. 2024).[2]

At the same time, resources in the public sector are scarce, rapid provision of results is a crucial issue, and politicians and civil servants may worry about their reputation if an experiment demonstrates that their proposed policy is ineffective. In addition, it might not be evident to non-experts when a policy experiment is feasible and preferable to other methods of evaluation (Dur et al. 2024). Similarly, Fels (2022) identifies policy-makers' fear of the unknown as a key constraint in using RCTs to test new policies. Therefore, it is crucial to foster a methodological understanding, to provide orientation (e.g. by sharing best practice examples from the public sector) and to build trust as a prerequisite for cooperation between behavioural scientists and policy-makers.

In the future, the field of BPP will face even greater challenges regarding experimentation. In unstable and adaptive systems, there is growing need for RCTs that can better address complexity (Hallsworth 2023a). As policy-makers encounter highly complex situations, such as public health or climate crises, interventions and evaluations must draw on more diverse evidence. This includes gathering broader data sets to identify heterogenous effects of interventions (see Bryan et al. 2021) and employing mixed methods research—such as qualitative data and interdisciplinary approaches—to better understand and align interventions with their specific contexts (see *strategic behavioural public policy;* Schmidt and Stenger 2024).

Given the advantages and potential of behavioural insights and in the interest of an exchange between science and practice, we conclude that it is valuable to further introduce and advance the approach to the field of policy-making and discuss its application possibilities without neglecting its limitations and downsides.

[2] Positive citizen attitudes have been documented not only towards experimentation, but also towards behavioural interventions themselves (Reisch and Sunstein 2016; Banerjee et al. 2021)—highlighting the importance of this approach in developing interventions as alternatives to more intrusive measures such as laws, regulations or taxes.

Appendix A1: Interview guidelines (supply side, for international interviews)

1. Introduction

2. Background (personal and of the organization) 10 min

- Could you tell us a bit about your personal background, in particular how and when you got in contact with behavioral insights?
- What was it that fascinated you about behavioral insights and the applied behavioral sciences in general? Why have you decided to specialize in that area?
- Overall, what experiences do you have implementing behavioral insights projects?
- Please describe the team/ the organization/ the institute at which you are applying behavioral insights. (Scope, how many team members/ background and education of the team members/ legal and organizational form/ financing)
- Have behavioral insights (or has the work of your organization) to your knowledge at some point influenced political decisions?

3. Detailed analysis of specific projects 10 min

- What were the two most relevant projects (or topics) where you have applied behavioral insights? Please tell us about the topic and the structure of these projects.
    - Did you implement behavioral insights? Did you conduct experiments/ randomized control trials?
    - Besides your input, have you also made use of internal resources of the customer/ project partner? What about external resources?
    - How satisfied were you with the output of these projects?
- Given your experience, what would you change/ improve when conducting projects applying behavioral insights?
- What are the prerequisites for the successful implementation of behavioral insights projects?

4. Topics and methodologoical approach 10 min

- What issues/ topics come to your mind, where behavioral insights can be applied (in addition to other policy instruments)?
- How would you describe a typical question/ application?
- What has been the focus of your work so far? Behavioral consulting, continuing education and/or conducting experiments? Which of them have been particularly important?

- In which phase of the policy process have you mainly been active: Design/ testing of a planned policy or evaluation of an already implemented policy? Which phase do you think is particularly important?

5. The future of behavioral insights (in Austria) 10 min

- How can organizations/ institutions be convinced to make use of behavioral insights?
- In which social areas can behavioral insights be used most fruitfully?
- Who do you see as the most important target group for the application of behavioral insight?
- In which topics, do you think behavioral insight can be applied most fruitfully?
- Which challenges do you see regarding the more frequent application of behavioral insights?
- What would you recommend decision makers in Austria regarding a quick and effective implementation of applied behavioral insight in Austria? From your experience, what is the best way to go?

6. Education, training and organizational implementation 15 min

- Do you think behavioral insights should be taught more often/ intensely at universities?
- Which form of teaching do you think would be most suitable, in particular regarding the subsequent application in practice?
- In summary, do you think behavioral insights should be applied more frequently in politics and administration?
- Which phase of the policy process do you think is most important thereby?
- Which organizational form do you think is most suitable?
- How would you describe the ideal composition of such a behavioral unit?
- In general, do you have any further insights regarding the application of behavioral insights you want to share with us?

Additional questions for participants responsible for applied teaching programs related to behavioral insights

- Could you please describe the teaching program you are responsible for (background of students, courses, structure, applied projects etc.)
- What kind of positions do your students usually take after graduating from your program (politics, administration, research, private enterprises)?
- What would you change/ improve, or what would you recommend setting up a BI teaching program?

Appendix A2: Interview guidelines (demand side, translated from German)

1. Introduction

2. Prior knowledge, application and associations with behavioral insights 10 min

- Aside from the background information, have you ever heard about applied behavioral insights or in general the application of behavioral economics/ the behavioral sciences to public policy, business and the society in general?
- If yes, in which context and which authors, projects, topics, universities, contents are you familiar with?
- Are you aware of any national or international projects where behavioral insights have been applied in practice?
- Have you ever heard about the BIT (Behavioural Insights Team) or Insight Austria?
- Do you or your team have any experiences applying behavioral insights in practice?
- Have you ever worked with experts from the behavioral sciences?
- Have you conducted any studies related to decision making, behavior, information processing, or perception of information in your area?
- Have behavioral insights ever influenced any (policy) decision of yours?
- Do you plan to look closer into applied behavioral insights in the future?

3. Detailed analysis according to the background information 10 min *(see 'Background information on behavioral insights', Appendix B)*

- Did the background information make sense to you? Do you have any questions?
- How do you evaluate the approach and methodology of applying behavioral insights in practice?
- How useful do you find behavioral insights for your area of expertise? Do you want to look closer into the subject in the future?
- Could you imagine applying behavioral insights to your work (in a similar way as described in the background information)?
- What would be an argument for you to apply behavioral insights to your work?
- And what would be an argument against applying behavioral insights to your work?
- Do you still have any open questions?

4. Benefits of behavioral insights and topics 10 min

- What issues/ topics (related to behavioral change) come to your mind, where behavioral insights can be applied (in addition to other policy instruments)?

- Please try to describe a typical question/ application in your area of expertise?
- In which way could behavioral insights provide a further input in addition to existing policy instruments?
- In this context, do you think about behaviorally inspired consulting, continuing education and/or conducting experiments?
- And in which phase: the development or the evaluation of a project?

5. The future of behavioral insights in Austria 10 min

- What would you/ your division/ section need to become more involved in applying behavioral insights?
- Should behavioral insight be applied to public policy more frequently?
- In which social areas can behavioral insights be used most fruitfully?
- Who do you see as the most important target group for the application of behavioral insight?
- For which topics, do you think behavioral insight could provide an added value?
- Which challenges do you see regarding the more frequent application of behavioral insights in Austria?
- How can organizations/ institutions be convinced to make use of behavioral insights?

6. Education, training and organizational implementation 15 min

- Do you think behavioral insights should be taught more often/ intensely at universities?
- Which form of teaching do you think would be most suitable, in particular regarding the subsequent application in practice?
- In summary, do you think behavioral insights should be applied more frequently in politics and administration?
- Which phase of the policy process do you think is most important thereby?
- Which organizational form do you think is most suitable?
- How would you describe the ideal composition of such a behavioral unit?
- In general, do you have any further insights regarding the application of behavioral insights you want to share with us?

Appendix B: Background information on behavioral insights (demand side)

Participants on the demand side received this short summary with examples how behavioral insights can be applied in practice prior to the interview. This is a translation of the German original. Note that some of the examples (e.g. increasing the take-up of ‘ voluntary pension splitting’) refer specifically to the Austrian policy context.

Background information: Why behavioral sciences in the public sector?

Our environment provides continuously **incentives** to act **more rationally**. These incentives can involve pricing of products, regulations or laws. Such measures assume that people are **fully informed about available alternatives and that they can evaluate** which option matches their interests and utility best. There is, however, evidence that h**uman behavior is often not in line with the assumption of rationally acting agents**. Decisions are influenced by processing of information, reference points, emotions, cognitive limitations, altruistic motives etc.

This intuitive behavior is prone to **systematic biases**. In this context, **psychological, social and cognitive factors** can play a major role. Concepts of the behavioral sciences can help to develop measures to overcome these impulsive behaviors and irrationalities.

The **behavioral sciences**, particularly **behavioral economics**, studies the divergence between rational and actual behavior, **develops solutions** and tests these solutions with **randomized experiments**: The goal is to **design evidence-based interventions** that can be translated into actual policies.

Examples how to apply behavioral insight to public policy

Financial decision making and taxes

- Automatic enrolment for contributions to private pension funds with an opt-out option
- Improve financial literacy in the general population through behavioral design, also considering insights from behavioral economics
- Provide comprehensible information about the risks of financial products

Family politics and gender equality

- Increase involvement of fathers and the up-take of parental leave, e.g. through defaults, framing or behaviorally optimized incentives
- Increase the take-up of voluntary ‘pension splitting’ between spouses

Sustainable use of resources

- Motivate energy saving through comparative feedback, e.g. by showing the average consumption in the neighborhood on the electricity bill
- Habit formation via individualized feedback
- Strengthen social norms of sustainable behavior

Health related topics

- Choice architecture in canteens: Prominent placement of healthy options such that they are chosen more frequently
- Goal setting and prompts to quit smoking or to do more sports
- Prevention: Motivate people to go regularly to medical check-ups (e.g. through commitment devices)

Labor market behavior

- Use implementation intentions to speed up labor market integration of job-seekers
- Improve and simplify information offers for jobseekers

Education

- Reduce stereotypes when choosing course of studies or occupation through behavioral interventions
- Personalized feedback for students to support the learning process

Mobility behaviour

- Switch to climate-friendly mobility through behaviorally inspired interventions like goal setting or social feedback

Further literature

Ariely, D. (2008). Predictably irrational: The hidden forces that shape our decisions. London: Harper.

Kahneman, D. (2011). Thinking, fast and slow. New York: Farrar, Straus and Giroux.

Thaler, R. H., & Sunstein, C. R. (2009). Nudge: Improving decisions about health, wealth, and happiness. London: Penguin.

Appendix C: Content categories from the analysis

Supply side

1. Personal background, experience and work environment
2. Operational procedures and project work
3. The potential of applying behavioral insights to public policy
4. Prerequisites for the successful application
5. Critical perspectives and limitations of the approach

6. How to convince relevant stakeholders
7. Organizational structure and how to compose a behavioral unit
8. Training courses and education

Demand side

1. Prior knowledge and previous projects
2. Attitudes towards applied behavioral insights
3. Possible areas of application and methodological approach
4. Advantages and benefits of applying behavioral insight to public policy
5. Concerns, barriers and hurdles
6. How to convince relevant stakeholders
7. Organizational structure and building up expertise
8. Training courses and education

Appendix D: Original quotations (in German)

As mentioned in Sect. 2 of the paper, interviews with German native speakers have been conducted in German. In the paper, quotations from these interviews are translated to English. The original German quotations are listed below. Note that some of the original German quotations have been shortened for the paper.

3.1. Potential of applying behavioural insights in the public sector

> „Kariesfreie Kinder, da hätten wir viel Luft nach oben, weil in Österreich sind knapp über 50% [der Kinder] kariesfrei, in den skandinavischen Ländern 90%. Also irgendwie, die werden ja auch nicht per Gesetz den Eltern vorgegeben haben, dass sie die Zähne putzen, da muss es ja irgendwelche Verhaltensmuster geben.“ (Interview D-PE-6)

> „[…] dass man über [non-monetäre] Anreize Dinge erreicht, die man sonst natürlich auch durch Zwang und Kontrolle erreichen kann, aber halt immer um den Preis, dass dann dieses Vertrauensverhältnis verloren geht und das, wenn das verloren geht, andere Negativ-Reaktionen […] nach sich zieht“ (Interview D-GO-10)

> „Und da hat das Geld z.B. nicht den Anreiz gehabt. […] Incentives für Blutspender […] nicht immer finanzielle Anreize […] [sondern] die altruistische Methode, Blut zu spenden, und Gutes zu tun […]“ (Interview D-PE-6)

> „Es gibt einen ganz profanen Nutzen, der da heißt, dass es relativ effizient ist, auch kostengünstig, also das ist gerade für eine Verwaltung, die immer dem Gebot Sparsamkeit, Wirtschaftlichkeit, Zweckmäßigkeit unterliegt, glaube ich, nicht von der Hand zu weisen.“ (Interview D-GO-10)

3.2. From manipulation towards transparency and other ethical principles

> „Es ist immer die Frage, wo fängt die Manipulation an, da muss man schon immer aufpassen. Der Vorwurf steht halt dann schon auch immer schnell im Raum, und da muss man gerade als öffentliche Verwaltung, glaube ich, besonders sensibel sein." (Interview D-GO-10)

> „Die Skepsis von der Verbraucherseite kommt natürlich daher, dass viele dieser ‚behavioral' Techniken vom Marketing halt stark eingesetzt werden und auch dazu führen, dass Konsumenten sozusagen Sachen kaufen, die sie nicht kaufen wollen." (Interview D-PA-6)

> „Wichtig ist für mich eher, dass [...] die Menschen, die dann […] beeinflusst werden, nicht das Gefühl haben, dass sie ausgenutzt oder für dumm verkauft werden, sondern schon ein Stück weit – wenn man denn möchte – tatsächlich darüber aufgeklärt werden." (Interview S-R-10)

> „Wenn Nudging nur dann funktioniert, wenn ich die Bürger nicht darüber aufkläre […], wenn es nur funktionieren würde, wenn ich die Leute täusche und hinters Licht führe, dann wäre das eine Katastrophe." (Interview S-R-15)

> „Nudging bedeutet für mich, dass das Ziel klar ist und das Ziel ist transparent und das wird auch kommuniziert. […] wenn das Ziel nicht transparent kommuniziert wird, dann mach ich das nicht, dann ist das auch kein Nudging mehr, das ist dann Manipulation […]." (Interview S-U-16)

> „Ich finde generell, das ist auch eine Community, die an einem Austausch sehr interessiert ist. Generell ist mangelnde Information in diesem Feld kein Problem, denn die meisten Sachen sind sehr transparent, das muss man sagen, im Vergleich zu allem anderem, was so auf Verwaltungsebene passiert." (Interview S-R-2)

> „Häufig müssen sich Leute, die Nudging-Interventionen fahren, mehr für ihr Ziel rechtfertigen, als wenn Gesetze, Verbote oder Steuern eingeführt werden und das ist nicht ganz schlüssig, weil da steckt ja auch ein ganz klares Ziel dahinter." (Interview S-U-16)

> „Wir entwickeln z.B. Faktenboxen, mit denen die Öffentlichkeit einfach verstehen kann, was der Nutzen und Schaden von bestimmten z.B. Mammographie, Prostatakrebsfrüherkennung ist und wo dann die Menschen […] Kompetenz bekommen, […] und sich selbst informiert entscheiden können. […]. Was man dann hat, sind informierte Personen, die wissen welche Fragen sie stellen können und die nicht einfach gewohnt sind, dass irgendjemand ihnen sagt, was sie tun sollen […]." (Interview S-R-6)

> „Ein Argument wäre, dass man nicht nicht manipulieren kann. […] Egal wie eine Entscheidungssituation ist, sie beeinflusst einen in irgendeiner Weise." (Interview S-U-18)

„Mir ist bewusst, dass das sehr viele Leute, gerade in der medialen Debatte, als negativ sehen und als Manipulation – also ich kann das überhaupt nicht nachvollziehen. […] Entschuldigung, dann ist ja jedes Gesetz eine Manipulation.“ (Interview D-PA-7)

3.3. Hurdles and barriers in the public sector and how to overcome them

„Ich glaube wirklich, weil zu wenige über das Wissenschaftsfeld überhaupt Bescheid wissen, wissen was geht und was nicht geht, das, glaube ich, ist das Hauptthema, das Nicht-Wissen um das Fach und die Möglichkeiten, die damit verbunden sind.“ (Interview D-GO-8)

„Politikinnovation ist generell nicht Österreichs Stärke. […] Das Bewahren ist halt schon eine österreichische Stärke und alles andere wird als ein Risiko [empfunden].“ (Interview D-GO-7)

„Wenn dann irgendwas schiefgeht von solchen Dingen, dann fürchtet sich jeder Minister […]. Medien könnten schreiben, ‚das ist Manipulation‘ […], wenn es der Staat mit seinem quasi ‚Hoheitsimperium‘ macht, hat es vielleicht eine andere Qualität.“ (Interview D-GO-10)

„[…] als politisch Exponierte werden wir sofort dran gemessen, da steht in zwei Wochen jemand da und fragt mich, wie weit sind wir denn, und was ist mit Deinem Pilotprojekt […]. Wie schafft man […], dass es nicht dem politisch Verantwortlichen dann gleich als Fehlschlag angelastet wird.“ (Interview D-GO-4)

„Aber das was eigentlich das Problem in Österreich ist, denke ich, dass sich die Politik ein stückweit fürchtet vor Transparenz. Also wenn Sie […] intervenieren, heißt das, dass Sie Einblick bekommen in Daten […] und zum anderen, dass natürlich Ergebnisse entstehen könnten, die jetzt nicht […] in die politische Programmatik passen. […] das ist so die typische Bremse in der Kommunikation mit den Ministerien, wo wir dann scheitern mit unseren Anliegen.“ (Interview S-R-17-AT)

„Wir stoßen dann immer an Grenzen, weil da gesetzliche Rahmen sind, wo wir sagen, wenn wir hier verhaltensökonomische Instrumente einsetzen, dann passt das mit dem Rechtsanspruchsdenken nicht zusammen. […] Man kann nicht einfach nur ohne gesetzliche Rahmenbedingungen fertige Komponenten reinbringen, sondern wenn, [dann] ist das ein komplett neues politisches Denken, das natürlich auch eine entsprechende gesetzliche Grundlage braucht.“ (Interview D-PA-1)

3.4. How to convince stakeholders to use behavioural insights and experiments

„Ich glaub, der Schlüssel ist, dass man einfach gute, plakative Beispiele hat. […] idealerweise erzählt man eine Geschichte, weil Geschichten, die wirken ja schön.“ (Interview D-PA-7)

„Wenn man sieht, dass der Erfolg einer Studie […] gleichzeitig als Erfolg des Kooperationspartners gewertet wird […]; der Erfolg wird dann auch zum gewissen Teil dieser Person zugeschrieben und erhöht ihre oder seine Karrierechancen. […] Man kann das natürlich verstärken, indem man […] sagt ‚ohne den Support von so-und-so wäre das nicht möglich gewesen.'" (Interview S-R-5)

3.5. Expectation management and limitations of the approach

„[…] vielleicht ist es da einfach auch nicht die Lösung. Man muss schon aufpassen, dass man es nicht als Lösung für jedes Problem sieht. […] Nach dem Motto, wenn ich einen Hammer als Werkzeug nur habe, dann ist der Nagel jedes Problem, das ich lösen muss." (Interview D-GO-10)

„Man muss es versuchen zu vermeiden, dass man es zu politischen Kategorien werden lässt, sondern die Verhaltensökonomie ist eine wissenschaftliche Disziplin und die kann evidenzbasiert, wissenschaftsbasiert einen Beitrag zu einem modernen Regieren leisten." (Interview D-PA-1)

3.6. Methodological concerns and how to address them

„Ich glaube, man verschafft sich eine ziemliche Glaubwürdigkeit, indem man auch Interventionen oder Ergebnisse von Interventionen veröffentlicht, die vielleicht nicht den gewünschten Effekt gebracht haben." (Interview S-U-16)

Acknowledgements This study has been conducted as part of a research project investigating the potential of applying behavioural insights in Austria and Lower Austria, funded by the Danube University Krems. A report (in German) on this project is available upon request. We would like to thank Marina Hahn, Gerald Steiner, Friedrich Faulhammer and Christina Hainzl for their support throughout the project and helpful comments and suggestions, Lucas Meyer, Eva Manegold, Sophie Rath, Alexander Truzka and Clara Zwettler for excellent research assistance as well as all participants of the expert interviews for their time and contributions.

Funding Open access funding provided by Institute for Advanced Studies Vienna.

Data availability This research is based on individual interviews with policy-makers in the Austrian public administration and international behavioural insights experts. Interviewees were assured of anonymity and that it would not be possible to associate any statements published in the paper with them personally. Given the very specific context of the interviews and the fact that in some countries there are only very few people working in the field analysed, the publication of audio recordings or transcripts of the interviews, in which country specifics and the working environment are mentioned, would make the interviewees personally identifiable, thus compromising their anonymity. For this reason, it is not possible to share or make the full set of underlying data publicly available.

Declarations

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

Ackermann KA, Heim N, Collenberg A, Lenggenhager V, Müller S, Furchheim P (2020) Swiss Behavioral Economics Studie. Der Einsatz von Verhaltensökonomie in Schweizer Unternehmen – Fokus Marketing. ZHAW School of Management and Law

Afif Z, Islan W, Calvo-Gonzalez O, Dalton AG (2018) Behavioral science around the world: profiles of 10 countries. World Bank Group, Washington, DC

Allcott H, Rogers T (2014) The short-run and long-run effects of behavioral interventions: experimental evidence from energy conservation. Am Econ Rev 104(10):3003–3037

Alt M, Bruns H, Della Valle N (2024a) The more the better? Synergies of prosocial interventions and effects on behavioural spillovers. J Environ Econ Manag 128:103061

Alt M, Bruns H, DellaValle N, Murauskaite-Bull I (2024b) Synergies of interventions to promote pro-environmental behaviors—a meta-analysis of experimental studies. Glob Environ Change 84:102776

Baggio M, Ciriolo E, Marandola G, van Bavel R (2021) The evolution of behaviourally informed policy-making in the EU. J Eur Public Policy 28(5):658–676

Ball S (2021) Translating behavioral public policy into practice: interpretations and traditions. Crit Policy Stud 16(3):315–332

Ball S, Feitsma J (2020) The boundaries of behavioural insights: observations from two ethnographic studies. Evid Policy 16(4):559–577. https://doi.org/10.1332/174426419X15643724702722

Ball S, Head BW (2021) Behavioural insights teams in practice: nudge missions and methods on trial. Policy Polit 49(1):105–120

Ball S, Hiscox M, Oliver T (2017) Starting a behavioural insights team: three lessons from the behavioural Economics Team of the Australian Government. J Behav Econ Policy 1:21–26

Bandsma K, Rauws W, De Roo G (2021) Optimising nudges in public space: identifying and tackling barriers to design and implementation. Plan Theory Pract 22(4):556–571

Banerjee S, John P (2024) Nudge plus: incorporating reflection into behavioral public policy. Behav Public Policy 8(1):69–84. https://doi.org/10.1017/bpp.2021.6

Banerjee S, Savani M, Shreedhar G (2021) Public support for 'soft' versus 'hard' public policies: review of the evidence. J Behav Public Adm 4(2):1–24

Benartzi S, Beshears J, Milkman KL, Sunstein CR, Thaler RH, Shankar M et al (2017) Should governments invest more in nudging? Psychol Sci 28(8):1041–1055

Brandon A, Ferraro P J, List JA, Metcalfe RD, Price MK, Rundhammer F (2017) Do the effects of nudges persist? Theory and evidence from 38 natural field experiments. National Bureau of Economic Research, Working Paper No 23277

Bryan CJ, Tipton E, Yeager DS (2021) Behavioural science is unlikely to change the world without a heterogeneity revolution. Nat Hum Behav 5(8):980–989

Button ME (2018) Bounded rationality without bounded democracy: nudges, democratic citizenship, and pathways for building civic capacity. Perspect Polit 16(4):1034–1052

Brinkman SA, Johnson SE, Codde JP, Hart MB, Straton JA, Mittinty MN, Silburn SR (2016) Efficacy of infant simulator programmes to prevent teenage pregnancy: a school-based cluster randomised controlled trial in Western Australia. Lancet 388(10057):2264–2271

Bruns H, Paunov Y (2021) Why policymakers should be transparent about the behavioural interventions they use: a systematic, policy-oriented review. SSRN Electr J 1–32

Bruns H, Kantorowicz-Reznichenko E, Klement K, Jonsson ML, Rahali B (2018) Can nudges be transparent and yet effective? J Econ Psychol 65:41–59

Cardon E, Lopoo L (2024) Randomized controlled trial aversion among public sector leadership: a survey experiment. Eval Rev 48(4):579–609

Chater N, Loewenstein G (2023) The i-frame and the s-frame: how focusing on individual-level solutions has led behavioral public policy astray. Behav Brain Sci 46:e147

Chetty R, Friedman JN, Leth-Petersen S, Nielsen TH, Olsen T (2014) Active vs. passive decisions and crowd-out in retirement savings accounts: evidence from Denmark. Q J Econ 129(3):1141–1219

Corduneanu-Huci C, Dorsch MT, Maarek P (2021) The politics of experimentation: political competition and randomized controlled trials. J Comp Econ 49(1):1–21

Curtis K, Fulton E, Brown K (2018) Factors influencing application of behavioural science evidence by public health decision-makers and practitioners, and implications for practice. Prev Med Rep 12:106–115. https://doi.org/10.1016/j.pmedr.2018.08.012

DellaVigna S, Linos E (2022) RCTs to scale: comprehensive evidence from two nudge units. Econometrica 90(1):81–116

Dewies M, Denktaş S, Giel L, Noordzij G, Merkelbach I (2022) Applying behavioural insights to public policy: an example from Rotterdam. Glob Implement Res Appl 2(1):53–66

Dowding K, Oprea A (2023) Nudges, regulations and liberty. Br J Polit Sci 53(1):204–220

Dupoux M, Gaudeul A, Baggio M, Bruns H, Ciriolo E, Krawczyk M, Kuehnhanss C, Nohlen H (2025) Unlocking the full potential of behavioural insights for policy: From influencing the individual to shaping the system. Publications Office of the European Union, Luxembourg. https://doi.org/10.2760/7367599

Dur R, Non A, Prottung P, Ricci B (2024) Who's afraid of policy experiments? Econ J. https://doi.org/10.1093/ej/ueae090

Einfeld C (2019) Nudge and evidence based policy: fertile ground. Evid Policy 15(4):509–524

Escobal J, Ponce C (2020) Challenges in using RCTs for evaluation of large-scale public programs with complex designs: lessons from Peru. World Dev 127:104798

Diaz Del Valle E, Jang C, Wendel S (2024) Behavioral systems: combining behavioral science and systems analysis. Busara Groundwork (Genre - Research Agenda), No. 8. Nairobi: Busara. https://www.busara.global/wp-content/uploads/2024/02/Diaz-Del-Valle_Jang_Wendel_BehavioralSystems_Groundwork_2024.pdf

Ewert B (2020) Moving beyond the obsession with nudging individual behaviour: towards a broader understanding of behavioural public policy. Public Policy Adm 35(3):337–360

Feitsma J (2018a) 'Rationalized incrementalism'. How behavior experts in government negotiate institutional logics. Crit Policy Stud. https://doi.org/10.1080/19460171.2018.1557067

Feitsma JNP (2018b) The behavioural state: critical observations on technocracy and psychocracy. Policy Sci 51(3):387–410

Feitsma J (2019) Brokering behaviour change: the work of behavioural insights experts in government. Policy Polit 47(1):37–56

Feitsma J, Schillemans T (2019) Behaviour experts in government: from newcomers to professionals? In: Straßheim, H. & Beck, S. (eds.), Handbook of behavioural change and public policy. Edward Elgar Publishing, Cheltenham

Feitsma J, Whitehead M (2019) Bounded interdisciplinarity: critical interdisciplinary perspectives on context and evidence in behavioural public policies. Behav Public Policy. https://doi.org/10.1017/bpp.2019.30

Fels KM (2022) Who nudges whom? Expert opinions on behavioural field experiments with public partners. Behav Public Policy. https://doi.org/10.1017/bpp.2022.14

Foxcroft DR, Moreira MT, Santimano NMA, Smith LA (2015) Social norms information for alcohol misuse in university and college students. Cochrane Database Syst Rev (12): CD006748

Fryer RG Jr., Levitt SD, List J, Sadoff S (2022) Enhancing the efficacy of teacher incentives through framing: a field experiment. Am Econ J Econ Pol 14(4):269–299

Ghebreyesus TA (2021) Using behavioural science for better health. Bull World Health Organ 99(11):755–755. https://doi.org/10.2471/BLT.21.287387

Gofen A, Moseley A, Thomann E, Weaver RK (2021) Behavioural governance in the policy process: comparative and multi-level perspectives. Introduction to the special issue. J Eur Public Policy 28(5):633–657. https://doi.org/10.1080/13501763.2021.1912153

Gopalan M, Pirog MA (2017) Applying behavioral insights in policy analysis: recent trends in the United States. Policy Stud J 45(S1):82–114

Grüne-Yanoff T (2012) Old wine in new casks: libertarian paternalism still violates liberal principles. Soc Choice Welfare 38(4):635–645

Hallsworth M (2023a) A manifesto for applying behavioural science. Nat Hum Behav 7(3):310–322. https://doi.org/10.1038/s41562-023-01555-3

Hallsworth M (2023b) Behavioral public policy in practice: misconceptions and opportunities. Behav Brain Sci. https://doi.org/10.1017/S0140525X23000924

Hansen PG (2018) What are we forgetting? Behav Public Policy 2(2):190–197
Hertwig R (2017) When to consider boosting: some rules for policy-makers. Behav Public Policy 1(2):143–161
Hertwig R, Grüne-Yanoff T (2017) Nudging and boosting: steering or empowering good decisions. Perspect Psychol Sci 12(6):973–986
Hertwig R, Michie S, West R, Reicher S (2025) Moving from nudging to boosting: empowering behaviour change to address global challenges. Behav Publ Policy 1–12. https://doi.org/10.1017/bpp.2025.9
Hotz I, Ernst N, Brenneis C, Diermayr G, Seebacher B (2024) Barriers and facilitators to conducting randomised controlled trials within routine care of neurorehabilitation centres: a qualitative study. BMC Med Res Methodol 24(1):258
John P (2014) Policy entrepreneurship in UK central government: the behavioural insights team and the use of randomized controlled trials. Public Policy Adm 29(3):257–267
John P (2017) Behavioural science, randomized evaluations and the transformation of public policy: the case of the UK government. In: Pykett J, Jones R, Whitehead M (eds) Psychological governance and public policy: Governing the mind, brain and behaviour. Routledge, Abingdon
John P (2018) How far to nudge? Assessing behavioural public policy. Edward Elgar Publishing, Cheltenham
John P (2019) The international appeal of behavioural public policy: is nudge an Anglo-American phenomenon? J Chin Gov 4(2):144–162
John P (2023) The ethics of self-aware behavioural public policies: any different to standard nudges? Behav Public Policy 7(4):898–905
John P, Stoker G (2019) Rethinking the role of experts and expertise in behavioural public policy. Policy Polit 47(2):209–225
Kahneman D (2011) Thinking, fast and slow. Farrar, Straus and Giroux, New York
Kusseven A, Yildiz M (2021) Emergence & development of behavioral public policy units in government: the case of Turkey. Asia Pac J Public Adm 44(1):66–80
Lecouturier J, Vlaev I, Chadwick P, Chater AM, Kelly MP, Goffe L et al (2024) The critical factors in producing high quality and policy-relevant research: insights from international behavioural science units. Evid Policy 20(2):141–162
Linos E (2023) Translating behavioral economics evidence into policy and practice. National Academies of Sciences, Engineering, and Medicine Report. https://nap.nationalacademies.org/resource/26874/NASEM_Commissioned_Report_Linos.pdf
List JA (2022) The voltage effect: How to make good ideas great and great ideas scale. Crown Currency
Lourenco SJ, Ciriolo E, Rafael Almeida S, Troussard X (2016) Behavioural insights applied to policy. Publications Office of the European Union
Lunn PD (2012) Behavioural economics and policymaking: learning from the early adopters. Econ Soc Rev 43(3):423–449
Maier M, Bartoš F, Stanley TD, Shanks DR, Harris AJ, Wagenmakers EJ (2022) No evidence for nudging after adjusting for publication bias. Proc Natl Acad Sci U S A 119(31):e2200300119
Maynard OM, Munafò MR (2018) Nudging transparent behavioural science and policy. Behav Public Policy 2(2):198–206
Mayring P (2015) Qualitative content analysis: theoretical background and procedures. In: Bikner-Ahsbahs A, Knipping C, Presmeg N (eds) Approaches to qualitative research in mathematics education. Advances in mathematics education. Springer, Dordrecht
Mertens S, Herberz M, Hahnel UJ, Brosch T (2022) The effectiveness of nudging: a meta-analysis of choice architecture interventions across behavioral domains. Proc Natl Acad Sci U S A 119(1):e2107346118
Michaelsen P (2024) Transparency and nudging: an overview and methodological critique of empirical investigations. Behav Public Policy 8(4):807–817
Naru F (2024) Behavioral public policy bodies: new developments & lessons. Behav Sci Policy. https://doi.org/10.1177/23794607241285614
Patel MS, Asch DA, Rosin R, Small DS, Bellamy SL, Heuer J et al (2016) Framing financial incentives to increase physical activity among overweight and obese adults: a randomized, controlled trial. Ann Intern Med 164(6):385–394
Pearce W, Raman S (2014) The new randomised controlled trials (RCT) movement in public policy: challenges of epistemic governance. Policy Sci 47:387–402

Oakley A, Strange V, Toroyan T, Wiggins M, Roberts I, Stephenson J (2003) Using random allocation to evaluate social interventions: three recent UK examples. Ann Am Acad Polit Soc Sci 589(1):170–189

OECD (2017) Behavioural Insights and Public Policy: Lessons from Around the World. OECD Publishing, Paris. https://doi.org/10.1787/9789264270480-en

OECD (2019a) Tools and ethics for applied behavioural insights: the BASIC toolkit. OECD Publishing, Paris. https://doi.org/10.1787/9ea76a8f-en

OECD (2019b) Delivering better policies through behavioural insights: new approaches. OECD Publishing, Paris. https://doi.org/10.1787/6c9291e2-en

OECD (2022) Good practice principles for ethical behavioural science in public policy. OECD Public Governance Policy Papers, No. 20, OECD Publishing, Paris. https://doi.org/10.1787/e19a9be9-en

OECD (2024) Logic: good practice principles for mainstreaming behavioural public policy. OECD Publishing, Paris. https://doi.org/10.1787/6cb52de2-en

Paunov Y, Grüne-Yanoff T (2023) Boosting vs. nudging sustainable energy consumption: a long-term comparative field test in a residential context. Behav Public Policy 1–26. https://doi.org/10.1017/bpp.2023.30

Reisch LA, Sunstein CR (2016) Do Europeans like nudges? Judgm Decis Mak 11(4):310–325

Sanders M, Snijders V, Hallsworth M (2018) Behavioural science and policy: where are we now and where are we going? Behav Public Policy 2(2):144–167

Schmidt R, Stenger K (2024) Behavioral brittleness: the case for strategic behavioral public policy. Behav Public Policy 8(2):212–237

Sheeran P, Webb TL (2016) The intention–behavior gap. Soc Pers Psychol Compass 10(9):503–518

Strassheim H, Korinek R (2015) Behavioural governance in Europe. In: Wilsdon J, Doubleday R (eds) Future directions for scientific advice in Europe. Centre for Science and Policy, Cambridge

Sunstein CR, Reisch LA (2019) Educative nudges and noneducative nudges. Trusting nudges toward a bill of rights for nudging. Taylor & Francis Group, Abingdon, pp 95–118

Thaler RH, Sunstein CR (2009) Nudge: improving decisions about health, wealth, and happiness. Penguin, Chicago, IL

Tomio AA, Dottori M, Hesse E, Torrente F, Flichtentrei D, Ibanez AM (2021) Behavioural insights (BI) for childhood development and effective public policies in Latin America: a survey and a randomised controlled trial. BMJ Open 11(8):e047925

Tor A, Klick J (2022) When should governments invest more in nudging? Revisiting Benartzi et al. (2017). Rev Law Econ 18(3):347–376

Troussard X, Van Bavel R (2018) How can behavioural insights be used to improve EU policy? Intereconomics 53(1):8–12

Van Bavel R, Herrmann B, Esposito G, Proestakis A (2013) Applying behavioural sciences to EU policymaking. Joint Research Centre European Commission, Brussels

Varazzani C, Tuomaila H, Emmerling T, Brusoni S, Fontanesi L (2023) Seven routes to experimentation in policymaking: A guide to applied behavioural science methods. OECD Working Papers on Public Governance, No. 64. OECD Publishing, Paris. https://doi.org/10.1787/918b6a04-en

Villegas-Cho C, Giraldez J, Jamieson D, MacDonald A (2018) Behavioural insight brief: ethics of applying behavioural sciences to policy. Government of Canada, Policy Horizons Canada. https://horizons.service.canada.ca/resources/wp-content/uploads/2018/11/bi_ethics_summary_2_0.pdf

Welsh BC, Rocque M (2014) When crime prevention harms: a review of systematic reviews. J Exp Criminol 10:245–266

Wendel S (2020) Designing for behavior change: applying psychology and behavioral economics, 2nd edn. O'Reilly Media, Inc

WHO (2024) Establishing a behavioural insights function: decision support tool. Geneva. World Health Organization, Behavioural Sciences for Better Health. https://www.who.int/publications/i/item/9789240095427

Whitehead M, Jones R, Howell R, Lilley R, Pykett J (2014) Nudging all over the world. Economic and Social Research Council of the United Kingdom. Routledge, London

Whitehead M, Jones R, Lilley R, Pykett J, Howell R (2017) Neuroliberalism: behavioural government in the twenty-first century. Routledge, Abingdon/New York