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Behavioural Insights Teams (BITs) and Policy Change: An Exploration of Impact, Location, and Temporality of Policy Advice

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Abstract

Behavioural Insights Teams (BITs) have gained prominence in government as policy advisors and are increasingly linked to the way policy instruments are designed. Despite the rise of BITs as unique knowledge brokers mediating the use of behavioral insights for policymaking, they remain underexplored in the growing literature on policy advice and advisory systems. The article emphasizes that the visible impact that BITs have on the content of policy instruments, the level of political support they garner and their structural diversity in different political departments, all set them apart from typical policy brokers in policy advisory systems connecting the science–policy divide.

Keywords

Behavioural Insights Teams, behavioral insights, policy advice, policy change, policy design

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Introduction

The literature on the use of behavioral insights in public policy has expanded over the past five years and presents a variety of perspectives on the long-standing phenomenon of using psychological findings to help achieve public policy goals (Van Deun et al., 2018). Ongoing research in the field involves examining the organizational manifestation of nudging in the form of Behavioural Insights Teams (BITs, n.d.) in government, as well as treating the use of behavioral insights as an informal addition or enhancement to traditional tools of government action. In this article, we aim to connect these streams of research by explicitly addressing the contribution of BITs toward shaping policy instruments based on behavioral insights. The application of behavioral insights to policymaking depends on the interpretations of scientific findings and the assumptions used in translating empirical evidence on human decision-making (Kuehnhanss, 2019). Thereby, responsible government departments require the capacity to effectively integrate behavioral knowledge into their functions, a task that has been taken up by the role of BITs (Howlett, 2015; Wu et al., 2015).

In this context, we identify BITs as catalysts for integrating behavioral insights into policy design processes. Here, questions also arise about how BITs try to modify prevailing policy instruments by changing existing policies to gain support from other stakeholders. The literature in recent years has highlighted the complexity of installing BITs in government, emphasizing their distinctive success in promoting behavioral ideas beyond traditional advisory roles (Strassheim, 2020). BITs inhabit a unique position within governments' broader policy advisory systems, as these groups start out as internal advisory units but can grow to become external partners that galvanize the creation of more behaviorally informed policies, across sectors and often across jurisdictions. There have been attempts to classify their role in government by identifying them as "knowledge brokers" (Feitsma, 2018). However, the degree of their impact can vary widely and rests heavily on the tendency of BITs to capture politically feasible opportunities for bringing about policy change. BITs can thus become largely independent units that take on knowledge broker functions by bridging behavioral research and policymaking, while also acting as enterprising policy actors that seize opportunities to insert and legitimize new behaviorally based ideas into the policymaking process. BITs can set themselves apart in promoting evidence-based policy advice by employing specific methods such as randomized controlled trials (RCTs), analyzing the results and designing local interventions that are ready for government uptake (Halpern, 2015). The influence of BITs along both of these activities can be critical to the way and extent to which the content of policy instruments is modified based on behavioral insights.

There is scholarly agreement regarding this form of instrumental learning that can be ushered in by enterprising knowledge experts in catalyzing policy change (Weiss, 1986) as well as the importance of knowledge brokering to bridge the gap between research and policy communities (Lightowler & Knight, 2013; Nutley et al., 2007). However, what remains rare, are attempts at generalizing the role of BITs as unique policy advisors and theorizing the impact that they can have on the content of policy. In short, the degree to which BITs are organizationally embedded in government as policy advisers as well as their instrumental function in policy design within these units has been given limited consideration (Strassheim, 2020). At the same time, however, the literature on policy advice and advisory systems has moved beyond a micro-level examination of individual policy advisers and now considers configurations of multiple advisory actors and how they interact with the policy process (Craft & Halligan, 2017; Hustedt & Veit, 2017; Veselý, 2017). While the example of BITs remains unexplored in the theorization linked with policy advice, scholars of the latter strongly indicate the need for more conceptual “legwork” to better investigate questions regarding the material impact of policy advice on policy output and to gauge its interaction with policy process variables (Hustedt & Veit, 2017, p. 46).

To address this gap, and in conceptualizing the dynamism of BITs as policy advisers, this article focuses on their location, temporality, and impact vis-à-vis their contribution to the formulation of policy instruments. *Location* herein describes the configuration of BITs, whether in the form of centralized, decentralized, or networked advisory units functioning internally and outside of government. *Temporality* captures the flexibility of how BITs operate within that structure and alter more broadly as part of the advisory system over time. Finally, *impact* is defined as the substantive changes that BITs can make to policy instruments. This discussion is situated within and aims to contribute to the contemporary discourse surrounding policy advice and policy advisory systems.

The article is structured as follows. In the first section, a review of the literature on policy advice vis-à-vis policy formulation aims to situate the function that BITs take on in government processes and how it is distinct from the current state of knowledge about policy advisory systems. Linked to this role definition, we highlight the connection of BITs with policy changes happening around the support for the use of psychological insights in policy design. In the second section, the article unpacks the dimensions of location, temporality, and impact with respect to the policy advisory function of BITs. The third section of the article concludes by drawing out broader patterns of political support that have been observed for BITs, while making a conceptual addition to existing frameworks of policy advisory systems.

BITs as Policy Advisory Systems: A New Approach

BITs occupy a specialized role in the policy design process, which is broadly indicated across the discipline of public policy (Oliver, 2015; Strassheim et al., 2015) as well as public management (John, 2018). However, attempts to theorize about the structure of the advisory relationship that they maintain with policymakers and the locus of their impact on the policy design process remain elusive. Where BITs have been defined as being policy intermediaries, their role as boundary spanners and mediators of the traditional science–policy divide has been less emphasized with respect to their own tendency to be “boundary-less and invisible . . . characterized by role conflict, role ambiguity and a lack of organizational recognition, and a lack of career pathways” (Feitsma, 2019). At the same time, with an invigorated effort to offer frameworks of analysis for understanding their different structures, motivations, and development strategies, contemporary studies of policy advisory systems in policy design have garnered much scholarly interest (Howlett, 2019) and provide a helpful starting point for generalizing what is known about the policy advisory role of BITs.

As highlighted by Howlett (2019), the knowledge gaps still existing in the examination of the expertise and politics of policy advice fall into three broad categories, and these are also mirrored by the theoretical questions that have arisen about BITs. First, there is a need to develop more robust models of policy advice that go beyond dichotomous “insider–outsider” depictions of advisors, to better include a consideration of where and how much impact they elicit. Second, questions about the temporal dynamics of how policy advisors strategically develop and achieve influence and support over time need to be addressed. Especially, to gain a comparative view about how policy advisory groups’ strategies and the level of support they receive may change from the time they are conceived (t_0) to a future time where their influence has resulted in some degree of observable effect (t_1), to thereafter as their influence expands, sometimes even across their jurisdictional origins ($t_2 \dots n$). Closely related to this topic is the third remaining gap in knowledge about policy advisors, which warrants a better comparative examination of what is the substantive content of advisory influence. That is, deliberation is needed not just about the location of support and strategic dynamics of the influence wielded by policy advisors, but also some thought must be given to understanding their “influence over what”? (Howlett, 2019, p. 5).

The field of policy formulation research is relevant in the context of this question. Recent research specifically looks at different types of actors who are involved in creating and designing policy (Howlett & Mukherjee, 2017, 2018). Within those studies, actors influencing formulation have sometimes

been described as “instrument constituencies” or “coalitions,” who employ political strategies to forward their preferred policy instruments onto government agendas for government action (Mann & Simons, 2015; Voß & Simons, 2014), or as “epistemic communities” of scientists and researchers who generate the knowledge and evidence that can be used by government decision makers for designing policies (P. M. Haas, 1992; Mukherjee & Howlett, 2015). Some policy formulation actors have also been called knowledge or policy “brokers” who serve as intermediaries and enjoy greater access to government decision makers than either of the two aforementioned categories, by “repackaging data and information into usable form” (Howlett, 2019, p. 33). However, the research on these different communities falls short when talking about behavioral experts, whose popularity and numbers as policy formulators have surged globally, and yet they remain inadequately explored by current theorization on policy formulation and policy advice.

In theorizing about the relationship between experts and policy formulators, early scholars of policy formulation acknowledged that there was no automaticity in how much and how quickly policy knowledge is taken up by policymakers. Webber (1983), for instance, pointed out that “if left to policymakers and policy researchers, there is little reason to expect the use of policy research to increase in the future” (Webber, 1983, p. 558). Furthermore, he noted that communities of knowledge suppliers are distinctly heterogeneous, because to encourage more uptake of policy research, researchers often espouse multiple roles as advisers, lobbyists, and brokers in the policy process (Webber, 1983, 1991). Following these findings, the notion of “policy advisory systems” was introduced in the mid-1990s as a way of capturing the complexity of arrangements that arise from the exchange of policy relevant information between knowledge “producers” such as scientists and political advisors and knowledge “consumers” such as political leaders and decision makers (Halligan, 1995; MacRae & Whittington, 1997; Weaver, 2002).

Through the concept of policy advisory systems, the academic discussion of knowledge utilization in the policy sciences has since moved beyond the earlier “insider–outsider” or “two-community” metaphors. Conceptualizing policy advisory systems in contemporary times captures the dynamism of knowledge use in policy design as interactions between at least *three* communities of consumers, producers, and policy advisors or knowledge “brokers” (Halligan, 1995; Lindquist, 1990). These systems represent “interlocking sets of actors, with a unique configuration in each sector and jurisdiction, who provide information, knowledge and recommendations for action to policymakers” (Craft & Howlett, 2012, p. 80). Their defining function is to make certain that policy-making remains germane to changing sociopolitical

contexts, by providing accurate and up-to-date knowledge of real-world events and salient methods and providing a foundation for policy deliberations and formulation, adoption, implementation, and evaluation activities undertaken by governments.

Various mechanisms exist to facilitate the actions of these different kinds of policy advisors and knowledge brokers and/or create multiple alternative paths in which information can flow (James, 1993; Knight & Lyall, 2013). Overall, knowledge brokerage in the policy process involves all the activities that bring together decision makers and researchers, facilitating their interaction and ultimately influencing each other's work as well as promoting research-based evidence in policy (Lightowler & Knight, 2013; Lomas, 2007). Knowledge brokers are hence seen to engage in three kinds of activities that help translate research into applicable lessons for policymakers (Giest et al., 2015). Those include diffusion of knowledge, which is essentially passive and unplanned, leaving the user to seek out information. A second activity is knowledge dissemination, which is an active process of communicating findings, which involves customizing the evidence for a particular target audience. And a third emphasis is knowledge implementation, which is "a more active process that involves systematic efforts to encourage adoption of the evidence" (Sebba, 2013, p. 396). These activities can also be framed as "push" and "pull" efforts, as researchers disseminate or *push* information out in hope of its usage by other stakeholders or embody a stakeholder *pull*, where a demand is created for such information.

Location, Timing, and Impact of Policy Advice by BITs

Knowledge brokers and their advisory activities have gained importance in response to the increased complexity of policy-making, as the amount of information policy makers must absorb and master increases and the fast pace of problems and public demands heighten. Also, "the decentralization of much delivery and decision-making, and the pressure to devolve delivery and/ or decision-making to local and regional government and to the not-for-profit sector are reducing governments' leverage for outcomes" (Eichbaum & Shaw, 2007, p. 465) enhances the role knowledge brokers play in policy-making and diversifies the type of advisory relationships they can foster with decision makers. Several authors have alluded to this latter point in recent observations of how the diffusion of new knowledge (such as behavioral insights) informs public policy. For example, Campbell and Pedersen (2014) in their comparative review of "knowledge regimes" or the diffusion of "big" ideas in policymaking across U.S. and European contexts suggest that this

activity rests squarely on “the organizational and institutional machinery that generates data, research, policy recommendations and other ideas that influence public debate and policy making” (Campbell & Pedersen, 2014, p. 3). Similar insights have emerged from examining the role of policy advisory bodies in the design of innovation policy in Europe (Christensen & Velarde, 2019). In other words, the structure of policy advice that is propagated by policy advisors can have a profound impact on how new knowledge is translated, as this is well-reflected in the case of how behavioral expertise is organized vis-à-vis policy decision makers during the design and redesign of particular policy instruments.

Location

The modern understanding of policy advisory systems places the role of the policy advisor as a necessary intermediary between the earlier “two-community” metaphor comprising only of knowledge generators (scientists and researchers) and knowledge users (policymakers). This contemporary locational model of knowledge use in policymaking defines policy advisors as a “third” community that fulfills the role of brokering between knowledge producers and consumers (Lindquist, 1990). Policy advisors are hence theorized to “repackage” scientific findings, data, and analysis in forms that are more usable for policymakers and those “with actual authority to make policy decisions, including cabinets and executives and well as parliaments, legislatures and congresses and senior administrators and officials” (Howlett, 2019, p. 244). In addition to defining a distinct role for policy advice, this “three-community” depiction has also allowed for a consideration of locational attributes that go beyond simplistic dichotomies of whether policy advisors are situated “inside” or “outside” government. This can better explain the contribution that actors as varied as nongovernmental specialists, experts from think tanks and interest groups and government’s own permanent cadre of researchers, have as policy advisors (Halligan, 1995; Veselý, 2013). Even as intermediaries, policy advisors can occupy a range of positions that are more proximal to policymakers or by contrast, more peripheral to the policymaking process depending on the level of control that the government exercises on the operations of the policy advisory system (Craft & Halligan, 2017; Craft & Howlett, 2012). These locational features can have a bearing on the level of influence that advisors can wield on the design of policy instruments. In his exposition on the “externalization” of policy advice, Veselý (2013) summarizes this distinction between policy advisors based on (a) whether they start off as part of a government sector (i.e., as internal or external) and (b) the extent to which policy decision makers and their appointees can

exercise some control over how the advisory body operates and the form that advice takes. And while the discussion about the locational characteristics of policy advisors has thus progressed to better explain how their position with respect to the central government determines their impact, questions about what impact their internal organizational transformations can have on policymaking are yet to be asked. That is, while the locational features of internal government research teams and external advisors such as think tanks have opened up to theorization about policy advice, the structural diversity of new advisors such as BITs remain unexplored, because their work can be internally oriented with an organizational structure that is conducive to external consulting.

Different organizational structures and their relative proximity to policymakers can greatly influence the advisory activities that BITs perform as crucial policy brokers. While the predominant understanding of policy advisory systems puts them in between external knowledge generators (scientists and social scientists) and policy decision makers internal to the government, BITs can also uniquely perform this role by themselves being embedded within public service agencies. To catalyze the application of behavioral insights into policymaking, BITs “are being built inside and outside government as well as at the international level” (Organisation for Economic Co-operation and Development [OECD], 2017, p. 22). And indeed, the most well-studied BIT, United Kingdom’s Behavioural Insights Team was first created inside the government in 2010 to furnish policy advice on how to apply behavioral sciences to the development of regulatory instruments. Eventually, it was made into a semi-autonomous “social-purpose company” in 2014 that is presently available to provide advisory services as consultants to various governments outside of the United Kingdom (Halpern, 2015). In this context, the Team espouses an empirical approach in policy areas such as public health and tax evasion, by designing local tests and experiments founded on principles of psychology and behavioral economics, employing methods based on RCTs, analyzing the results, and designing local interventions that are ready for government uptake (Halpern, 2015). This emphasis on promoting evidence within context has been shown to set BITs apart from alternate sources of policy advice, as they do not just act as more or less passive conduits or facilitators between behavioral scientists and policymakers. Rather, they themselves constantly validate and are in turn validated by the empirical recommendations that emerge through the use of experimental methods such as RCTs. In doing so, the U.K. BIT not only functions as a boundary-spanner between academics and policymakers, but also substantively fulfills the entire range of brokerage activities described above (knowledge diffusion, dissemination,

and implementation) both externally and internally to the government. This uniquely multidimensional function that a BIT is able to play in a policy advisory role is fundamentally “based on the capability of actors to combine both, political and epistemic authority, i.e., expectations towards their capacity to produce and validate knowledge about governance that is deemed scientifically sound as well as politically relevant and legitimate” (Strassheim, 2020, p. 462).

While the U.K. case is a prominent example of a policy advisory body fulfilling knowledge brokering functions by being situated both inside and outside public administration, most BITs around the world remain internal to government (OECD, 2017). The “model” of BITs as internal policy advisory agencies can vary across jurisdictions, but tends to suggest three major configurations. A comparison of BITs across Europe, North America, and the Asia-Pacific identifies these as centralized, decentralized, and networked (Figure 1; Afif et al., 2019). The latter refers to a model where there is a coordinating agency, but each ministry may have its own behavioral unit. The Dutch BITs unit is an example of a networked configuration. These units started out as individuals or teams in several Ministries (around 2009) that shared behavioral insights and advice through various communication channels—both in informal ways (over a cup of coffee) and in structured settings, such as offering problem analysis and matching this with behavioral tools (Afif et al., 2019). In 2014, a Behavioral Insights Network consisting of 11 Ministries and regulatory bodies was officially established to share knowledge on behavioral interventions (Lourenço et al., 2016). In a more decentralized model, several government departments have their own BIT—allocating funding and projects separately. Similar dynamics apply in the U.K. case, where the central steering model seems to have evolved into a more diffused configuration, where “BIT has become an entity partly outside government, providing support to government departments and agencies, which have also their own BI units or specialized teams” (OECD, 2017, p. 35). Thereby, even though the U.K. BIT is now separate from government, in a physical and organizational sense, it remains closely linked by conducting trials in collaboration with individual governmental units.

And, finally, in a centralized set-up, there is one unit that works with all departments—structurally pooling resources and research for designing and implementing interventions. Germany is an example of this. The German government has a central team as part of the staff of the Policy Planning Unit within the Federal Chancellery. The team integrates insights and methods in one place while collaborating with a wide network of experts from the Federal Ministries, academia, and practitioners. However, due to Germany’s federal structure and the high level of autonomy of each Federal State (*Bundesland*),

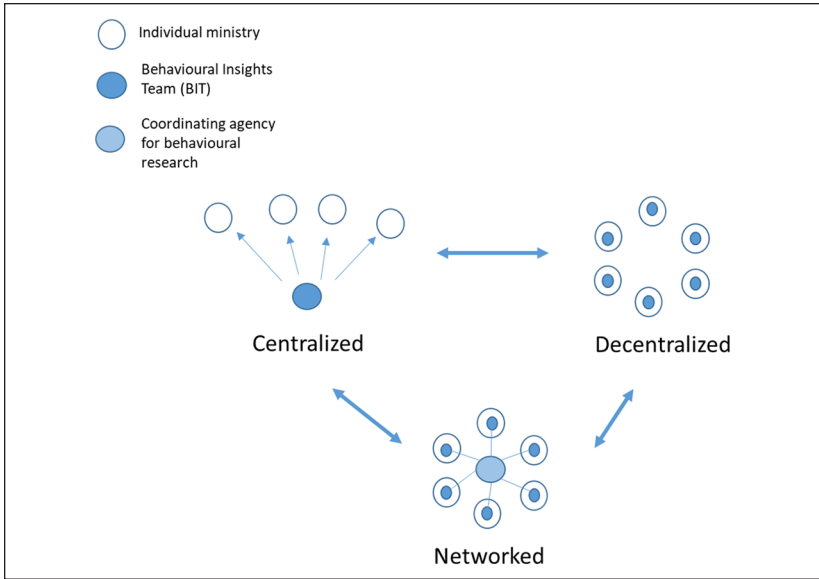


Figure 1. Prominent models of BITs in government.

Source. Based on Affif et al. (2019).

Note. BITs = Behavioural Insights Teams.

BI application and involvement of the unit might vary widely throughout policy sectors and geographic location (Afif et al., 2019; Joint Research Center [JRC], 2016).

Temporal Dynamics

The temporal dimension can mean different things in the context of policy advisory systems more generally and for BITs specifically. It can address the advice being given by BITs in terms of its short-, medium-, or long-term application. Furthermore, it can describe the larger behavioral movement and its evolution throughout different government settings and instrument choices. Such assessments are often linked to broader questions of shifts in modes of governance (Bingham et al., 2005; Craft & Halligan, 2015; Page & Wright, 2007). Finally, temporal dynamics highlight the changes over time in policy advisory systems themselves. This is based on the assumption that policy advisory systems are not static, but rather evolve in response to changing policy requirements.

The literature on policy advice has only recently begun to ask questions about temporal dynamics, and even then, these have been limited to the

aforementioned notion of *externalization* or rather, how we can measure whether external policy advice is growing (Howlett, 2019; Veselý, 2013). The externalization theory still does not essentially allow for deeper hypotheses to be crafted to capture the dynamism of the facilitative role that policy brokers can play over time and has been exhibited by the case of BITs. For example, do initial contributions by policy advisors focus on promoting greater use of specific kinds of research or research methods in policy-making, while more mature or later forms of advice relate specifically to how policy instruments should be adjusted in light of that research? The answers to this question cannot solely be found in the dynamics of BITs themselves, but are embedded in a larger discussion on locational and structural settings. In this section, however, the goal is to separate the temporal factors from the push–pull factors outlined in other literature to highlight the specific mobilization of behavioral expertise, in the form of BITs over time.

Most BITs originate within the government and usually around a time when the political environment is already supportive of the use of behavioral knowledge for policy design (John, 2016a, 2016b; Kok, 2017). As such, their establishment within the government has usually signaled an escalation of support for the use of psychological findings into policymaking and is legitimized by the ascendance of RCT methods for policy design (Haynes et al., 2013). As Howlett (2011) points out, “civil servants and others whom they trust or rely upon to consolidate policy alternatives into more or less coherent designs and provide them with expert opinion on the merits and demerits of the proposal” (p. 32). This is true for individual behavioral advisors, while larger advisory committees mostly involve officially selected representatives that sit on temporary or permanent bodies. Howlett et al. (2009) list the characteristics of this type of knowledge broker as

- advisory bodies are closer to societal actors than to the formal government;
- they are working with specific focus;
- they engage in dialogues that seek to build consensus;
- they are not created to develop new knowledge, but are a venue for different interests and framing issues.

Ideally, and over time, an effective policy advisory body contains all of these elements by combining in-house advisory service with specialized political units and third-opinion options (Halligan, 1995). Policy advisers, for example, first take on a brokering position beyond the minister–department relationship to address policy overlap or conflict and resolve differences (Maley, 2000). Over time, more complex issues which span multiple levels of

government require customized advice structures to cope with the mass of information and localized expectations of how that information can be used to bring about substantive changes to policy tools (Howlett & Newman, 2010).

This mediation role played by BITs, initially as specialized advisory committees, helps to ramp up uptake of particular scientific knowledge by moving beyond mere access to information to helping defining the problem, challenge the design of existing policy instruments and programs, expand the public debate based on, for example, public outreach, innovate through policy research, and collaborate with various stakeholders (Sebba, 2013). Research mediators widely “build on existing networks of users in research designs, improve clarity of communication, gain key contacts, and develop media ‘savvy’ timeliness which anticipates future policy interests” (Sebba, 2013, p. 405), which ultimately makes them valuable assets in the policy-making process. Their expertise, while centralized into one organization (as BITs often are), can allow them to increasingly take on the role of consultants over time and occupy more “external” positions as they mature. As consultants, they are able to expand their repertoire of policy advice across different departments and often across jurisdictions through processes of “externalization” or the extent to which actors outside of government exercise influence and “politicization” or the extent to which partisan or nontechnical aspects of policy forms the content of policy advice and thereby favors actors who deal in this kind of information and knowledge (Craft & Howlett, 2012).

The mobilization of behavioral expertise, in the form of BITs, as they transcend jurisdictional boundaries takes on a unique form. Domestically, the rising influence of behavioral experts and consultants may manifest itself through a rise in engagements between members of an existing BIT, within a variety of sectors such as energy, health, and welfare. But domestic and regional successes can also inspire the diffusion of knowledge and the development of similar organizational structures internationally, sometimes simply by example. For instance, following the burgeoning of behavioral insights in the policymaking landscape in the United Kingdom, “the White House set up its own behavioral policy unit, the Social and Behavioral Sciences Team (SBST), which operates in a similar way to BIT,” and similar developments have followed in Australia as well as Singapore and several European governments (John, 2014), to indicate a significantly systemic rise of the influence of organizing behavioral expertise in policymaking.

This diffusion of the BIT organizational structure over time does not completely mimic what is already known about the externalization of policy advice. Policy advisory actors and knowledge brokers who increasingly work beyond their original jurisdictions often take the form of independent research institutes or think tanks and BITs are markedly different from this category of

policy advisors. To expand on a more traditional a subset of knowledge brokers, think tanks, for example are defined as “organizations that have significant autonomy from governmental interests and that synthesize, create, or disseminate information, research, ideas or advice to the public, policy makers, other organizations (both private and governmental), and the press” (E. Haas, 2007, p. 68). Think tanks are intellectually independent from governments, but their output is geared toward government needs (James, 1993). This implies that researchers in think tanks strategize about the timing of their advice and who the recipient is. Secondly, they undertake public interest and strategic research in that they focus on pressing issues in the public realm, but also take on projects that are financed by certain interest groups. And finally, most think tanks are politically partisan. This characteristic is common, but manifests itself in varying degrees depending on the political system and the issue at hand (James, 1993). Based on these elements of think tank work, think tanks also serve as “mediators” between research and policy (McGann & Johnson, 2005; Smith et al., 2013).

Whereas, for BITs, their influence over the design of individual policy instruments can accrue over time to eventually bringing about very notable changes to how policy goals are set and a recasting of policy problems as more behavioral in nature. So, the question remains: Do BITs signify the emergence of a new and distinct category of policy advisors? Their temporal dynamics make it difficult to evaluate their contribution of behavioral knowledge during a specific time period and confuse their roles as “brokers,” and sometimes “entrepreneurs,” necessitating a long-term view of what exactly their impact on the process of policy design looks like. What is missing is a way of distinguishing between the effects of knowledge brokerage on policy by examining its effect on policy *content* or output.

Substantive Impact

The goal of this section is to shed light on the impact that BITs have on governmental programs and policy instruments. This includes questions about the type of policy changes BITs work on. These changes could entail creating a new policy instrument, tweaking the settings of existing instruments, or initiating broader level changes in the regulatory system. Remaining questions linked to the impact of BITs ask how behavioral units work with governments and what these organizational arrangements mean in terms of the kind and the level of policy changes they can bring about (John & Stoker, 2019). While in the policy sciences it is generally understood that the structure of the relationship between experts and policymakers can vary across policies, sectors, as well as jurisdictions, empirical questions remain about


	Hall (1993)	Howlett (2002)	Cashore and Howlett (2007), Howlett and Cashore (2009)	Sabatier and Wieble (2007)	
Changes in: 	Incremental	1 st Order: Settings of policy instruments	Policy instrument components	Calibrations ↓ Settings	Secondary aspects ("minor")
		2 nd Order: Types of policy instruments	Program specifications ----- Policy instrument types	Mechanisms ↓ Objectives	
	Paradigmatic	3 rd Order: Policy goals	Policy goals	Instrument logic ↓ Policy goals	Policy core beliefs ("major" – subsystem-wide)

Figure 2. Major theories of policy instrument change.

the substantive impact of this relationship on the formulation of policy instruments. In other words, the impact of policy advice is testament to “the quality of internal and external policy advisory systems and their capacity to provide useful, relevant and high-quality policy advice” (Vesely, 2013, p. 200).

Such claims are similar to those found in the existing theories of policy change (Figure 2) that distinguish between different layers of change and the compounding influence that minor-level changes to policy can have on broader policy aims (Hall, 1993; Howlett, 2002). Change can thus take place for specific settings, as well as within abstract goals (Cashore & Howlett, 2007; Howlett & Cashore, 2009; Howlett & Migone, 2013), impact means-end relationships between policy focus and policy content components (Howlett & Cashore, 2009), and from minor to major (Sabatier & Weible, 2007) alterations of policy belief systems.

Policy instrument components, or secondary aspects, are often the most specific, the most observable, and the most pliable to the type of learning and knowledge forwarded by BITs. The functioning and influence of BITs can be critical at this stage when policy objectives are revised or rethought based on science as well as political experience. In line with Sabatier’s (1998) assumption, there is scholarly agreement regarding the role of policy-oriented learning that can be ushered in by the epistemic role that policy advisors such as the BITs take on, in catalyzing incremental, endogenous policy change.

For example, BIT and the U.K. Department of Energy and Climate Change (DECC) conducted an RCT with British retailer John Lewis to test label information on household appliances. Alongside the standard EU-mandated

energy rating labels, additional labels displayed the average lifetime running cost for each appliance. “The aim of the trial was to test whether providing this information at the point of sale changed purchasing behavior, resulting in consumers buying appliances that use less energy” (BIT, 2014). In the evaluation of the trial, the DECC (2014) concludes that there is robust evidence to use lifetime running cost labels on white good appliances, specifically washer dryers. A change in the label is seen as a low-cost improvement to address information barriers in the energy efficiency domain and to provide salient information to consumers.

In a few exceptional cases, policy learning from the incorporation of behavioral insights has been attributed to some form of cumulative yet altogether paradigmatic policy change. This can be witnessed in the EU ecolabel discussion. The use of ecolabels pre-dates the BI trend—being in use since 1992/1993—however, their reform has provided windows of opportunity to update them in line with behavioral insights. In addition, their effectiveness on consumers is expected to plateau by 2030. Such a scenario presents a chance for policymakers to consider alternative measures as well as an opportunity for BITs to adjust energy efficiency measures in the area of ecolabeling. At EU level, energy efficiency labels started out with ranking products along a 7-point A–G scale from most to least efficient. However,

while the original idea was to only have the best products marked with an A rating, this highest energy efficiency class has become a de facto standard on many product categories, to an extent where up to 90% of products . . . are now A-labeled. (EC, 2010; Heinzle & Wüstenhagen, 2012, p. 61)

In 2009, three additional classes were introduced to the scale to embrace products “beyond A.” This led to a scheme where seven classes of energy efficiency were possible: from A+++ to D (ECEEE, 2009). For this step, going toward an A+++ to D model, a 2012 study, finds that the introduction of categories beyond A reduces the effectiveness of the overall label, because it adds complexity and reduces awareness (Heinzle & Wüstenhagen, 2012).

Given these mixed results for the expanded A category, the EC ordered a study to assess the impact of different energy labels on consumers’ understanding and purchasing decisions regarding electric appliances (London Economics [LE], 2014). The experiments showed that consumers are more likely to choose the most energy-efficient appliance when the scale uses A to G anchors rather than A+++ to D. In 2015, based on these findings, the EC proposed to return to the A–G label scale. The labels will be introduced to consumers as of March 1, 2021 (EC, 2019b). In this updated version, energy labels will also display other energy and nonenergy information, such as

information about water used per washing cycle, storing capacity, and noise emitted (EC, 2019b).

In addition to bringing about first-order changes to policy instruments such as those exhibited in the ecolables example above, BITs can also impact modifications to policy at the program level, based on the extent to which behavioral approaches and behavioral knowledge are institutionalized within government policymaking structures. And much of this institutionalization is determined by how BITs succeed in marshalling support and taking charge of promoting behavioral insights as suitable and necessary toward improving program design. These activities go beyond what is typically observed for policy advisory systems that are mainly concerned with information-facilitating roles to help translate research into policy. For example, a cross-national, cross-sectoral survey of BITs in OECD member countries indicates that

BI are introduced largely as a result of the organizations' leadership where there has been some high-level support within the organization for the use of behavioral insights. This is often with the support of partnerships with academic institutions that can help build capacity and capabilities within the government. (OECD, 2017, p. 32)

In the energy sector, there are several examples of how second-order changes at the program level directly result from BITs assuming capacity building and supervisory roles. For example, in the Netherlands, the Information Council (*Voorlichtingsraad*), which formulates the joint communication policy of the central government for the Prime Minister and the ministries, started a trial government-wide behavior lab for communication in 2017. This resulted in changes such as modifying an email sent to high energy consumption companies committing to achieving an energy saving of 30% in the period 2005 to 2020. Behavioral insights have also been incorporated into the government Integral Assessment Framework for Policy and Regulations, published by the Dutch Ministry of Justice and Security, to guide policy makers on instruments and guidelines to formulate policies and regulations (Afif et al., 2019).

Discussion and Concluding Remarks

Based on the above theoretical exploration of policy advisory systems and the unique features of BITs therein, we propose a simplified policy advisory framework (Figure 3). The proposed framework focuses on the content and dynamic location of policy advice. The *content* looks at the modifications to the settings of existing instruments and the potential realignment of broader

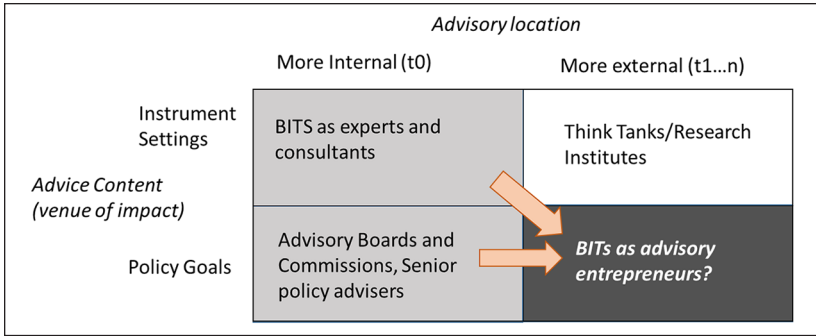


Figure 3. Behavioural Insights Teams (BITs) in policy advisory systems.

policy goals. The *location* of policy advice targets the enabling environment of political support that advisory systems occupy. The *temporality* aspect is captured by the arrows in Figure 3 indicating the transient nature of the organizational structure of BITs that can adapt between centralized, decentralized, and networked forms, from their inception (t_0) to their evolution over time ($t_{1...n}$).

This perspective aligns with ongoing efforts to assess the impact and categorize the structure of BITs. The Organization for Economic Cooperation and Development (OECD), for instance, attempts to place BITs “inside and outside of government” (p. 23) and maps country-specific dynamics over time (OECD, 2016). Similarly, the EC proposes the PRECIS perspective, where the acronym PRECIS stands for Political support, Resources, Expertise, Coverage, Integration, and Structure (Lourenço et al., 2016). These dimensions highlight how BITs can be most effectively examined by scrutinizing the way that they are embedded in the institutional structure, how many financial and human resources they have, their experience and seniority, as well as their policy scope and whether they are internal, centralized, or decentralized.

To this end, the article offers a more holistic view of the processes of evolution witnessed by policy advisory system by integrating the location and role of advisors such as BITs with research on timing and policy change. We emphasize that BITs need to be assessed as a unique phenomenon compared with traditional policy advisors and knowledge brokers, as this consideration would enable research to make the connection between timing, location, and impact and gain more nuanced insights into the dynamics of behavioral teams as part of government.

This exploration of policy advisory systems using the increasingly visible case of BITs shows that the patterns of political support for BITs indicate their

transformational nature as policy advisors and the wide range of effects that they can have on the content of policy. Their origins, development, and influence over the process of policy design allude to the unique duality of their role as subject matter experts as well as political negotiators and highlight the importance of incorporating this duality in what is known traditionally about the role of policy advisors. The visible impact that BITs have on the content of policy instruments, the level of political support that they are able to garner, and the cooperation they can elicit from different political departments, all set them apart from typical policy brokers in policy advisory systems connecting the science–policy divide. This understanding can advance the theorization of what is known about the role of policy advice in policy design, especially from an agency perspective, and offers new possibilities to conduct research on BITs. First, there is a need to examine the major patterns of political support for BITs in different modes of governance to generally understand whether BITs signify a new form of policy advisory system within the policy-making process. Second, a more empirical exploration is needed regarding the structure of BIT interactions with relevant departments (whether as consultants, stand-alone coordinating divisions, or as specialists within every department) as depicted in Figure 2. And third, and more conceptually, what does the emergence of BITs signal for policy advisory systems to be understood as independent variables of policy-level change?

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