Dr. Kathrin Loer

Fernuniversitaet in Hagen and

University of Osnabrueck (04/2019-09/2019)

Email: kathrin.loer@fernuni-hagen.de

Jan Pollex

University of Osnabrueck

Email: jan.pollex@uni-osnabrueck.de

All that different? Behavioural expertise in policy-making

Paper to be presented at ICPP Montréal June 26-28, 2019,Panel T05P04: "Combining Instruments in Formulating Policies: Why and How Decision-makers Set up Policy Instruments' Mixes"

Abstract

During the last years we observed gaining prominence with regard to the use of behaviourally informed policy instruments. Governments have started to (at least) notice and often integrate findings from behavioural and cognitive science in order to design policies that better fit with addresses' probable or most likely behaviour. Although we consider policy-makers to break new grounds when it comes to the institutional embeddedness of behavioural experts or to the design of specific choice architectures, so far only few studies in political science systematically analyse behavioural expertise in policy-making (e.g. Strassheim 2017, Thomann 2018). In our paper we will follow the question how the choice and design of policy instruments changes if behavioural insights are applied. Starting with this question and considering the rich strand of literature we will present a concept that integrates the politics dimension with regard to (a) the process of instrument choice and (b) the interrelation between problems and policy instruments . In doing so we aim to contribute to the understanding of policy instruments that are informed or infused by behavioural insights since we identify open questions concerning instrument choice and application when they get a behavioural spin (Loer 2019). So far we do not know under which political conditions behaviourally informed instruments are designed and applied. We assume behaviourally informed instruments not to be totally new if they are used to improve previous or present instruments in order to change their mechanism or modes of action. Here we merely would call behavioural tools as being additive or complementary to existing policy instruments. We will show how they can get a behavioural spin.

However, we expect specific expertise and knowledge being highly relevant to develop and improve policy instruments – only the insights of behavioural science help changing the logic of instruments. So, we will analyse how specific knowledge becomes relevant with regard to the development of policy instruments. We will show how evidence from behavioural science will be politicized. We will follow the assumption that the policy process does not produce customized solutions with regard to specific problems but rather is the result of loosely coupled polices and problem structures (Kindgon 2003) as a basis for our study of behaviourally informed instruments and the role of expertise. Two empirical examples (Eco labels, Sugar Regulation) will show how to understand the process of behaviourally informed policy-making as being highly politicized contrasting the idea of a strictly evidence-based approach that is solely looking for perfect "solutions".

All that different? Behavioural expertise in policy-making

Introduction

Behavioural policy instruments have gained prominence in recent years. With their book *Nudge* Richard Thaler and Cass Sunstein fuelled a discussion on how to influence individual behaviour that was taken up in policy-making and political research. While behavioural insights and the idea of nudging people into a desired behaviour was taken up quickly by some governments (e.g. UK Cameron government and the Behavioural Insights Team), research is still debating several key issues related to the idea of nudging (Straßheim 2017). Especially, the selection of behavioural instruments has gained attention (e.g. Thomann 2018) but needs further conceptualization from a political science's perspective. Since Thaler, Sunstein and others have emphasised the relevance of behavioural insights for the design of their so-called "nudging"-approaches we want to investigate if and how these scientific insights have a major impact on policy-making and propose a way forward for research on behavioural public policy. We assume that not only expertise is part of political processes in which it is interpreted or framed but that expertise is politically charged. Therefore, we must look closely on behavioural insights, their relevance and forms of application in policy-making. The common trait of "nudging"- approaches is "[…] that they are based on the notion that our behaviour is governed not only by reflective and conscious processes but also by automatic and unconscious processes" (Ölander and Thøgersen 2014, 344). Various insights derived from psychology, cognitive, social and behavioural research prove that people can "[…] deviate in predictable ways from stereotypical economic rationality" (Wilkinson 2013, 341). To inform policy approaches these insights must in some way be incorporated or considered in policy making. On the one hand the nudging debate and behavioural research emphasise the relevance of scientific insights as a major element of more effective policy-making. On the other hand policy research is generally not only more critical towards the influence which scientific expertise can play in policy processes but policy research does also acknowledge the political dimension of scientific expertise and epistemic authorities (e.g. Straßheim and Kettunen 2014).

To uncover the role of behavioural insights we concentrate on a *policy-taker-perspective* (Howlett 2019): So far, the addressee or policy-taker[1] is not considered in the literature on

[1] We will use the term "policy-taker" and "addressee" synonymously.

policy instruments systematically. How the policy-taker behaves or under which circumstances he or she decides strongly inherits a political dimension: What do policymakers *believe* how the policy-taker acts and reacts? In our view, policymaker's expectations or assumptions could play a role in designing policy instruments and could have an impact on the decision about how coercive or intrusive an instrument will be. A political debate on policy instruments does often occur if specific groups think of an instrument as being inappropriate. Thus, whether and how policymakers consider the reactions of *policy-takers* might prove crucial in understanding the design policy approaches and government intervention.

Additionally, we propose to think of expertise as an element that is being charged with political meanings or interpretations. Whether the design of interventions is influenced by scientific knowledge or whether policy-makers consider studies that show (or seem to show) under which conditions an instrument or instrument-mix will be effective, needs a closer inquiry. Especially, of expertise is – at least theoretically – able to change the way policy-makers think of addressees (e.g. consumers), which is key to nudging approaches which rely on behavioural expertise. We consider expert knowledge to be part of political processes. We argue on the assumption that political dynamics always play a role when expert knowledge comes in which is not or only partly conceptualized in the literature on policy instruments so far: Concretely we can observe political processes in which "evidence" is stressed as being the top priority for decision-making.

Although the discussion on behavioural impacts in policy-making is vibrant, there is still limited knowledge on whether and particularly how exactly behavioural insights impact instrument selections and design. We aim at filling this gap by looking at a) the role behavioural insights play for instrument choice and b) the underlying assumptions and narratives that are applied when using behavioural insights.

To answer these questions, we discuss the overall role of policy instruments. Since they represent distinct forms of governments' power exertion, analytical perspectives on instrument selection – especially in the context of behavioural instruments – must be attentive to logics of policy-making attached to certain instruments. Furthermore, we will propose a way to apply this perspective. Therefore, we exemplify three cases that help us illustrate the role of behavioural insights and highlight what expectations policy-makers might be attached to when they select and combine behaviourally informed instruments (energy labels, smart meters, obesity prevention).

In general, we suggest to integrate a temporal dimension with regard to policy instruments and its “political charging”, because a certain form of “political charging” always takes place in a certain temporal context in order to be effective.

2. Policy instruments and policy-making

When talking about "instruments," we conceptualize the “instrument” as being one of several categories that are relevant to understand political processes. Political instruments are always interrelated with institutions, actors and problematic structures (Böcher and Töller, 2016). Thus, they are part of negotiation processes: the portfolio of instruments represents how policies can be shaped, the instruments at choice or the combinations of instruments may then become subjects of conflict in the political process. Policy instruments can have an immediate effect if they are directly addressed to citizens or private sector actors, but they can also be used indirectly, which means that a subordinated administrative level (agencies, service providers, street level bureaucrats or similar) has leeway to develop the specifics of a tool or instrument. Peters distinguishes between "instrumentation" when it comes to choosing the instrument and "intervention" when the public administration (or other executive actors) applies the instrument (Peters, 2018, 23f).

Keeping all that in mind and stressing the political dimension with regard to all aspects of policy instruments we also would like to highlight that the choice of instruments (or combinations of instruments) does not (or only in exceptional cases) happen "from the scratch" or, in other words, from a tabula rasa. The literature on policy design (which is critically discussed below) states aptly: "most policy design is redesign" (Peters, 2018, 8). This applies both to the problem definition which starts from a certain idea or framing of a “problem structure” and to the choice and combination of policy instruments, in which path dependencies can play a (significant) role. Problem structure and the decision for specific instruments are interrelated. Actors may choose from the instrument portfolio considering institutional factors (i.e. restrictions or facilitating factors). Furthermore, situational elements play a role if actors choose instruments. These considerations should serve as a starting point, but they are not yet sufficiently elaborated for understanding the choice of instruments.

2.1 Linking instruments and political negotiating processes

Our view on public policy follows the literature which refuses the assumption of clear problem-solving mechanisms. That is why we consider instrument choice as a result of highly political and contingent negotiation processes (Peters, 2018, 19). This view corresponds with a "proceduralist" approach which also understands the selection of instruments as being the result of complex and unique political processes (Linder and Peters 1998). Therefore, we argue that an explicit attribution of certain factors to certain instrument types does not help for public policy analysis – rather, we have to systematize general and political factors influencing the choice of instruments and understand them as being part of (possibly) ideologically driven and politically contentious processes (for a similar argument see Hood 2007, 137). Generally speaking, Sager points to the fact that policy instruments would correspond to political aims, but that the choice of instruments that should help reach the aim depends on the policy-makers ambition or ability (Sager, 2009, 537). In fact, the behavioural turn – be it with regard to the debate on policy instruments and be it in real policy-making – could be understood as a strategy to purse political goals more intensively and unequivocally and find (more) effective instruments. This perspective could even be reversed: to know about varieties of human behaviours, their influences and (new) approaches of provoking a certain (wished) behaviour could also help to create instruments – however, this could lead to the impression that policymakers act particularly insistently, unambiguously or with lots of emphasis in order to pursuit their political goals, an impression that could be misleading if these policy instruments are only the result of specific political opportunities: knowledge is produced, this knowledge-production is institutionalized, and it can be used for specific political reasons that do not necessarily result from insistence, unambiguity or emphasis.

In order to avoid linking problem definition and problem solving too quickly or without integrating the political dimension, we follow a perspective that takes a variety of influencing factors into account. Our view corresponds to Howlett who identifies six factors affecting instrument choice: the assessment of effectiveness or efficacy, legitimacy, situational elements, political popularity, cultural standards and values, as well as institutional and political orders and arrangements (Howlett, 2017, 103).

The literature on policy design does also deal with policy instruments. From a "design" perspective instruments play an important role as a chance to fulfil the idea of "good policy" (for

example Peters 2018, 3). For us, the question arises which criteria would have to be used to classify a particular policy as being "good" or "appropriate" in a prescriptive sense (Ansell et al 2017) and how such a classification can be justified. Even if this branch of the debate on policy designs should be critically discussed in our view, the literature on policy designs provides helpful insights for dealing with a) the dimension of policy-taker's behaviour and b) the influence of (behavioural) scientific expertise. Similar to what Sunstein and Thaler quote as being a guiding principle for nudging, Peters classifies policy design as the way „[to] shape the environment of behaviours rather than the behaviour itself" (Peter 2018, 9). A second similar assumption connects the nudging literature and policy-design since both call for a "move away from command and control" (Peters 2018, 9).

Interestingly, the policy design literature seems to differentiate between effectiveness and intrusiveness, which, according to relevant authors, has a significant impact on how well citizens accept an instrument: avoiding authoritative instruments (command and control, sticks) would lead to greater acceptance even if the impact is limited; rather, if citizen have the impression that the state acts intrusively, this impression would weaken the acceptance and thus (possibly) reduces the effectiveness of the instrument (Peters 2018, 9).

Key to this strand of literature is a systematization which focuses on the policy process (the following ideas are based on Peters 2018, 3f): First, policy design starts from the assumption that political actors should systematically ascertain which features constitute a "good policy" – this approach is in contrast to those approaches that see political actors "juggling" or "taking stabs in the dark" while applying already known political concepts. In addition, the debate on policy design claims that a "clear design" enables systematic learning and the development of policies in order to better assess and evaluate these policies[2]. Literature on policy-design operates with terms such as "clear vision" and "best design" whereas the perspective of political processes assumes that policy processes often achieve the "least common denominator" due to bargaining and negotiation processes and includes the conflicting values and ideas as being highly relevant in the political process. Comparing the literature on policy-design and the debate on behavioural insights we see some similarities and comparable arguments since advocates of behavioural insights underline a normative component when rejecting "sticks" and "carrots" as being too intrusive.

[2] With regard to the buzzword „good policy" we see an implicit normative claim. However, literature does not address this claim. Although we cannot go deeper into this here, we think that an in-depth analysis is necessary with regard to the normative dimension of good policy and policy design.

What we learn from these debates is that the involvement of expertise is necessary to avoid "classical" instruments like command and control and too much intrusiveness while simultaneously reach a most probable degree of instrument effectiveness or at least get the impression of reaching higher effectiveness. Expertise might be needed in this regard so that the instrument chosen ("designed") survives the political process.

In sum we would argue that the political dimension of policy instruments should not only be conceptualized as an influencing factor, but furthermore as a characteristic of instruments. Widening the view on behavioural science expertise and its use in policy-making, we would even stress this argument: The decision to apply or even institutionalize behavioural scientific expertise has to do with the political dimension of instruments and furthermore with underlying political beliefs and motifs of the policymakers. Both, the development and production of behavioural expertise as such is concerned or even dependent on political decisions (e.g. research promotion, classifying certain knowledge as being relevant). The institutional integration of behavioural scientists in political processes (see 2.2.) who should come up with "new" varieties of instruments is also based on political decisions. We think that policy instruments are charged politically and we observe that this "political charging" might be less obvious at first sight with regard to behavioural insights but that it does play a decisive role though.

Generally speaking, instrument design and choice could indeed be led or influenced by scientific expertise which again is not an apolitical phenomenon but which is based on political decisions. Behavioural insights influence instrument development and choice in special ways. Interestingly enough, political assumptions that are interwoven with behavioural insights and nudging fit very well with typical arguments in the discussion on policy design which point out that "a good deal of the discussion amongst design scholars, as well as governments, is how to move away from command and control instruments (Peters 2018, 9). This corresponds (not only) to Thaler and Sunstein 2008, who emphatically refuse "command and control" and "incentives" in contrast to "nudging" tools that are similar to information and organization, although a number of their own examples contradict the criterion of no command, control or incentive.

2.2 What about the policy-takers? Debates on policy instruments in political science and the blind spot of policy-takers

Literature on instruments can be confusing since it promotes various ideas of systematizing instruments: A large number of different typologies coexist, starting from various assumptions, following different perspectives and integrating multiple issues or characteristics of instruments (for an overview see Böcher, 2012, Böcher and Töller, 2012, Hood, 1983; Howlett, 1991; Jordan et al., 2005; Schneider and Ingram, 1990; Vedung, 2003). In principle, we follow the idea that instruments themselves are to be understood as forms of political action in a more or less technical sense if we want to answer the question how exactly and by what means the state does act. However, this stream of the instrument literature does not answer the question whether or to what extent political actors are influenced by scientific findings on addressee behaviour as provided by behavioural sciences. Although instrument typologies may serve as the basis for any analytical work on policy instruments, we see some limitations of these typologies.

In contrast to analytically-oriented instrument typologies most of the concepts that characterize instruments are rather descriptively oriented, since they use the intended effect of the instrument as a differentiation criterion for their description. These approaches are mainly focused on the implementation that is aspired. But, from our point of view, they do not or not clearly enough integrate the political dimension of instrument choice into their concepts. Interestingly enough, most typologies do not yet, or only in a few terms, a) address the expectations with regard to the policy-taker (except Schneider, 2012, Schneider and Ingram, 1990 and Howlett 2019), and b) ignore the influence of behavioural sciences.

We use Salamon's descriptive typology (2002) as a cornerstone for the discussion about policy instruments in order to integrate behavioural expertise and policy-takers. Salomon distinguishes between "detectors" and "effectors" as different types of instruments and describes an interaction between them. Salomon uses "detectors" to classify such instruments that are used to identify the conditions of policy-making; "effectors" are all instruments intended to have an immediate or indirect effect. Here, too, we suggest that the use of "detectors" as well as of "effectors" should not be understood irrespective of political factors. Especially, since expertise often influences effectors and detectors, this influence of expertise should be analysed with regard to the degree of politicization - especially in the case of "effectors" we expect

the involvement of behavioural sciences and scientists as being more and more relevant for policymakers.

Empirically oriented policy analysis often relies on one of the different instrument typologies, but generally does not explain or justify why the respective typology was chosen. In our opinion, however, empirical applications should consider the basic assumptions of the respective instrument typology, its limits and its applicability to empirical case. What is more are questions regarding a) the expectation of policy-takers' behaviour and b) the influence of (behavioural) scientific expertise.

However, what we will take from the literature is a distinction of four types of instruments. In the beginning of this chapter, we have already mentioned a few examples of instruments that can be found in everyday life: prohibitions, information and symbols. Following the idea of a very basic and crude instrument typology, three variants of instruments could be named, which are clearly distinguishable from each other but have to be added by a fourth variant in a next step. (1) Prohibitions and orders belong in the category of instruments, which can be subsumed under the term "authority". These are legally regulated rules, compliance is controlled and can be enforced by state authority – the English term "sticks" (Vedung, 2003) is emblematic for it. "Authority" is to be distinguished from (2) incentives that are mostly market-based, but can also be of social nature. State actors either use certain resources (subsidies, tax exemptions, premiums, awards) or they aim at financial state revenues (tax) through a tax burden addressed to citizen and corporations. Incentives fulfil not only a guiding function but should steer the addressee (policy-taker) in a specific direction. The term "carrots" for incentives builds the counterpart to "sticks" (Edison 2013; Vedung, 2003), the incentivizing instrument type is also mentioned as "treasure" (Hood, 1983) or "expenditure" (Howlett, 1991). The third type of instruments summarizes measures which have an (3) informative character in the broadest sense and which should give the addressees the "capacity" to make a specific decision or to behave in a certain way. These informative measures range from symbols to exhortations (without sanctions) to pure information, education and enlightenment, which should lead to new insights and / or persuade people – Vedung calls this group of instruments "sermons" (in the result: Carrots, Sticks, and Sermons = CSS), mostly these instruments are also overwritten with "information".

The popular CSS typology explicitly excludes (4) organization or the provision of infrastructure although we easily find these category as a result of public policy. Therefore, in our view, the

addition of “organization” as a fourth category is necessary. In a descriptive sense, certain forms of governmental action would otherwise not be covered, such as the construction of infrastructure, the organization of round tables and forums, encouraging voluntary agreements (with more or less pronounced governmental activities). Hood points out that the elegant CSS typology (Vedung 2003) does not cover those types of policies that establish a certain physical structure of environments – governmental action can literally change the environment physically (Hood, 2007, 140). Furthermore, in a variety of policy sectors public policy initiates, provokes or supports organizational structures or even institution building. “Organization” in a broad perspective – in the sense of organizing physical elements of the living environment as well as organizing forms of cooperation and coordination – has to be part of an instrument typology.

This perspective also needs to be discussed against the background of the debate on "instruments as institutions" (Lascoumes and Le Galès, 2007) which includes the idea of instruments as being a reflection of different models, worldviews or scientific beliefs (Bemelmans-Videc et al., 2003; Lascoumes and Le Galès, 2007; Salamon, 2002). We follow this idea and link it to the "behavioral turn" in economics that reflects contingencies between overall concepts and scientific convictions.

What does all this mean with regard to policy-takers? With regard to all these instrument types we can assume two dimensions with regard to the policy-taker: 1) a certain behaviour is expected that relates to the instrument’s characteristics and 2) there is a potential added value for the addressee which can be constructed – both dimensions have not yet been mapped in instrument systematics. All descriptively oriented typologies, which outline the characteristics of policy instruments and use them as demarcation, can be complemented accordingly: Authority-based public policies (“sticks”) rely on citizen’s obedience, which can have different reasons. Following rules and prohibitions means that the addressee would not have to fear sanctions, obligations and punishments. However, this mechanism requires the state to effectively control citizen’s compliance. Incentives (“carrots”) can only be effective if the policy-taker first and foremost calculates his or her economic costs or - in the case of social incentives - appropriately weights social factors of in- or exclusion. He or she must be able to calculate financial or material profits or has to fear reputational losses so that the incentivizing instrument is effective. In this case, sufficient financial, material or social resources must be available to effectively trigger the incentive mechanism. Almost every type of policy

instrument within the large category of capacity-building measures ("sermons") only has a genuine impact if the addressees pay attention, process information and - depending on the instrument's design - act rationally in the sense of the information given. To respond to capacity-building measures policy-takers need to come to the conclusion that they profit from following the information which sometimes might need them to develop new cognitive capacities, change their convictions or beliefs (in the case of persuasive forms of the instrument). The fourth type, organizational instruments subsume concrete physical changes to the environment (such as infrastructure) as well as organizational activities, be it the organization of round tables, the stimulation of (voluntary) agreements between stakeholder, expert committees, cooperation and so far. All these organizational activities depend on willingness and ability to cooperate, environmental changes have to literally be noticed and finally used by policy-takers. They do so, if they expect a reduction of transaction costs, hope for network effects or if they need such an infrastructure anyway.

2.3 Linking policy instruments to behavioural instruments

Thus far, our overview of expected behaviour and added value for policy-takers shows one premise playing a decisive role for all types of instruments: policy-takers have to rationally calculate and have to come to the conclusion that they profit from following the instrument's logic. So far, on the one hand we find no instrument typology that includes this aspect as a dimension to characterize policy instruments and on the other hand there seems to be no instrument type so far that addresses specifics of human behaviour beyond such rational calculation. Against this insight, we want to turn to behavioural instruments. We prefer the term *behavioural instruments* since it provides us with an opportunity to clarify the nature of these instruments more analytically. Taking Thaler and Sunstein's perspectives would mean that nudges can be characterised as a completely new set of policy tools. They propose to differentiate instruments based on the underlying cognitive aspects used, e.g. defaults, social norms or group pressure. As we have discussed above, policy research usually arranges instruments based on the level of coercion used by the tools (Vedung 2007). While these different views could simply coexist, we propose a concept of behavioural tools that can be integrated into existing and well-established perspectives on policy instrument.

Therefore, we focus on *behavioural spins* that change an instrument without completely reversing its nature (Loer 2019). For instance, information on foodstuff ingredients can be transferred in form of a neutral notice on a product, but information can also be communicated by using specific colours, shocking pictures or other design elements that are based on behavioural insights in order to make the information easier to understand or to have a more immediate effect on the recipient (policy-taker). Generally, the application of a behavioural spin (based on behavioural sciences) changes the instrument's mode of action towards a behavioural one, but it does not alter its nature as such: for example, information is simply communicated differently while it is still non-coercive.

We suggest to link behavioural instruments to an enhanced concept of policy instruments that acknowledges what policy-makers expect from policy-takers. Bringing the policy-taker into the debate on policy-instruments has to be conceptualised empirically and theoretically. Therefore, such a perspective requires reflection on human behaviour and leads to the involvement of behavioural expertise which in turn plays a role in policy-making.

2.4 The role of science and expertise in policy making

In order to understand the selection of policy instruments we must look at policy-making processes. On a conceptual level we have to identify factors impacting the selection of certain instruments and which factors create opportunities for the use of behavioural instruments. In this paper we follow Kingdon (1995) and Cohen, March and Olson (1972) who describe a messy policy-making process (Cairney 2012). Instead of assuming a rational or logical cycle-model in which the selection of instruments follows a thorough discussion of problem structures and aims at *solving* problems, we think of policy-making as a process in which actors link instruments and problem interpretations to create acceptable *reactions* to current events or pressing issues (Kingdon 1995). Following this perspective, instruments exist independently of political decisions and come to play when policy entrepreneurs use favourable situations to propose them as a viable tool. We assume that policy-makers aim at creating convincing policy packages, containing an answer (instrument) to a problem interpretation (Zittoun 2013). Therefore, we concentrate on problem interpretations and the relevance of expert knowledge. In regard to problem interpretations we use interpretative approaches of policy analysis (Fischer 2007). In this perspective, problems are not simply existent, but policy-

makers interpret realities and describe them accordingly: “Problem definition cannot be definitively settled [...]“ (Weiss 1989: 98). Kingdon differentiates between *conditions* and *interpretations*, while the latter is the product of actors’ understanding and description of a condition. Most importantly, different problem interpretations exist in policy-making so that “[…] competing interpretations […]” (Rochefort and Cobb 1993: 59) are discussed in the process. Based on different world views or party ideologies actors understand real world developments and shape them into *policy problems*. Thus, the *right* answer (i.e. a reasonable or appropriate policy intervention or instrument) depends on the way the problem is described. Take one example: Political parties formulate different answers in environmental policy depending on their perspectives or world views. Whether they see climate change as a result of imperfect market mechanisms or as a result of market-based economies itself results in different policy proposals on how to adapt to climate change.

The second aspect we focus on is expert knowledge. As we have described in the introduction, research on behavioural policy and nudging emphasises the role of scientific advice. In that view, research on individual behaviour is a major factor impacting the selection and design of policy instruments. Linking this assumption to existing research we come to a more sceptical conclusion. For instance, Radaelli (1999) showed in regard to epistemic communities that expert knowledge is dealt with in policy neither *un-interpreted* nor *un-filtered*. Rather, expert knowledge is one element helping policy-makers “[…] to understand and decode a complex reality” (Radaelli 1999: 762). Howlett points to, among other things, limited “analytical resources” of governmental organisations to understand and translate scientific insights into policy (Howlett 2009: 155). Additionally, political commitments to better government have increased the need to base policy decisions on knowledge of *what works*, turning evidence into a source of political power (Sanderson 2002). Furthermore, the production of knowledge is crucial. Especially, the easy-to-understand results of randomised control trials (RCTs) in behavioural research provide policy-makers with handy results to support their decision making (Straßheim 2015: 252). Thus, behavioural research has been institutionalised in some governments, e.g. in the UK and the USA.

While specific knowledge on individual behaviour, human flaws and best ways to use them seems crucial for the design of behavioural interventions, we want to take a more sceptical perspective and argue, that a number of factors impacts instrument selection and design. Howlett has identified policy-makers’ assumptions on instrument effectiveness, the

legitimacy of certain tools, situational aspect, popularity (i.e. expectations regarding certain policy approaches or goals and their acceptances), and policy-making conditions (e.g. polity) to be critical for the selection of instruments (2017: 103). Against this backdrop, behavioural insights are either a minor factor among many others to impact policy-making, or they are overwhelmingly powerful and can superpose other elements impacting instrument selection. While we tend to reject the latter idea, research has not yet dealt with the impact of behavioural insights in a comprehensive manner. Therefore, we turn to three cases to investigate how behavioural insights impact policy-making.

3. Investigating the role of behavioural insights

Thus far, we have discussed our understanding of behavioural instruments as well as our perspective in policy-making. This section describes our research design before we present three cases that can help us to understand the impact of behavioural science in policy-making. We follow Hajer (2003) and his perspective on storylines by which policy makers combine elements, i.e. problem interpretations, policy goals and measures, to create a brief narrative on policy action justifying their approaches. Scientific expertise in this perspective is one element of storylines supporting a certain policy approach. Thus, expert knowledge gets integrated into a story line if scientific evidence supports the policy approach. Furthermore, we assume a *charging* process by which instruments are framed, e.g. as non-intrusive or particularly effective to address a given problem.

Therefore, our investigation focuses on three elements: the political context of instrument choice (= instrument context), behavioural science and the application of policy instruments. First, *instrument context* captures the factors that play a role for the choice of instruments in each case. Our investigation concentrates on policy agendas, description of approaches, problem definitions within agendas or dominant narratives within a policy area (e.g. health policy). We concentrate on policy-takers, i.e. how addressees are integrated in the policy-making, how policy-makers aim for changing their behaviour and how this dimension impacts the actual selection of instruments. By looking at these aspects we try to detect the *charging* of issues. We assume that the *instrument context* limits the use of instruments to a certain category, e.g. economic instruments. Second, the element *behavioural science* captures the presence of research on individual behaviour in the context of the instrument selection or design. We

assume that a study on behaviour in a certain case or domain (e.g. sustainable consumption) or a study on best ways to impact decision-making does have an influence on the design of instruments. It might either change the perspective on policy-takers by increasing knowledge on actual drivers of individual behaviour or contribute to a more nuanced selection of instruments that take behavioural insights into account. Therefore, we investigate whether policy-makers turned to behavioural expertise or commissioned a study to inform their policy-making and how studies and their results fit the charging of the instrument context. Third, investigating *policy instruments,* we focus on the instruments actually in place. If behavioural insights are used, they should lead to a behaviourally informed tool if the charging of each element is similar.

We investigate three cases: the EU energy label informing consumers about product qualities; the EU directive on energy end-use efficiency asking for the use of smart meters to impact individual power consumption; and the UK's policy on child obesity. In each case we trace the development of the policy approach, investigate the use of policy instruments and check for the relevance of behavioural insights for the instruments' design and application. The case selection for this paper is based on our previous research into behavioural policy approaches and an in-depth knowledge of several applications of behavioural instruments.

3.1 EU Energy label – framing scientific expertise to support instrument design

The Energy label is one of the measures within EU policy to promote environmentally friendly devices by signalling their resource consumption (e.g. energy or water) to consumers. The instrument was introduced 1992 and revised several times. In our investigation we focus on the instrument's major redesign in 2017. In this process the EU overhauled the existing label and changed the presentation of information. We focus this revision since it aimed mainly at redesigning the instrument and improving its effectiveness in guiding consumers. The label in its prior version marked products on a scale from D to A+++ and colours from red to green. A need for revising the tool was based on consumers being increasingly confused regarding the differences in resource efficiency between products marked with A, A+ or A++. No matter the exact design, we can clearly characterise the instrument as a behavioural one since it not only communicates information but also uses mental short-cuts to underline the information. To guide the redesigning process the EU Commission conducted an impact assessment (IA)

including a study on different label designs. This study tested different designs, e.g. numerical labels, a new A to G scale, and forms of color-coding, and tested how easy consumers could identify the most efficient product. The results show that a label marking products from A to G and including a colour-coding from green to red (without adding an A+ category) was the most effective version (Ecofys 2013, IA 2015: 44). Based on this research and the impact assessment the Commission proposed redesigning the instrument according to the study's result.

The Commission's proposal was heavily criticised by industry representatives because devices labelled A in the old version would be downgraded to a C or D tag (IA 2015: 67-77). These critical voices were voted down by the Commission with reference to the study on label designs and the proven effectiveness of new label. In this regard, behavioural insights were an important element in shaping the instrument and justifying the proposal. But looking closely at the policy making it becomes evident that the Commission framed the behavioural insights according to its policy preferences. Despite the clear results of the study the Commission furthermore integrated them into EU's overall policy approach to sustainable consumption. For instance, Machin shows how a discourse on market-driven adaptions and environmental modernisation dominates environmental policy in the Union (Machin 2019). This holds also true for the Energy Label. Instead of just using the study on consumer behaviour the Commission framed the label's redesign with a *cost-saving-narrative* emphasising the opportunities for consumers to save energy costs with more efficient devices: "Energy labelling is favourable […] because customers can obtain […] information on the energy efficiency […], allowing them to take informed choices […] that are both good for the environment and save money" (COM 2015/341: 2). Considering the impact assessment, the Commission proposal and the final Directive we found 162 instances highlighting cost-savings for consumers. This framing shows how the scientific expertise gets *charged* with a distinct policy perspective underlining economic factors within sustainable consumption measures.

3.2 Smart-meters – behavioural instrument without scientific expertise

With the Directive on energy end-use efficiency and energy services (2006) the EU focused on energy consumption in households. One of the main proposals of this Directive was the

installation of so-called smart meters in houses. The meters are supposed to impact consumers by providing them with "informative billing that reflect their actual energy consumption and […] its actual time of use" (COM 2003/739: 6). The goal of this measure is to make consumers aware of their consumption and provide them with easy-to-access information. Schleich et al. (2011) identify this measure as a nudge since it improves the accessibility of information and provides feedback, e.g. on periods of high energy consumption (see also UBA 2017).

The policy-making in this case differs from the one leading to the Energy label revision. Most importantly, the EU Commission did not provide an impact assessment or reference to a study investigating the impacts of smart meters on individual behaviour. This is stressed by the EP's Industry, Research and Energy Committee that asked for an impact assessment to investigate the success of the measures (A6-0130/2005: 41). Rather than to relate the smart meter proposal to research on individual behaviour the Commission dwells on experiences from public procurement. Since the public sector "[…] corresponds to about 10% of the total national energy use" its saving potentials are significant (COM 2003/739: 10). While the public sector uses environmental management schemes and public agents to realise savings potentials, consumers are expected to behave in a similar fashion as professionalised administrations.

Furthermore, the measures are integrated into a broader perspective on energy consumption and market mechanisms. The Commission, as well as the European Parliament, extensively relates the proposed measure to market mechanisms. For instance, the Commission identifies a "[…] need to improve the functioning of the energy market by removing barriers in order to allow market forces to allocate economic and natural resources effectively" (COM 2003/739: 2). Therefore, increased consumer awareness (individual as well as institutional) on energy usage is supposed to foster efficiency (ibid).

Overall, this case shows that the use of a behavioural tool is not based on a comprehensive study investigating its effectiveness but rather on assumptions on individual interests in energy efficiency. Furthermore, the use of smart meters to provide accessible information and feedback to users is directed at public and private consumers assuming similar capacities to monitor and compare energy usage. Additionally, our analysis shows that the measure is integrated in a broader policy approach underlining market mechanisms[3]. In this regard the

[3] Similar to the policy making in the Energy label case we found the reference to market-mechanisms to be crucial for the central story line in the documents. Analysing the documents, we found 106 mentions of market mechanisms in the Commission's proposal alone.

smart meter approach matches the Energy label and the story line combining individual action and market mechanisms.

3.3 Measures addressing child obesity in the United Kingdom

The third case we attend to in this section is slightly different from the first two cases but helps us to highlight the relevance of behavioural insights. Child obesity has been identified by UK governments as a major challenge since it is related to health problems and thus to increased costs for health systems. In the early 2000s a variety of actors, e.g. local governments, developed and implemented programmes to help children and their parents to deal with practical issues, every-day problems or social and cultural disadvantages. Early on, these programmes included behavioural insights into child behaviour, nutrition and factors contributing to obesity. For instance, the MEND programme (Mind, Exercise, Nutrition, …Do it!) combined information and group specific approaches like gamification that were based on behavioural insights. Interestingly, this variety of decentralised approaches to fight obesity led to the 2011 'Public Health Responsibility Deal' on national level (centralized approach) fostering a collaborative network of private enterprises and non-governmental organisations to contribute "to improve public health through their influence on food, alcohol, physical activity behaviours […]" (https://www.nutrition.org.uk/nutritioninthenews/reports/responsibility-deal.html). Especially, voluntary agreements were supposed to lead to a reduction of ingredients related to obesity (e.g. sugar). While these voluntary measures had only limited success (Knail et al. 2018: 10), the industry increasingly requested government action, e.g. explicit regulatory measures to create a level playing field for all corporations (ibid). While regional or local programmes to assist families with nutrition and exercise remained in place, the British government started intervening with the food industry: With the "Soft Drinks Industry Levy" and the "Calorie and Sugar Reduction Programmes" the government used regulations and economic incentives to change products to support the overall approach to reduce obesity.

This case shows how instruments and instrument combinations change over time. In a first period we observe how information about obesity and organisational as well as cooperative instruments were applied on a local or regional level. Giving a "behavioural spin" to informational, organizational and cooperative policies on the basis of research fitted with the political conviction of involvement of policy-takers and more target-group oriented decentralized

approaches. However, since no change to the problem structure, namely high figures of (child) obesity, could be achieved, these behavioural instruments were complemented by voluntary measures supported by the British government. So far, policy-makers did refrain from using more coercive or intrusive instruments which meets the expectation of more liberal (maybe industry-friendly) approaches in a liberal market economy. Hence, it could surprise, that in a following period of time more conventional approaches, e.g. command-and control and particularly incentivizing instruments, were used to counter the imperfect results of self-governance approaches, information, organization and cooperation which were informed by behavioural expertise. Interestingly enough, various studies about human behaviour (from different disciplines) supported exactly that policymakers turned to those "conventional" instruments which would be typically avoided due to their intrusiveness, political non-attractiveness or even political risk. They were introduced because behavioural expertise was involved (BIT) and in awareness of potential political pushback from various actors. The political will could be explained as a combination of need for action (due to rising health costs because of obesity as a crucial problem for the National Health System) and compelling insights from research on obesity: such research points to the various influences on eating behaviour and shows the problems if people are expected to overcome dietary routines on the basis of information or similar offers. At the end of the day, policy-makers chose to apply *conventional* and therewith more intrusive and coercive tools to overcome the weak spots of human beings instead of using non-interventionist measures.

Importantly, this case shows that knowledge and scientific evidence regarding individual behaviour can be integrated into different policy agendas or programmes, that it has a highly political dimension and that it is not limited to "soft" regulation. On the contrary, we see how a problem is framed with regard to different policy perspectives, the responsibility of different actors (the individual versus industry) and how such frames are used to support different types of approaches – behavioural interventions as well as (harder) regulatory measures like command and control or incentives.

3.4 Summarising the cases – what role for expertise and policy-takers

Our analysis concentrated on three cases to illustrate the relevance of policy-takers and scientific expertise. While behavioural insights provide knowledge on how individuals behave,

they should to some extent inform policy-makers' perspectives on the *policy-takers*. However, the cases show very different processes leading to the use of behavioural instruments. The analysis shows how the policy-making in each case is dominated by a variety of factors. While behavioural insights and a focus on the policy-taker play a role in two of the cases, the EU's approach to foster the use of smart-meters does not include a thorough investigation of human flaws and cognitive mechanisms. Nevertheless, the policy features a behavioural instrument (see table 3.1).

Table 3.1: Case comparison

	Energy Label		Smart Meter		Obesity	
Instrument context and focus: behavioural[4] instruments enabled	✓	Focus on market mechanisms, dominant discourse on market-driven adaption	✓	Focus on market mechanisms, dominant discourse on market-driven adaption	✓	Regulatory turn in response to insufficient market solutions
Behavioural science	✓	Impact assessment by the EU Commission on instrument design	✗	No impact assessment or study on the effects of smart meters on individual behaviour	✓	Early integration of research on individual behaviour and ways to impact it Use of behavioural expertise to understand policy-takers behaviour that limits "soft" approaches
Behavioural instrument	✓	Use of a behavioural instrument – behavioural spin added to information	✓	Use of a behavioural instrument – behavioural spin added to information	✗	Use of conventional command-and-control instrument

Comparing the cases, only one seems to support the assumed role of behavioural insights for policy-making. The revision of the EU Energylabel is based on a study investigating the best design. Thus, the questions *what works* and the evidence-based answer is at the core of the instrument design in this case. This case clearly shows how assumptions on policy-takers inform the instrument design. Nevertheless, context matters as well. The label and its design are fitted into the overall market-focused policy approach, including a more superficial perspective on individual behaviour (e.g. related to a homo oeconomicus assumption). The same context is crucial for the second case – the use of smart meters. Again, the policy focuses market mechanisms and ways to strengthen them is the basis for the selection of instruments.

[4] Comprehensive perspective on behaviour

Instead of grounding the measure in an investigation into which tools work best, the use of smart meters rests on a sovereign consumer perspective assuming rational decision-making processes (McShane, Sabadoz 2015). Although knowledge on human flaws and limits to active choices should be the basis for behavioural approaches, this case points to the opposite: Policy-makers use ideal-type conceptions of individual behaviour linked to a homo oeconomicus that is heavily criticised by nudge-proponents. Finally, the case of child obesity policies is marked by central role of behavioural insights informing policy-making. But, instead of nudges, we see a turn to command-and-control measures precisely because policymakers know about the limits of policy-takers (and the seductive effects of the industry and its products). Just because a broad spectrum of research identifies behavioural factors that have an impact on obesity which are mostly not to overcome by using information or making offers, policy-makers chose to apply *conventional* and therewith more intrusive and coercive tools to overcome the weak spots of human beings instead of using non-interventionist measures. Furthermore, these instruments are used in a strategic way: With regard to future policies the use of instruments that are more interventionist and coercive could be a sign to stakeholders (industry) to prepare for policies coming up or to prevent such measures by (serious) self-regulation ("shadow of hierarchy").

Overall, our investigation shows that behavioural insights play a role in policy-making. But instead of purely providing evidence for the best approach they are subject to core features of policy-making. As our brief study shows, policy-makers interpret expertise and do so within their political contexts. Furthermore, the *charging* of expertise has to fit broader policy agendas.

4. Discussion

Our investigation concentrated on the mechanism of instrument selection. Especially, the behavioural turn in public policy has put a spotlight on policy-takers. While behavioural research provides an increasingly dense picture of human decision-making, its flaws and drivers, the policy instruments literature slightly disregards these aspects. While target groups and addressees are part of the research, these factors impacting instruments (their design as well as the selection of instruments) still need a more comprehensive inclusion into research perspectives and instrument typologies. Our goal was to develop a perspective that helps to assess

the impact of behavioural insights in policy-making by focusing policy-takers. Research on policy instruments and on logics behind their selection provided the background for our inquiry. Considering the cases studied, we come to three conclusions. First, our research shows that behavioural insights do provide options to develop instruments or redesign them, because so far instruments have been based on the (underlying, subliminal) assumption of a rational policy-taker. Importantly, behavioural research does not change the policy-making but contributes to more nuanced perspectives on individual behaviour while behavioural insights themselves are more or less political. Thus, policy-makers' expectations on how addressees behave impact their policy decisions. Especially, research that underlines behavioural flaws and calls the idea of a homo oeconomicus into question can impact policy-making. But to do so behavioural research needs to be available for policy-makers in an early period of policy formulation or instrument selection. However, behavioural expertise does not necessarily result in behavioural interventions (e.g. based on RCTs). Policy-makers can decide to use conventional tools (e.g. regulations) to alter behaviour instead of using nudges. The obesity-case illustrates that expertise informs policy-making but it does not necessarily lead to "soft" regulation. For instance, industry's interest in a level playing field accounts for the decision to use command-and-control instruments.

Second, policy agendas, goals and problem interpretations remain stable over long periods of time (see, e.g. Rose 1990). Policy instruments and their design are linked to these broader objectives. The case of the Energylabel and the smart-meter case illustrate the impact of policy contexts quite clearly. While the EU focuses on market-driven adaptions to climate change the two instruments correspond with this perspective. In both cases, policy-makers aim at strengthening market mechanisms by helping consumers visualise their energy usage or in selecting energy efficient products. Taking Hall's (1993) perspective, the overall policy paradigm remains stable. Since changes on this level happen gradually, behavioural insights can only contribute to incremental change but not completely suspend dominant objectives or interpretations.

Third, we argue to incorporate a politics dimension in analysing instrument selection and especially in regard to expertise's impact on it. Our cases show that behavioural insights are not translated one-to-one into policies. Rather, policy-makers choose to include expertise that supports their overall approach, their world views and ideas on steering society. We used the metaphor of *charging* to explain the incorporation of behavioural insights into policy-making.

If evidence is charged according to existing preferences, it will get included into the policy-making to support desired decisions. We could show the relevance of *charging* insights in two cases: In the Energylabel case policy-makers incorporated behavioural insights into the overall approach. In the obesity case they used insights to argue for command-and-control approaches. In both cases, the *charging* of expertise enables them to include it into their story lines justifying policy measures.

5. Conclusion

Growing research on individual behaviour, increased attention payed to behavioural policy instruments and the relevance of policy-takers were the starting points for this contribution. Summarizing our research, we come to two conclusions. First, behavioural insights can play a role in policy-making. But we need to be careful in regard to the way theses insights are used. While an institutionalization of Behavioural Insights Teams has boosted this topic overall, expertise is still subject to policy processes, most importantly: it is open to political interpretations. To assess the role of behavioural insights we focused on policy-takers. If there is one area in which psychology, cognitive research or behavioural economics have provided innovative insights it is in regard to individual behaviour. Thus, policy-making that includes these insights can – theoretically – design more elaborate instruments to impact behaviour. Yet, the cases investigated in our paper point to a different mechanism. Policy paradigms and political interpretations are key to understand how and why expertise is used to (re-)design instruments or why it is left out of the equation. While our paper focused on reviewing the relevant literature, there is a need for more comparative research dealing with behavioural expertise's impact on policy instruments. Especially, the policy-taker-perspective, that is not yet regarded to its full extent research, needs to be incorporated more comprehensively. We tried to describe a perspective, that can help us understand the role of addressees for policy-making.

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