
This short paper focuses on a challenge commonly thrown at those working with theories of practice on issues of sustainability: what is the potential of theories of practice, and empirical studies that draw on this work, to inform government policy? The paper argues that to unpick this question, we need to take a step back and think about the relationship between theory, empirical research and policy per se. I start by outlining an in-progress framework that identifies several of these theory-research-policy relationships, namely: framing problems – a relationship in which theory enables the systematic critique of taken-for-granted assumptions, as well as the proposal of alternative framings; policy influence and change – a relationship in which theory and research seeks to understand the potential role of policy within social change; the use of new kinds of data for intervention design, which come from empirical research that ‘operationalises’ aspects of theory; and policy evaluation, which focuses on the success or failure of particular interventions or programmes. The framework is applied to the recently published ‘Developing DECC’s evidence base’ (DECC, 2014), showing that these different roles of theory are often conflated in policy documents. The framework also provides a tool to evaluate research on theories of practice and policy and identify where future work could focus.

**Introduction**

The main argument of this paper is that if we are to understand the potential for policy of theories of practice, it is necessary to take a step back and think about the relationship between theory, empirical research and policy per se. I make this point for two reasons. Firstly, research about practice theories and policy that has emerged across the last few years draws on theory and empirical research in quite different ways, making a wide range of claims about how theories of practice might be useful and relevant. In thinking broadly about this work I had the idea that a framework to help us think more clearly about the theory-empirical research-policy relationship (from now on referred to as the TRP) would be useful.

Secondly, and related to the above, my experience in recent discussions – at academic conferences, the Scottish Government and other engagement events – is to be commonly asked ‘is this a behaviour change intervention?’ or ‘what is a practice theory intervention?’ I have a problem with these questions, as I think they oversimplify and conflate the complex and multiple relationships between theory, empirical research and policy. To understand what is different about these approaches requires a more sophisticated understanding of the TRP relationship.

I want to emphasise that this is work-in-progress, and I am interested in feedback on whether developing the framework further is worthwhile. There are four reasons why I think it is. Firstly, I think such a framework could help to provide clarity on the aims of research concerned with the TRP. Secondly, it would enable an evaluation of the current state of the art, in relation to theories of...
practice and policy and help to identify a future research agenda. Thirdly, it provides a means of reviewing how policy understands evidence, for example, I have recently co-authored a response to the DECC evidence base (with Elizabeth), a document which slips between very different conceptualisations of the TRP, without recognising it is doing so. I will highlight later why this can be problematic. Finally, the framework potentially provides a method for contrasting theories of practice to the behavioural change approaches currently popular in policy.

An in-progress framework

The table outlines an in-progress framework. It identifies four different kinds of theory-research-policy relationship (nb these conceptual distinctions are overlapping and interrelated). In each case I provide a short description and note some of the literature I have identified as being relevant to each. This literature helps to explicate the TRP relationship in each case and comes from a range of research fields including technology studies, health research, innovation studies and social policy. These different research traditions appear to have strengths on particular aspects of the TRP relationship. My idea is that delving into them has the potential to move forward our thinking about theories of practice and sustainability policy. Below the table I explain a little more about each of the TRP relationships.

<table>
<thead>
<tr>
<th>TRP Relationship</th>
<th>Description</th>
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<tr>
<td>Framing problems</td>
<td>Theory (e.g. a theory of how social change happens) enables the systematic critique of the taken for granted assumptions embedded in policy problems.</td>
<td>Hommels (2005) provides an overview of ‘frames’ – a set of concepts from technology studies concerned with fixed ways of thinking and acting that can constrain the working practices of planners, engineers, architects etc. Rein and Schon (1993) write about the concept of frames in policy analysis.</td>
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<tr>
<td>Using data/research findings to inform intervention design</td>
<td>The use of data for intervention design, which comes from empirical research that ‘operationalises’ aspects of theory. Nb data does not only have a ‘real’ role but also justifies/legitimises.</td>
<td>Mackenzie (1981), Law (2009), Osborne and Rose (1999) write about how social statistics and large scale surveys enact a particular social world. Although these critiques exist, few alternatives are offered. There is a history of approaches to this aspect of the TRP in health research. These move beyond critique to the development of alternatives. For example there are critiques of systematic review and randomised control trials: (Pawson et al., 2005; Cartwright and Hardie, 2012). Alternatives include realist review (Pawson et al., 2005; Pawson and Tilley, 1997), and meta-narrative mapping (Greenhalgh, 2004)</td>
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<tr>
<td>Policy evaluation</td>
<td>Focuses on collecting particular kinds of data to evaluate the success or failure of particular interventions or programmes</td>
<td>Recent publications focus on a ‘what works?’ agenda in all areas of public policy. (HM Government, 2013; Puttick, 2012) Cartwright (2010) and Cartwright and Hardie (2012) critique the focus on ‘what works?’</td>
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‘Framing problems’ refers to a TRP in which theory (e.g. a theory of how social change happens) enables the systematic critique of the taken for granted assumptions which underpin current policy problems and the solutions that are deemed to be plausible and possible. The concept of frames has been developed in technology studies and social policy analysis. Broadly speaking, these concepts refer to “…situations in which town planners, architects, engineers, technology users, or other groups are constrained by fixed ways of thinking and interacting. As a result, it becomes difficult to bring about changes that fall outside the scope of this particular way of thinking.” (Hommels, 2005: 331). When applied to policy, the concept of frames highlights that the definition of problems, what counts as evidence, the way that evidence is interpreted and plausible and possible solutions are all intrinsically interrelated (Rein and Schon, 1993: 145). Social theory provides a way of critiquing framings which may have become part of ‘common sense’, this opens up new opportunities for policy by posing different questions, and bringing alternative solutions into the frame.

Much of the initial work about theories of practice and policy has focussed on this aspect of the TRP, examples include (Shove, 2010; Shove et al., 2012; Spurling et al., 2013). For example, challenging behaviour change framings, and taking steps to illustrate how problems and sites of interventions might be reframed differently using concepts from theories of practice.

A second TRP relationship is one in which theories inform research designs, which in turn produce different data. Data, and the methods used to collect that data, are implicated in producing particular realities. Law’s (2009) ‘Seeing Like a Survey’ focuses on the Eurobarometer investigation into European citizens’ attitudes to farm animal welfare, to show some of the ‘realities’ which this particular survey enacts (2009:240). His observations include that the survey reproduces the individual act of consumption as the proper location for political action, enacts Europe as an isomorphic population of individuals, and enacts a consumer who cares about farm animal welfare. These observations have resonance with the discussion of ‘frames’ above, and illustrate how research methods and data can reproduce particular problem framings. Data can make some sites and styles of intervention visible and plausible, and others invisible and implausible.

Although critiques of such policy data exist within the sociology literature, work to develop and integrate new forms of data within policy processes is more difficult to locate. This is in contrast to the health sciences, where methods to collate and consolidate data for policy has a longer history. My initial dabbling in this literature has identified a range of methods, some of which have gained greater status than others. They include systematic review and randomised control trials, realist review and meta-narrative mapping. I’m wondering why an equivalent to this doesn’t exist within social science research, and think it would be worthwhile to consider what it would look like to move things in this direction. In terms of research framed by theories of practice, although studies that address this TRP are less common, they do exist. An example is Browne et al’s work (2013), www.sprg.ac.uk which ‘scales up’ research on practices, developing a method to understand water use in alternative ways to those currently used by water companies.

On policy influence and change, recent work on evidence based policy (Cartwright and Hardie, 2012) suggests that it does not make sense to conceptualise policy interventions in terms of simple relations between cause (an intervention) and effect (an outcome). Rather, the same intervention will likely have varying effects in different times and places because of the historically and culturally specific mechanisms involved. Shove et al (2012) make a similar point, suggesting that if the world is constituted of social practices (Giddens, 1984), that have dynamics of their own then “…interventions have effect (some intended, some not) as part of the ongoing dynamics of practice”
(Shove et al., 2012: 145). Understanding the potential influence of policy, and the mechanisms by which policy has effect has implications for sites and styles of interventions, and for the practices of policymakers per se (i.e. policy does not only take effect through deliberate interventions).

Finally, policy evaluation has always been important for policy makers, to evaluate whether an intervention or programme has been successful, and whether it should be ‘rolled out’ elsewhere. Recent moves in government have seen the rise of a ‘what works?’ agenda, based on similar principles to RCTs (Puttick, 2012; HM Government, 2013), this emphasises collating examples of policy programmes and interventions that ‘work’ so that good practice can be shared. This recent focus signifies the valuing of a particular kind of knowledge, which tells us little about how or why particular interventions work in particular places, and instead focusses on rates of success. There are multiple problems with this approach, and a more detailed critique can be found in Cartwright (2010) and Cartwright and Hardie (2012) but to put it briefly they assume direct cause-effect relationships between an intervention and an outcome, pay no attention to the historically and culturally specific mechanisms within which policy takes effect, and as such can mistakenly assume that an intervention will work (or fail) everywhere because it works (or fails) somewhere. For theories of practice this TRP is unchartered territory.

Applying the framework to DECC’s evidence base (DEB)

Having defined an in-progress framework, what can we say about the TRP relationships that policy, or specifically ‘Developing DECC’s evidence base’ (2014), draws on?

Framing problems

The potential of theory to frame problems is not a TRP relationship that is recognised within the DEB. On themes of energy demand and energy efficiency the DEB is quite clear that the priority lies in consistently meeting present levels of demand in a manner that is secure and decarbonised. For example, “We need to make sure our networks are reliable as we decarbonise our supplies, and as demand changes as a result of new technologies” (DECC, 2014: 6).

As such the strategy does not address more debatable questions about need, including the ‘need’ for electricity. This is one aspect that those working with theories of practice challenge. For example, rather than taking the status quo for granted, the DEMAND centre’s research will identify instances in which the practices on which energy demand depends are expanding, contracting and changing (e.g. business travel, home IT use etc.) (see www.demand.ac.uk ). As such, our work will reveal the variety of contemporary ‘needs’ and practices; it will show how interpretations of normality and ‘need’ change over time, and promote debate about what energy is for and how much is ‘needed’.

Another predominant framing in the DEB is the focus on “increasing the share of electricity and heat supplied from low carbon technologies”(DECC, 2014: 11), and on the uptake and effective use of energy efficiency measures (DECC, 2014: 16).

The DEMAND approach shows that focussing on more efficient technologies and marketing to this end is in essence about meeting existing ‘needs’. As such the promotion of efficient technologies legitimises and perpetuates the demand for certain levels of heating, hot water, lighting, cooking, home entertainment, etc. despite the recent social history of these aspects, and their potential openness to change.
The DEB does not recognise this TRP, and as a result it is locked into a particular framing which limits the potential of policy in unnecessary and counterproductive ways. So, though the DEB does not recognise this TRP, it would benefit from being more open in this regard.

**Using data/research findings to inform intervention design**

The use of research and data to inform intervention is strongly recognised in the DEB. However, this takes a particular form (which relates to the current framing of problems noted above). As such, although the DEB recognises that research and data can be useful to inform intervention, it does not recognise that new and different forms of policy intervention are likely to rest upon, and call for different types of data and analysis.

In the DEB there is an interest in collecting evidence about ‘people/behavioural drivers’, ‘buildings and technologies’ and ‘energy use’. These categories are significant because the way the field is carved up relates to an understanding of the nature and scope of policy intervention. Some of DEMAND’s research is ‘useful’ to the policy system as it is presently configured, but DEMAND research also points to new sites and styles of policy influence. Here are some examples:

**Understanding people and institutions** (DECC, 2014: 14): The DEB seeks “to improve our understanding of how people behave, whether as individuals at home or work, or as part of communities, businesses or whole supply chains or workforces” (DECC, 2014: 14). Organisations are approached in the same terms, hence: “We want to understand more about how different types of organisations make energy-related decisions...” (DECC, 2014: 17), and “Getting a better understanding of how investment decision-making works in practice, understanding what drives behaviour, including the role of key individuals, organisational culture, customers...” (DECC, 2014: 24). As these extracts demonstrate, the purpose is to learn more about individual decision makers/decision-making on the grounds that they constitute possible subjects and sites of intervention.

This is not the only way to go. For example, rather than treating an organisation as an energy-related decision maker, it would be possible to track how office work is simultaneously constituted, reproduced and transformed by many different organisations: facilities managers, developers, standards bodies, business organisations etc, and by the technologies and infrastructures involved (Falconbridge and Connaughton, Project 3.2, http://www.demand.ac.uk/research-themes/theme-3-managing-infrastructures-of-supply-and-demand/3-2-negotiating-needs-and-expectations-in-commercial-buildings/ ). Such approaches open the way for thinking about how policy has a bearing not only on individual choices, but on the longer term development of what are taken to be normal and ordinary ways of life. Evidence like that would identify different political subjects, and potential new sites for intervention.

Another example on this topic is that the DEB outlines the potential for making use of (smart) metered data about domestic and non-domestic energy consumption. A key concern is to use more detailed data on electricity demand to “refine policy” (DECC, 2014: 22). However, knowing how much energy is used and when, does not of itself, provide much insight as to the range of energy-using practices involved, the extent to which these are flexible or must happen at particular times or where opportunities for policy intervention might lie.
Within DEMAND we are developing methods of showing how more and less energy intensive social practices are coordinated in time and space (http://www.demand.ac.uk/research-themes/theme-1-trends-and-patterns-in-energy-demand/). This work underlines the importance of institutionally timed events, opening hours, etc., on a seasonal as well as a daily/weekly basis. As such, it potentially identifies other plausible ways of intervening, for example exploring institutional timetables as opportunities for load shifting.

Although the DEB recognises the relevance of this TRP, it remains disconnected from ‘framing problems’, as such, methods which inadvertently reproduce existing framings form the main source of data which is used to inform intervention design. In terms of communicating with policy, this observation opens up two possibilities. The first is to continue working with policy at the level of reframing problems (the first TRP outlined above). The second possibility is to note that this is not necessarily the best starting point and that a better approach might be to focus on how different kinds of data might be used to open up new opportunities for policy. To move in this direction would require a research agenda for theories of practice that specifically focussed on the development of new methodologies and kinds of data. There is some existing work that provides an example of how such a genre might develop (Browne et al., 2013) and as noted above, several DEMAND projects develop this aspect.

Policy influence and change

Interpretations of policy relevant evidence reflect underlying theories about how change comes about and whether and how it can be steered. The DEB offers a variety of different perspectives.

In several places we find the idea that the energy system will respond to policy intervention, simply by policy having effect - “In order to achieve our objectives, and as a result of our policies, our energy mix will change, and different energy vectors will be used for different purposes” (DECC, 2014: 35). Or because there will be a predictable take up and usage of new technologies: “We need to make sure our networks are reliable as we decarbonise our supplies, and as demand changes as a result of new technologies” (DECC, 2014: 6).

In contrast, other parts of the DEB suggest that the energy system has a dynamic of its own, for example, “… people at home consume nearly a third of total UK energy and this share is rising over time” (DECC, 2014: 18), or “We expect that electricity will have an increasing role in meeting our needs... Our needs vary daily and annually – and these characteristics will also change in the future...” (DECC, 2014: 32).

There is the frequently discussed idea that policy is capable of promoting change in the purchasing decisions of individuals in domestic and non-domestic settings. In particular that policy can intervene in the drivers and barriers of particular decisions.

Finally, there is also a recognition that sometimes policy has unintentional effects, or that non-DECC policy can have effect on energy demand. For example, the DEB says there is interest in “understanding how our policies interact from the perspective of people and institutions: for instance, identifying risks and opportunities with the delivery of smart metering, the Green Deal and the Renewable Heat Incentive” (DECC, 2014: 15). There is further recognition of the need to understand how policy portfolios intersect: “how we can look across our and other government...
departments’ policy portfolios to understand the interactions” (DECC, 2014: 13-14), and “...we need to understand the interactions between different sectors (such as how action on heat influences the requirements for electricity generation); [...] In understanding these trade-offs we also need to understand how policies interact – for example on a national and European level.”(DECC, 2014: 15).

Recent work on theories of practice has begun to conceptualise the relationship between policy and practices. This includes DEMAND research, which looks at how a wide range of policies (and not just energy policies) promote, justify and make normal particular end-use practices. Focusing on end-use practices shows that non energy policies relating to security, health and safety, education and employment can have major implications for energy demand (http://www.demand.ac.uk/research-themes/theme-4-normality-need-and-entitlement/4-3-implicit-energy-governance/).

Policy evaluation

The DEB explains that “We need evidence to help us see what really works...” (DECC, 2014: 4), arguing that such an understanding can be used “to inform future policy development” (DECC, 2014: 13). The implication is that successful interventions (what works) at one place and time might be appropriately ‘applied’ in other times and places.

Because the emphasis is on ‘what’ worked, not on ‘how’ and ‘why’ it worked, research/evaluation in this vein is unlikely to identify the historically and contextually specific mechanisms involved. The project of identifying ‘transferable’ conclusions rests on a specific (but unstated) theory of change (involving driving factors, barriers, etc.). As such it takes the mechanisms of policy influence for granted and does not enquire further into how change actually comes about, or the role of policy within those processes.

A further problem with such an approach to ‘evaluation’ is that it separates evaluation from the other TRP’s identified. This means that the framing of the problem, the data and research used to inform intervention design, and the subject and site of intervention all remain external to the evaluation, and beyond the scope of critique and change. An approach to evaluation that brings such aspects into view would create a broader range of possibilities for policy learning.

Conclusion

This short paper highlights some of the different conceptualisations of the relationship between theory, empirical research and policy which have been identified, discussed and developed in a range of literatures, including health policy, innovation studies, social policy and technology studies. Applying the framework to the DECC evidence base shows which of these conceptualisations exist alongside one another, and which are completely missing. The analysis shows that the first TRP ‘framing problems’ is not recognised at all in the DEB. The second TRP – using data/research findings to inform intervention design – is recognised within the DEB, however there is a focus on large scale surveys, which enact a particular reality, reproducing existing problem framings (which as noted are not open for debate). The implications of this for research might be interpreted in two ways: first that more work needs to be done to highlight ‘framing problems’ as a TRP that policy should value, or second developing a research agenda focussed on new kinds of methods and data, to communicate with policy from this alternative starting point. The third TRP exists within the DEB, to the extent that a variety of formulations of how policy does and does not take effect can be
identified. Finally, the fourth TRP, takes a particular form, focussing on ‘what works?’, and separating off evaluation from the other TRPs, removing the framing of problems and use of data from the realm of evaluation, further reproducing current frames, and limiting policy learning.

For theories of practice, the framework highlights that to date the majority of research relating to policy is concerned with the first TRP of ‘framing problems’, there is still much scope for research which develops methods and data, which seeks to understand the role of policy in changing practices and which contributes to the challenges of policy evaluation and the transferability of interventions.

Acknowledgements

The paper refers to a range of DEMAND projects, details of the research teams and progress of specific projects can be found at www.demand.ac.uk. The section on ‘Developing DECC’s Evidence Base’ draws on a DEMAND Centre response which was co-authored with Elizabeth Shove.

References


