

An introduction to the special issue on “the behavioural turn in public policy: new evidence from experiments”

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1 Introduction

Since the publication of the best seller *Nudge* (Thaler and Sunstein 2008), the growth in the relevance of ‘Behavioural Economics’ (BE) and ‘Nudging’ has been exponential, both in terms of the adoption of behavioural perspectives in policy making and of ongoing academic research. With some simplification three strands can be singled out. First, the widespread application and institutionalisation of behaviourally inspired policy-making beyond the two initial cases of the US and the UK (Lunn 2014; Sousa Lourenço et al. 2016). Second, a discussion within the field of economics as to the place and contribution of BE toward ‘Evidence Based Economics’ (Chetty 2015; Thaler 2016). Third, the explosion between 2010 and 2016 of a multidisciplinary and multi-domain meta-literature of commentaries and essays for and against ‘Nudging’ that deal with its conceptual, theoretical, and philosophical underpinnings, as well as with its political and ethical implications (Blumenthal-Barby and Burroughs 2012; Gigerenzer 2015; Gold and Lichtenberg 2012; Hausman and Welch 2010; Jones et al. 2013, 2014; Kosters and Van der Heijden 2015; Marteau et al. 2011; Oliver 2015; Rebonato 2012, 2014; Saghai 2013; Selinger and Whyte 2011; Vallgård 2012; Sunstein 2015a, b).

Explaining the circumstances of the *momentum* of behavioural policy and behavioural economics could be a chapter in the sociology of knowledge. It is

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argued that the basic principles and underpinnings had existed for a long time, at least from the work of Simon (1957) and Tversky and Kahneman (1974) or as far back as Adam Smith and various other economists of the early 20th century (Thaler 2016, pp. 1578–1579). The impact of the book *Nudge* itself should not be overlooked (Kahneman 2013, pp. viii–ix). Yet, one could advance also other interpretative hypotheses such as done by Straßheim et al. who argue that behavioural economics has gained policy relevance (1) by leveraging the political epistemic derived by ‘easily demonstrable forms of experimental evidence’ and (2) because behavioural approaches allegedly redefine the relations between science, politics, and citizens at the time when the Evidence Based Policy programme is clearly in crisis (2015, p. 251). Indeed, elsewhere we also suggested that one of the main allure of the behavioural turn in policy resides in the use of Randomised Control Trials (RCT) and warned that this might be an ineffective shortcut to filter out value judgements from the design of policy options and overlook the importance of theoretical constructs (Bogliacino et al. 2015a).

In this editorial we briefly consider the three trends outlined above (diffusion of behavioural policy-making, evidence-based economics, and the meta-literature on nudging) and argue in favour of a fruitful dialogue, which is currently missing. In doing this, we sketch the policy triangle of politics, value and evidence as a potential guidance.

2 Building bridges between values, politics and evidence

2.1 The behavioural turn in policy

Two stock-taking surveys recently published, respectively by the OECD (Lunn 2014) and the Joint Research Centre of the European Commission (Sousa Lourenço et al. 2016), have amply documented the reach of behavioural approach to policy making. After the well-known and much publicised forerunners cases of the Office of Information and Regulatory Affairs (OIRA) in the US and the Behavioural Insight Team (BIT) in the UK, explicit and institutionalised use of behavioural insights in policy making can be found in Australia, Denmark, France, Germany, Norway, the Netherlands, Sweden, the OECD, the European Commission, the World Bank, and the United Nations. Specialised behavioural units have been set up inside governmental or quasi-governmental structures in the Netherlands, Germany, France, Denmark (Sousa Lourenço et al. 2016, p. 30). As observed (Lunn 2014, p. 12), whereas the countries above have explicit initiatives, the implicit influence of the behavioural insight into policy making may be greater. Indeed, Sousa Lourenço et al. (2016) found broadly defined behavioural policy and/or regulatory interventions (i.e. behaviourally tested, behaviourally informed, and behaviourally aligned interventions) in most of 32 European countries surveyed (European Union plus the four EFTA countries).

Within the growing number of cases of application of behavioural insight in policy making, there certainly are successful cases that make the behavioural turn worthwhile (as per our experience in Europe, e.g. Bogliacino et al. 2015b;

Codagnone et al. 2014a). Yet, there are at least two critical aspects worth considering. First, the indiscriminate application (at least in the initial phase) of nudging in domains where influencing behaviour is either much more complex than simply changing default options or where the actual design of the nudges is embedded into, and constrained by, regulation. There is growing recognition, including by the European Commission (Sousa Lourenço et al. 2016), that many situations and areas of behaviourally informed policy interventions are complex and require new and more sophisticated treatments than the parsimonious and simple nudges that have been made popular by Thaler and Sunstein. Each domain has its specificity and there is no one size fit all solutions, as can be exemplified briefly considering healthcare and health behaviour. Empirical evidence converges in showing that changing default options in prescription support artefacts systematically drive physicians to adopt the desire prescribing behaviour; on the contrary, the evidence is inconclusive and controversial when various forms of nudges are used to change health related behaviour of the individuals (Codagnone et al. 2014b). Second, the use of behavioural insight fails to sufficiently distinguish the three steps needed (Fischhoff and Eggers, 2013, p. 218): (a) the *ex ante* normative analysis identifying the ‘best’ choices; (b) descriptive analysis using experimental evidence to predict the choices that would be made under different policy treatments; and (c) prescriptive analysis quantifying the gap between the normative objective and the empirical reality. Often (a) and (c) are not considered or transparent, if not entirely conflated and short-circuited into (b).

2.2 Evidence-based economics

Its growing policy relevance has stimulated the growth of the BE literature and renewed the debate about its role within, and contribution to, the broader field of choice theory. According to Chetty (2015, p. 1), despite the growth of BE as a sub-field, its validity as an alternative paradigm is still questioned. He makes the case for BE in what he deems a pragmatic approach: by starting from a policy question (i.e. increasing savings rates) and showing how incorporating behavioural factor improves empirical predictions and policy decisions. To make his case, Chetty uses the Friedman yardstick that economic models should be evaluated above all on the accuracy of their predictions (1953). He then uses evidence from various studies to argue that BE makes three key contributions: (a) new policy tools to influence behaviour; (b) better predictions on the effect of existing policies; (c) new welfare implications. Thaler endorses Chetty’s argument and summarises it as a way to proceed that stops ‘*arguing about theoretical principles and just get down to work figuring out the best way of understanding the world*’ (2016, p. 1957). Thaler, however, goes a step further and call for behavioural economic theories (or descriptive theories) to test hypotheses and assumptions based on empirical observations and moving away from the logic of neoclassical economics (2016, p. 1591) as to build ‘evidence based economics’ still grounded in theory but not restricted to the factors that classical models accommodate (2016, p. 1591).

Whereas there are promising potential in these positions, what Chetty and especially Thaler propose is easier told than done. The BE empirical documentation

of reference-dependence, framing effects, social construction of preferences, etc., has shaken the normative axiomatic edifice of rational choice and its welfarist implications; yet, it does not provide as yet an alternative standpoint to define ‘normative preferences’ and predict the distributional and allocative efficiency consequences of a ‘nudge’ aimed at influencing consumers’ decisions. This aspect has been best illustrated by Lunn (2015) through a case study of three-part tariffs in the telecommunication market where most consumers fail to select the best tariffs for their actual needs,¹ as a result of miscalibration, overweighting of small probabilities, inattention, and taxi-meter effect; the case is used to argue that behavioural phenomena cannot be considered as a fourth type of market failure² alongside externalities, market power, and information asymmetry. The market failure framework defines a normatively grounded ideal-type enabling the identification of *incentive compatible* intervention that could restore the first best (or putting the agents close enough). This is premised on several principles but above all on the axiom that consumer behaviour express desirable outcomes. The all BE enterprise has shown that this is not the case, by empirically showing a wide array of behaviours contradicting such axiom and that consumer decision making is subject to many very context specific factors and can change as a result of very subtle aspects of such context. An intervention aimed at reducing miscalibration may be defeated by overweighting of small probabilities or by other well-known biases. The corollary being that no normative regulation of a fourth market failure category can be derived from BE as it stands. Lunn telecommunication case study shows that ‘welfare effects of policies based on the behavioural evidence are more ambiguous’ than it might appear at first sight (2015, p. 323). This is not to say that behavioural interventions should not be pursued, but rather that currently BE’s basis for normative deductions are still fuzzy in many domains.

2.3 The meta-literature on nudging and libertarian paternalism

We have identified as many as 223 essays published between 2010 and 2016 that discuss ‘Nudging’ and/or ‘Libertarian Paternalism’ from various disciplinary background and focussing on different aspects (conceptualisation, theoretical underpinnings, available empirical evidence, philosophical and epistemological basis, political implications, ethical dimensions); about another 50 essays of the same kind were published between 2007 and 2009. Whereas in the early phase these essays tended to be programmatic and calling for the application of Nudging

¹ Three-part tariffs include a fixed fee for a specified bundle of service (minutes of calls, megabytes of data, etc.) up to a threshold, beyond which much higher fees are charged for use. The majority of consumers on such tariffs do not consume up to the limit of the fixed bundle and would save money choosing a fee with lower fixed fees and allowances; a smaller percentage tend to overstep the limit and pay more for extra fee than they would, had they chosen a higher level of fixed fees and allowances.

² As reported in Lunn (2015, p. 316 and 318–319), the expression ‘behavioural market failure’ was first coined by Bar-Gill (2008) and then used by Sunstein (2013) and by Bubb and Pildes (2014); Bubb and Pildes argue that BE can change the normative theory of regulation through the incardination of a new category of market failure (2014, p. 1603, as reported in Lunn 2015, p. 316), whereas Sunstein affirms that behavioural market failures ‘supplement the standard (welfarist) justifications for government action’ (2013, p. 39, as reported in Lunn 2015, p. 318).

everywhere, lately the tone is more critical. This literature is correct as with regards to the fuzziness of the ‘nudge’ concept (Oliver 2015; Kusters and Van der Heijden 2015) which cause both a lack of a clear taxonomy of interventions (by type of intervention and context/domain) that could be used to cumulate homogenous empirical evidence for meta-evaluations, and the indiscriminate application of nudges in all sorts of policy and regulatory situations. A second group of critiques worth taking seriously is on the reductively individualistic approach that Nudge inherit from BE (Frerichs 2011; Gigerenzer 2015; Rebonato 2014; Streeck 2010). The ‘Homo Behavioralis’ that substitute ‘Homo Oeconomicus, so the critique goes, attempt a hardwired micro foundation of human nature than ends up being almost more deterministic and naturalistic than the reference model that is criticised. Sociologically this amount to a form of ‘cognitive universalism’ obliterating cultural segmentation and institutional effects. The sociological gaze reminds us that we also think and cognitively process stimuli as members of particular communities. Cognitive schemas are grounded in culturally, historically, and sub-culturally specific traditions. One example of culturally led cognition could be the study of Gneezy and Rustichini (2000) about the opposite interpretation between two community of actors (a school and the parents of the children attending it) on the meaning of a fine. Observing that our actions can be deliberate or automatic, hot or cold, representing different strategies (or lack thereof) and having different effects is not sufficient and beckons the social, cultural, and historical conditions that either enable or constrain individual actors or groups of similar actors from switching their action strategies today or across time (Cerulo 2010, p. 121; DiMaggio 2002, pp. 277–278).

The part of this literature that focus on the political philosophy and/or ethical implications of nudging (especially focusing on Libertarian Paternalism, e.g. Rebonato 2012, 2014) provides somehow a blurred advancement. We feel that Libertarian Paternalism creates more problem than it supports the advancement of behavioural approach to policy analysis and policy making. The same applies to the denunciation of the risk of manipulation, e.g. ‘who nudge the nudger?’, or ‘on what grounds the nudgers decide which are the desirable outcomes?’ (Ashcroft 2013; Blumenthal-Barby and Burroughs 2012; Lichtenberg 2013; Ménard 2010; Oliver 2012; Ploug et al. 2012; Saghai 2013; Vallgård 2012; Welch 2013; Wertheimer 2013; Wilkinson 2013). If the edifice of normative preferences collapse, there is no value free policy intervention and any form of policy and regulatory intervention will impose a criterion against someone’s will (it will always be the case) that cannot be cut in the stone of evidence or welfare neutral criteria. As put it, the answer to the question whether nudge is an ethically acceptable way of governing people’s behaviour depends on the ethical principles one adheres to. A more delicate critique, levelled especially for what concerns healthcare and health in the UK after the launching of the BIT in the UK (Bonell et al. 2011a, b; Lancet 2012), concerns the risk that the drive toward behavioural policy will obscure or masquerade the government incapacity or unwillingness to introduce also more structural interventions. Indeed, socio-economic conditions and structural determinants should not be overlooked, although it is not necessarily implied in BEs and nudging that behavioural intervention should substitute structural one.

2.4 More dialogue toward the triangle of transparent policy options and choices

Five years ago, in one of the first special issue devoted to BE and its application to consumer policy by the *Journal of Consumer Policy*, the editorial welcomed this new approach as fresh air and innovation with respect to the rigid and mostly ineffective normative and regulatory approach derived from the standard ‘information paradigm’ (Micklitz et al. 2011). The empirical evidence, the intellectual debates, and the policy practices cumulated in the last 5 years cannot but confirm that the behavioural turn in policy has brought new insights for policy itself and also contributed to advancement in academic research. There is also no doubt that such experiences of different kind have also shed light on new challenges, difficulties, limitations; after the typical hype, there is now more awareness that nudge is not a panacea, cannot be applied indiscriminately, and that nudge plus RCT should not be used as a short-cut to a-critically or surreptitiously resuscitate at all costs the agonising ‘Evidence Base Policy’ agenda.

In considering the three strands (behavioural turn, evidence based economics, and meta-literature) we have identified at least three directions that need improvement. First, better conceptualisation to improve both the application of behavioural insights and to cumulate homogenous evidence for future meta-evaluations. Second, the need to better deal with the actual policy and welfare implications, acknowledging the current lack of a normative standpoint; nudges are not self-absolving tricks for policy makers and do not eliminate political choices from policy making. Last but certainly not least, more complex efforts are required to bridge inductive experimentation and theory. Behavioural interventions tested through RCT are welcome for their potential transparency and replicability but in a nutshell ‘the generalisation of a tested policy is conditional on the equivalence between the implemented and the tested policy and on assumptions of how agents in different contexts respond to the tested intervention. There is no blueprint for this stage, but surely theoretical guidance is necessary’ (Bogliacino et al. 2015b, p. 112).

To this purpose more dialogue would be needed between the various actors responsible for producing the practices and contributions grouped under the three strands above. Such dialogue would, by tacking the three limitations outlined above, contribute to incardinate behavioural policy inside the policy triangle of value-politics-evidence (Fischhoff and Eggers 2013).

Transparent and democratic policy making cannot but incorporate all the three poles of the dimensions: consider the values of the policy-takers, use available evidence (theoretical and empirical) and then make political choice imposing explicitly one criterion that cannot be ascribed just to ‘science’ in technocratic fashion and neither can be entirely and emotionally subjected just to the values of some part of the citizenry. In that respect, evidence and data can act as constrains and affordances to value judgements rather than replacing the latter. Policy making in a democracy would require as minimal criteria: (a) transparency on the values selected in deciding and designing an intervention; (b) and at least an evidence based justification of the choice. Under such conditions, overt and explicit coercion

by ‘nudgers’ it is arguably better than covert manipulation by those designing environmental and contextual cues.

3 The contribution of this special issue

In this special issue, we present five articles. They have three characteristics in common: they use experiments, although in different settings (online, laboratory and field experiments), they deal with sensible policy domains (investor, environment, and consumer protection), and they try to recur to theoretical constructs to *learn* and generalize from experiments. As we emphasize in the section above, it is a small step to operationalize the policy triangle: BE (*evidence*) needs to deal with interests-constrained domains (*politics*); normatively charged issues (*value*) have to face “what works” (*evidence*), and agencies’ own agenda (*politics*) have to get into negotiation with what we know (*evidence*) and what people care about (*values*).

The articles by Codagnone et al., Gómez et al., and Rodriguez-Priego et al. analyze nudges in domains where the level of regulation is strong, some options are already in place and the space for radical changes is restrained.

The first contribution explores CO₂ labelling for cars in Europe. Both labels per se, and labelling options included in the advertisement are discussed and tested through both a laboratory experiment in the UK and an online experiment in ten countries. Various theories of bias in evaluations are discussed to ground potential results, and the limitations induced by rigidly constrained policy domains are also analyzed. Once cost saving frames are in place (e.g. running cost information) the behavior changes, causing for example large and expensive cars to be undervalued. No similar effect of information on CO₂ emissions and eco-friendliness is found. By virtue of being embedded into a setting designed to capture the attention, promotional materials are more effective.

The second contribution discusses existing financial labelling options in the domain of investor protection. The authors collect information via a laboratory experiment in Spain. The authors try to identify the impact using rank dependent utility theory. In this way, they are able to measure if the distance from *rational preferences* increases or decreases as a result of regulation. The introduction of numerical and color-coded labels significantly affects pessimism and risk-aversion in cases where the probability of obtaining the best outcome is high; as a result, the distance from the prediction of expected utility theory is actually increased.

The third contribution studies the influence of changes to the online environment over changes in privacy behavior. The data have been gathered through an on-line experiment across four European countries. The nudges include various measures in place or discussed by the literature (an anthropomorphic character, highlighting prior browsing history or changing the look-and-feel to convey greater informality). The nudges did not lead to differences in the amount of personal information disclosed, but did affect whether participants noticed the privacy link or not.

The articles by del Brio et al. and by Cardenas et al. address two policy debates where strong normative preferences are established, respectively opportunistic behavior in financial markets and pollution-threaten health and biodiversity.

The former explores whether insider trading and earnings manipulation can be detected in unregulated financial markets and how self-regulation works in *laissez faire* regimes. Data are gathered in a lab experiment in Spain. The evidence clearly makes a case for regulation, since both opportunistic strategies are registered, and are jointly used. As a result, market efficiency is eroded, as information is not correctly conveyed through prices.

The latter investigate willingness to pay for health and biodiversity features of fishery techniques. The application of behavioural economics to development economics is growing and we consider this paper an important contribution. They perform choice experiments in the field, along the fish chain (producers, intermediaries and consumers), in Colombia. Results show that both consumer and fishermen place a significant economic value to the reduction of exposure to mercury contamination in fish, creating opportunities for Pareto improving measures in the regulations and prices which could translate into lower demand for more contaminated fish.

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