

Possible Shortcomings in Using Behavioural Economics in Policy Making

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These days the behavioural economics have many different applications. Whenever it is a more general kind, discussing our biases in our thinking (Kahneman, 2011), how we can use it to improve our personal life (Ariely, 2008) or how it can be used to improve the policy making in order to allow us freedom while help us make better decisions (Thaler & Sunstein, 2008). And I do agree with Thaler and Sunstein (2008), that the knowledge of the behavioral economics can help us create better society by showing the people how they can make better choices for themselves without prohibiting anything, what I am more skeptical about it is, if this is really a panacea that some people are hyping it out to do.

So in this following paper, I am going to discuss some of the points that represent the areas where the behavioural economics might still have some problems. I am going to start with a short example of how behavioural economics principles were implemented in the school setting, which will be a good introduction into some of the shortcomings that behavioural economics has right now as a science. After that, I am also going to be touching on some of the problems that can arise when translating the behaviour economics insight into policies.

Let me start with one of the examples of how behavioural economics is not always implemented correctly. In order to do this, I don't have to go far. I just need to exam the homework submission system at the Faculty of Computer Science at the University of Ljubljana. In their Moodle system that has tried to implement the kind of honour system. What they do is, that at the place where the person can upload their homework files, they need to check the that 'this assignment is my own work, except where I have acknowledged the use of the works of other people' (Faculty of Computer Science, 2016). It seems to be reminded of the MIT honour code that Ariely (2008) used in order to reduce the cheating.

The problem is that at that time the people that were planning to cheat already cheated. Shu, Mazar, Gino, Ariely, and Bazerman (2012) did show through a couple of experiments, including an ecological valid one with the automobile insurance company,

that in order to reduce cheating, the remainder has to be placed right before they are tempted to cheat. If people were reminded afterwards, after the cheating already happened, then it had no effect. So that means that if Faculty of Computer Science is trying to reduce cheating through this, this is not an effective way. Which is probably why there is a lot of anecdotal evidence of people paying people to solve their homework and submit that work as their own, though I am not aware of any systematic study of it.

I do agree that it is hard to design a system to be able to inject the mention at just the right time. Since homework by definition is not done on the schedule, and most people use different software workflow in order to do it, this one would be hard to design and it would require some testing. One way to test would be for people to check a box right before they see what is their homework.

Which brings us to the next point. The behavioural economics is still having a bit of problem coming up with the predictions. The example of this was written in the Financial Times (Harford, 2014). They were running the experiment to encourage people to sign up to be organ donors. They tried eight different versions of the message that they displayed on the website. They were expecting the social proof ones, will me the most persuasive. People have an innate need to belong so this is one of the things that should according to the current theory worked. But not only it was not the most successful, at least one of the three social proof one was worse than the one with no persuasion at all. The one that won? The message based on the reciprocity.

There are a couple of reasons why this is like that. The first one is that behavioural economics come from two of the most context-free social sciences. The behavioural economics is a mixture of the psychology and the economics. While there was no clear answer of which branch of psychology was used, there was at least one source that implied that the psychology used was cognitive psychology (Camerer, 1999). The state of the psychology and the methodology used also give an additional indication that this could be true. The current mainstream of the psychology is cognitive psychology. Just like most experiments in the behavioural economics, the cognitive psychology does not take the context into account but tries to control for it to get to the underlying process. The main assumption in their paradigm is, that the underlying processes are the same for all humans.

In psychology, this has lead to the WEIRD bias. The WEIRD bias stands for Western, Educated, Industrialized, Rich and Democratic and it came into more prominence, once it was discovered that most studies are made on people from the US and Western Europe. Not only that, in some of the journals the main study population were psychology undergraduate students in US (Arnett, 2008). But while this has induced a movement in the last 10 years to study other samples as well, it is worth noting that based on the paradigm of the cognitive psychology, this was the expected result. If humans all have the same underlying process and the differences can be controlled for, then it does not matter which sample is used in the study. So the ones that are the most convenient will ended up being the most frequently used.

But trying to battle the WEIRD bias and in some cases even starting to include a bit of context, there were some interesting results that have come to light. When it comes

to language, the native tongue and the language that the person uses in the moment of decision or action both influence the biases of the people. When it comes to the mother tongue, people with mother tongue where they are forced to use the future tense to talk about the future (like English, French, Slovenian, Italian, Greek and Russian) have higher time discounting. This means that they save less, retire with less wealth, smoke more and use the condom less frequently when compared to people with mother tongue where they are not forced to use future tense to talk about the future (like German, Japanese, Chinese and Finnish) (Chen, 2013). Considering that higher time discounting leads to higher consumption of unhealthy food (Barlow, Reeves, McKee, Galea, & Stuckler, 2016), they might also be more obese.

But these biases can also be manipulated by simply changing the language that people use. By simply using a foreign language, there are some biases that become weaker as result. An example like that is a loss aversion (Keysar, Hayakawa, & An, 2012; Costa, Foucart, Arnon, Aparici, & Apesteguia, 2014), where people acting in their foreign language show lower or no loss aversion bias. Though it seems that the more fluent a foreign language, the less of an effect does it has on the biases (Costa, Foucart, Hayakawa, et al., 2014).

The language is not the only thing that can affect aspects that the behavioural economics is studying. One of them is also personality. It has been shown that personality has an effect on the biases like overconfidence, mental accounting and sunk-cost fallacy (Rzeszutek, 2015). Also, the personality can affect how people process outside cues, as it was shown with how much food one eats depending on the size of the bowl and who is serving (van Ittersum & Wansink, 2013). Based on the later study, the suggestions for introverts and extroverts would end up being different at least in the regard of who is serving them. Or we could go to the gender and culture, which both have an effect on the amount of the attribution bias that the person shows (Mezulis, Abramson, Hyde, & Hankin, 2004).

But even though these results are, at least for me, quite interesting, I have rarely seen them discussed outside of their studies. While the studies that could generalise to the whole population are the ones that get mentioned in the different personal development courses or possibly used in the policies.

There is also another note that I would like to touch upon regarding the science of behavioural economics. And this one refers to the paradigm aspect of it. Even reading through the multiple studies, I have no idea what the main paradigm of the behavioural economics is. And I am not the only one, as Harford (2014), Grant (2014) and Kahneman (2013) have indicated that a lot of what is called behavioural economics today is actually more like other social sciences, like social psychology or similar. The reason could be, that economics is still considered valuable for policy making, unlike the other social sciences (Kahneman, 2013). Which then gets rebranded as behavioural economics, adding up to the confusion.

I have mentioned in the previous part of this paper, that behavioural economics seems to have come from the cognitive psychology, which has a different paradigm than social psychology that some people apparently mix it with. Not to mention, while most of the papers in the behavioural economics are experimental, some of the are correla-

tional. Which I find it interesting, considering that this came from psychology. Corr (2007) mention one of the reasons why personality is not that well accepted in the mainstream psychology is the divide between experimental and correlation psychology. The mainstream psychology has been experimental for a long time, first through behavioural and then cognitive psychology. While the personality studies have mostly been correlational. And the two strains did and still don't work well together.

Kuhn (1970) have discussed the paradigms and how they allow the normal science to progress. Some of the elements were that there is a consensus about the value of problems that need to be solved, accepted methods and assumptions. The assumption seems to be the most secure one, as there is a generally accepted assumption that we people don't act in a rational way. There is some agreement about the methods, with experiments still having the most prominent role. But while a lot of the studies are done with experiments in the controlled settings, there has been a push for more ecological and situation specific experiments. The problem to be solved is also not that clear. It could be that it is studying of how irrationally we make decisions. But seeing the studies and how is it marketed, it also seems that the problems it is solving are the policy and lifestyle problems of the people, and not improving the knowledge about specific phenomena.

Taking this into account, I get the impression that behavioural economics is still in a pre-paradigm phase or at least in a bit of a crisis, with their constant searching in multiple directions with no underlying main theory. Since I am not a researcher in behavioural economics, my impression could be wrong. There is nothing wrong with having science in that state, but in this case, I would be a bit sceptical about using behavioural economics on a widespread basis in the policy making. Or at least, if it is used, pair it with another kind of policy making as well.

I mean, there are a couple of theories that also deal with how people make a decision, but from a different perspective. One example like that is terror management theory (Greenberg & Arndt, 2011). It is a theory that says that thought of death affects people's decision making. People that have conscious thought of death are more likely to choose life-prolonging choices, like eating healthier. On the other hand, people that think of death on the unconscious level are more likely to choose image-enhancing choices or going with the herd. This has been linked with the current rise of electing the charismatic leaders, like Donald Trump in the US. This is just one example of an alternative theory, but it has a far less public and policy exposure than behavioural economics.

Though I guess the reason why politicians like policy based on the behavioural economics is because these are more popular than ones based on the neoclassical economics. One example would be convincing people to drive less. Thaler and Sunstein (2008) in his book uses the example of energy usage. There the idea was to inform people about their usage and how well they are compared to their neighbours. Something similar could be used for car usage as well. Maybe when people come to service the car or when they apply for the insurance, they communicate to other people how many miles did they drive. This would be a time when comparison nudges can be used, and inform the people that use the car a lot to change. The other example would be the Vienna public transportation company. A couple of months ago there was quite some news, which

included the information that would make people believe that public transportation is the better choice. Like how the number of yearly tickets for Vienna Zone passed the number of registered cars in Vienna.

I am not saying that these don't work. But this might be used for the politicians to not use any other method. Another way to be able to influence people would be to introduce or increase the tax on the gas. But this is generally an unpopular decision. An indication of this could be shown, when on one show in the US asked people about it. None of them agreed with the gas tax (Oliver, 2015). Which makes me worried that the behavioural economics would end up being an excuse for not doing anything that would be unpopular with the voters.

Also, another thing that is a bit of a problem is who is actually making decisions of what is the main goal. This is not much of the problem in the usage of the behavioural economics in personal cases, but it is when making decisions on the policy level. The good example of this is organ donations. Thaler and Sunstein (2008) in their book declare that organ donations could 'save thousands of lives every year and do so while imposing essentially no new burdens on taxpayers'. So they take the increase of organ donation to be the goal to be perused and they don't really indicate much more space to the discussion of the problem.

Maybe to some people this seems like self-evident and who would not agree with this? Well, one example of this was Japan, which had a public debate about it before the year 2000 (Morioka, 2001). What is interesting about their debate is, that they did not stop at the consent problem of the organ donors. They discussion also included which type of death is counted. They ended up with probably one of the most stringent rules for organ donors. For people to donate organs, the two step approval is needed: first, the person has to give a prior approval to be an organ donor. Also, the family must have no objection at the time of the person's death. What is interesting is, that people that give the approval for organ donation can also choose which type of death should be counted, with the default being the cardiovascular death, and not brain death.

Does this mean that they might get less donated organs to save lives? Most likely, as Japan is on the bottom of organ donations when compared by country (IRODaT, 2013). They don't have specific organs available, like the hearts of the children, because the children can not give consent before a certain age so they can not become the donors (Morioka, 2001). But this policy allows them to reflect the values and opinions that the people of Japan hold, since 70% of Japanese believe that both person and a family would need to give consent in situations like that. Is this worth more than the lives that could be saved? I don't know, but I believe that each group of people would need to take this decision by themselves and it can not be imposed by others or worse ignored by making it irrelevant.

I will admit, that even in Japan case, there was a choice architect that ended up designing the policies and defaults. But these were created in a dialogue with other members, taking into account many more things than just a single goal, which is where the behavioural economics is usually presented as a good way of resolving a problem. Doing things in a more holistic way, and with some of the discussion might be a better way.

But an additional reason of why I included this is an anecdotal evidence that I have collected afterwards. I asked people if they knew what the choice architecture was for organ donations and what is being counted as death. While some, even if not all, people did know about the state of organ donations, not a single one knew what the criteria for death are. I found this fascinating, because Thaler and Sunstein (2008) in their book constantly talk about how the choice needs to be available, but with good option for people that won't make one for any reason. But deciding the state at which point a person is considered death is not just a choice that is not available in some countries, it is also hard to find out what is the choice that was made for us.

Why is this important? I will argue that it is important for two reasons: first, it has to do with the four E paradigm in cognitive science, and I am going to discuss it from the perspective of extended cognition. The second point, which I will discuss afterwards is about dignity.

Extended cognition refers to the notion that some of our cognitive processes take place also outside of our body (Clark & Chalmers, 1998). The example of that would be an Excel file helping us navigate the financial decisions or map apps on our phone helping us navigate. Because we have these architectural parts to help us act in our world, we don't need to have the necessary cognitive processes outside of this outside help. The example of this would be, how we are much better these days remembering where we had seen something, then what we had seen, as the cost of finding information again has dropped drastically (Sparrow, Liu, & Wegner, 2011).

Considering this, it makes me wonder how a deliberately good choice architecture would affect the ability for people to think. If there is not preception-action feedback loop, because the choice architecture nudges people into making better decision, than people will simply not develop the decision-making skills. They will be dependent on somebody else making their choice for them. The good example of how the outside technology can affect the cognition of the people was presented in the Postman (2006) book. He explains this by how now that the television had supplanted the print, the people are much more likely to judge things not rationally, as in the print area, but by how attractive and entertaining it is. By allowing a widespread of this new 'technology', we might also be providing side effects that we are not anticipating.

The second point that I would like to mention is dignity. Dignity is constructed from three parts: equality, agency and self-definition (Spiekermann, 2015). The problematic ones are the agency and self-definition. Influencing the choices of other people takes away some part of people's agency. Even if this is for their own good, for example, that this would make them smoke less, it still influences the ability to make their own choices. Also, because we human beings make our identity based on the historical narrative, leading people to make different choices would make them construct different identity. And that would go against their dignity, as it does not allow them to self-define their own image of themselves. This two would not be a problem, as long as these are transparent and their description easily accessible. But, this is not true for at least my country.

So I would like to start my last point, and this is the danger of incrementalism. By making some of the choices more salient than the rest of them could be the first step

in simply having somebody else make the choice for us. The example in the previous point, where the choice of when a person was declared death is already hidden and perceived irrelevant in some of the countries. There is no indication that these small changes will not turn into bigger changes down the road by making more and more choices irrelevant.

It is true that behavioural economics can bring us some ways to better control our life, from using smaller plates to eat less, to having a fly on the toilet in order to reduce spillage, and to have regular reminders to be honest. Most if not all of these three examples don't bring forth unintended negative consequences and are a cheap way for a person to control their own choices in everyday life. I think that in everyday life these are to be embraced.

The problem comes when the sciences that it not yet matured is used to influence the choices of all the members or citizens of specific group or country. For a science that still does not have answers to most of its questions and sometimes it is not even sure what questions to ask, I think it is pretentious to expect to be a valid solution for multiple problems. In these cases, it could be a possible way to solve it, but it should not be tested and implemented in the same way that the websites owners decide how to design it or what content to choose. But instead it should be transparent and part of the political discourse.

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