

Health Economics

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Week – 06

Lecture 29- Nudge Theory

Welcome, friends, to our NPTEL MOOC module on Health Economics. We are discussing one important dimension of behavioral economics is the nudge theory. The meaning of nudge is very clearly understood as a kind of gesture, with a very quick gesture, a short-term action, etc. We will clarify everything systematically. But what we did in the last lecture in connection with this lecture is that we started discussing the previous one on prospect theory.

We have given all possible steps of the prospect theory, and hence, the subsequent lectures should be on nudge theory. So, I will just introduce what is nudge and who introduces etc. Nudge theory is a concept that originated in the field of economics and psychology. It is popularized by Richard Thaler and Cass Sunstein in the famous book called Nudge, Improving Decisions about Health, Wealth and Happiness.

So, you might have must have understood or about some of the works of Richard Thaler. Richard Thaler is particularly famous in the present days because of the Nobel Prize he received already for his contribution in this direction. So then, what is Nudge? INudge is any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives. Nudges are not mandates. To count as a nudge, the intervention must be easy and cheap to avoid.

For example, we have already cited one simple case study, one simple example of consumption habits to develop through a nudge. If you put fruits at your eye level or eye count level, then this might improve the extent of consumption of fruits as against other unhealthy products. But just banning junk food in order to increase the consumption of healthy food like fruit is not called nudge. So, nudge is simply you are taking action positively, giving the scope to the individual to make decisions quickly. That is like you are just keeping fruits at a very close distance in front of the eye, and hence, there are more chances to consume them.

Some of the other words that are quite frequently used in this context are reinforcement. This is all about strengthening the likelihood of future behavior. Positive reinforcement adds a desirable consequence, while negative reinforcement removes an undesirable

consequence that is associated with the behavior. The theory suggests that positive reinforcement and your indirect suggestions can influence people's behavior and decision-making. We have already used the terminology called choice architect, then architecture etc.

I am going to clarify this. The choice architect has the responsibility for organizing the context in which people make decisions. Whereas in the case of architecture, choice architecture is related to libertarian paternalism and Nudge's theory which proposes that positive reinforcement and implicit suggestions can influence behavior. Nudge's theory emphasizes the decision of choices or choice architecture to influence decisions by altering the way options are presented, the theorems to guide individuals forward in making better choices without restricting their freedom. Here, we are giving six principles as per the original discussion by the experts which we cited.

We are saying that the six principles of good choice architecture are largely called nudges or mnemonics; they are just mnemonic and just mean in a short form. Good architecture includes incentives that provide the right incentive to the right people to enable good decision-making. Then, understanding mappings relate to the consequences of different decision pathways, and there are defaults as well; like people, it is difficult to leave the decisions that are usually considered default. People often leave the default decisions on if they are too lazy to make a decision. Then, giving feedback helps improve the decisions, and expecting errors is the one where the errors are human and design should be built accordingly.

It has a structure of complex choices that makes the choice structure simple and convenient so that it can reach people for better decisions. Coming to libertarian paternalism, this is all about the Nudge theory operates under the concept of libertarian paternalism, which means influencing behavior for the better while respecting an individual's freedom to choose. Nudges are designed to guide choices without imposing mandates. Republican Libertarian paternalism is the idea that it is both possible and legitimate for institutions to influence behavior while also respecting freedom of choice without any coercion. Hence, there are two cognitive systems, as discussed in the authors' original articles, which have already been cited.

So, the two cognitive systems are automatic or reflective. So automatic, there are some features we will discuss, and for reflective, we will also discuss. Just for your basic clarity, we want to refer here to one example: most Indian people have automatic system reaction to a temperature given in the Celsius scale but have to use their reflective system to process a temperature when given in the Fahrenheit scale. Similarly, speaking in the native language it is an automatic one. While speaking in a foreign language, we are supposed to get a reflective approach for understanding and deciding in another language.

Hence, the difference between these two are like the automatic system; it is largely uncontrolled, effortless, associative, fast, unconscious and skilled. Whereas in the case of

reflective one, it is largely controlled, effortful, and deductive because you are supposed to deduce the information based on reflections or reflective approaches. It is relatively slow, self-aware and rule-following. Then, some other concepts used in Nudge theory are called heuristics. There are three heuristics or rules of thumb as proposed by Tversky and Kahneman 1974.

Heuristics are mental shortcuts. These allow us to make quick judgment calls based on generalization or rules of thumb. And heuristics can cause biases. Biases we have already discussed in our lecture. They are called optimism and overconfidence, gains and losses, status quo bias, and the framing we have already discussed. You can follow the lecture accordingly.

And especially in the previous lecture, it was discussed categorically. The three heuristics proposed by Tversky and Kahneman are anchoring, availability, and representativeness. And heuristics are associated with biases and emerge from the interplay between automatic and reflective systems. So, like in the case of anchoring, when estimating a certain value, we tend to give an initial value and then adjust it around that initial value, either increasing or decreasing. Similarly, regarding availability or mental shortcuts used to make frequency or probability judgments based on the ease with which instances or occurrences can be brought to mind.

Then, the frequency of cyclones occurs in the Bay of Bengal since we are more acquainted with and more available to the nearby people or in the context of the Bay of Bengal. They used to judge the frequency of cyclones more in the Bay of Bengal as compared to the Arabian Sea. And another bias as of the heuristics is due to representativeness. We categorize events or objects based on how they relate to instances we are already familiar with, like the category of dogs or chairs or the category of humans. Some representations have already been made.

Hence, we used to be biased towards those. And simply view it as if a representative one is being discussed. So, you can follow up on further details from the respective lecture. Here is a case study on nudges and health. We have taken from our earlier example on organ donation, opt-in, or opt-out if you remember.

Some systems have an opt-in principle, and some systems have an opt-out principle. So, we can understand which one has better knowledge. So, the first one is called explicit consent, which is simply based on the willingness to donate. It is called willingness to donate like you get the form filled out through willingness to donate. If any accidents occur or at the time of the deal or driving license, if opt-in is taken, then that is part of the willingness to donate. That is purely called explicit consent.

The default rule is everyone has to register to donate. Then there are challenges as well; inertia exerts a strong influence and suggestions like changes in choice architecture would

help ensure that more organs are available. Another one is called routine removal. Legally, everyone has to donate if simply asked, and the default rule is that everyone eligible to donate must donate. If that is made as a compulsion, then that is precisely on remaining the case of nudge.

The challenges are that it violates the rights of people over their bodies. And the third one is called presumed consent. It is considered to be consent taken just opting out in case of organ donors like based on willingness not to donate or on willingness to donate etc as part of the opt-out system we have already discussed. So, a different rule is that everyone is registered and is allowed to de-register. And there are challenges, no doubt the best approach.

This is the best approach, but often, countries with a presumed consent system have lesser organ donation count due to a lack of infrastructure in place. And also, it is politically not viable. So, the example we have cited and accordingly, you can understand. Where the nudges are working, they have to emphasize the willingness of the people. Then another one is, that this also captures coming to the example of organ donations through the nudges, we can capture the demand-supply gap in organ donation.

But nudges are helpful enough to reduce these demand-supply gaps. So, in each of the cases we have started discussing, another approach to reduce this gap is through mandated choice. Since the presumed consent method is politically not viable, mandate choice is asked, like during DL, registration for which is mandatory. It breaks the inertia. However, there is a default rule that everyone has to register based on willingness to register.

And there are challenges; it would produce fewer registered donors than a presumed consent policy. There are norms also, but before norms, let me just clarify that in the case of this organ donation, freedom of choice and number of donations theoretically have a negative correlation. However, with the right nudge and choice architecture, the gap in supply and demand can be reduced. So, for some of the important norms, the state should give preferred presumed consent or mandated choice systems on the grounds that either approach should be likely to save lives while preserving freedom. If both cases are taken together, it is really good.

Web page should be there to attract donors in an excellent, which is considered excellent. So, if more information is given to attract donors, it would be a better nudge. So, you can also refer our slide number 23, an introduction to behavioral economics. We discussed the role of behavioral interventions in organ donations. So, especially in the introduction of behavioral economics, we have already discussed it.

The significance of behavioral nudges is indeed substantial as they can assess individuals and recognize their genuine preference for organ donation without biases. The opt-out systems have higher enrollment for organ donation than the opt-in systems. We also

discussed earlier. So, the opt-out system where organ donation will occur automatically unless a specific request is made before death for organs not to be taken. We are citing examples again; they follow opt-out systems like Austria, Sweden, France and Russia.

But in the case of an opt-in system, people have to sign up actively or to register regarding countries such as Denmark, Germany and the US following opt-in systems. So, these are the readings for understanding nudge theory. There are so many things to explain. I think these are the starting points we have given and rest I am sure you will have interest to study. So, thank you.