

## Unit 2: Can we think of health as capital?





Hello, I'm Marlène Guillon post-doc student at the CERDI at the University of Auvergne. The purpose of this video is to introduce behavioral economics and to understand how its concepts can help create public policy. Traditionally, economic models rely on a simplified representation of humans, homo economicus who is

models rely on a simplified representation of humans, homo economicus who is supposed to be perfectly rational and selfish with consistent preferences over time and in different contexts. These assumptions help create models of human behavior but they are limited and do not reflect the complexity of decision making.

Behavioral economics which lies between economics and psychology allows a more exact understanding of the cognitive and emotional biases affecting our decisions. The descriptive aspect of this science tries to explain why our behaviors challenge traditional economic models. The normative aspect of predictions from behavioral economics intends to advise policy makers on what policies to put in place. Specifically, these models allow us to create strategies to orient individual choices without forcing them. These are called nudges. Nudges are an extra tool that can be used in public policy alongside conventional tools such as bans or financial incentives like taxes and subsidies. Nudges are a tool that can also be used in health care to create more effective health care policy. Behavioral economics can allow us, for example to design more effective prevention campaigns. Many cognitive biases, such as loss aversion or the desire to conform to social norms allow us to design more effective prevention messages. Loss aversion defines an individual's tendency to put more weight on a loss than on an equivalent gain. Several studies in behavioral economics have shown how loss aversion influences our health decisions. In a 2008 study, Gerend et al. studied the intention to get a HPV vaccine in two groups of American female students. Group 1 was informed of the risks associated with not getting vaccinated. They were told, for example that not getting the HPV vaccine would increase their risk of developing cervical cancer. Group 1, therefore, was assigned a loss-framed message. In Group 2, the students were informed about the benefits of the vaccine with the message, for example, that the HPV vaccine would reduce their risk of developing cervical cancer. The prevention message here was gain-framed. The results showed that loss-framed messages led to greater vaccination intentions. It would appear that, to promote preventive behaviors such as screening or vaccination it is more effective to highlight the losses associated with not adopting this behavior than the gains of adopting it. Behavioral economics has also shown how our cognitive capacity influences our health decisions. For example, it is difficult for us to make a choice when too many options are made available. In the context of health care health insurance coverage in the US has illustrated this issue. Studies on the subject showed first that offering too many coverage options could discourage people from taking out health insurance. Studies have also shown that offering too many options can result in consumers making suboptimal decisions. For example, Tymus et al., in a 2009 study studied the probability of choosing optimal coverage with regard to the number of options offered. In the experiment, participants had to choose Medicare Plan D coverage out of 6 options for Group 1 and out of 24 options for Group 2. The choice of health coverage depended on three criteria: the monthly premium, the co-payment and the distance to the nearest pharmacy. In both groups, there was one optimal plan better than the others with regard to the three criteria. The results showed that the participants faced with 24 coverage options were significantly less likely to choose the optimal plan. These different studies have important implications for public policy.







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They show that, even if theoretically the possibility of finding optimal coverage increases with the number of options reducing the number of options can, in the end, increase the rate of enrollment and promote choosing the best option. If we cannot reduce the number of insurance options several interventions can be

end, increase the rate of enrollment and promote choosing the best option. If we cannot reduce the number of insurance options several interventions can be implemented to reduce the cognitive difficulty of the choice and to promote enrollment and the best coverage option. Public authorities could push for standardization of coverage options to increase their comparability or they could implement tools that can calculate the co-payment amounts for each plan

standardization of coverage options to increase their comparability or they could according to the profile of each eligible person. We can also use behavioral economics in the fight against obesity. The difficulty of adopting and maintaining a balanced diet or regular physical activity is exacerbated by temporal inconsistency. Behavioral economics studies have shown a preference for immediate gratification in most individuals. This preference pushes people to not stick to their decisions including when it comes to health. To fight against temporal inconsistency and promote better health behaviors pre-commitment strategies can be set up in order to stop temporal inconsistency from influencing decisions in the future. For example, systems for preordering school lunches have proven effective in increasing the nutritional quality of food choices. Setting up commitment contracts which is a way of integrating loss aversion is also a possibility. In such commitment strategies, people choose to bet a certain sum of money on maintaining their goals namely with regard to health such as weight loss or more exercise. People will lose money after a certain amount of time if they have not met their health objectives. In a 2011 study, John et al. tested this type of commitment strategy to help participants lose weight. Participants in the study were randomly assigned either to the control group or the incentive group with a commitment contract to which they contributed between \$0-3 per day. At the end of each month the participants assigned to the incentive group could win back the deposited money if they achieved their weight loss goals. The commitment contracts were effective in promoting weight loss as participants in the incentive group had a mean weight loss of 3.9 kilograms after 32 weeks compared to only 500 grams in the control group. In conclusion, behavioral economics has revealed a certain number of cognitive and emotional biases that affect decision making including when it comes to health. Implementing nudges that use or correct these biases can promote better health behaviors. Nudges are used more and more in policymaking for public health issues. Despite the increased use of nudges experts still have questions about them. The first one is whether nudges can influence our health behavior in the long term. Their increased use can reduce their effectiveness because people will become increasingly aware of the purpose of nudges and of their own behavioral biases. Ethical questions with regard to nudges have also been posed in the literature in recent years. Creating policies that seek to orient people's behavior is seen by some as paternalistic and condescending. What's more, nudges can be used in order to push someone to adopt a behavior which goes against personal interests or the interests of society. Further reflection is needed on this subject and it should lead to establishing safeguards to ensure that nudges are always used for legitimate purposes.



