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BEHAVIORAL ECONOMICS: A NEW HEAVYWEIGHT IN WASHINGTON?

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Economists are hardly a rare sight in Washington, D.C. but the toolbox of beltway economists has become a little bit fuller during recent years. The insights of behavioral economics have increasingly moved from research journals and classrooms into policy discussions and the popular media. The topic's rapid ascendance into the public sphere is evident in workshops hosted by federal agencies, a best-selling book on the application of behavioral economics, and op-ed pieces in major newspapers.

Neoclassical or traditional economics is based on models about how people should behave when acting in their own best interests. Empirical observations are then fit to these models. In contrast, behavioral economics has been based primarily on observations of how people do behave. This new stream of thought has focused in large part on how individual behaviors deviate from the predictions of more traditional economic approaches. To accomplish this, behavioral economics utilizes a set of tools drawing on approaches from both psychology and economic decision models. Much of the literature in behavioral economics boils down to two main results. The first is that people use heuristics, or rules of thumb, to make choices in a wide variety of settings. Second, these heuristics often lead to errors, in the sense of outcomes that are suboptimal from the viewpoint of a self-interested decision maker. These errors, however, are generally predictable through both observation and understanding of the decision rules employed.

Dieting is a useful example to illustrate the differences between the two approaches. Many people do not think their future health is based on their present food choices. A traditional economics approach, based on assumptions of perfect information and maximization of utility or personal well-being, would explain this behavior as being evidence of people not valuing their future much. After all, dieting involves giving up some enjoyment today in order to have a better tomorrow. While discounting of future outcomes is certainly an important part of the story, it does not fully explain individual behavior. When asked, many people would say they do care about their future health more than their actions seem to indicate and that they actually would like to make better food choices. By their own reckoning though, they are failing to meet their goals. Behavioral economics seeks to explain the phenomena that would cause these individual shortcomings. Such errors might have played an important role during the recent obesity crisis, which is a large part of why behavioral economics became such a hot topic in Washington.

Could Behavioral Economics Improve Health-Promoting Policies?

Diets that are suboptimal from a health point of view may still reflect rational choices, as people may willingly give up some of the joys of a supersized plate of nachos today for a little of tomorrow's good health. But one needs to look no further than the existence of a multi-billion dollar weight loss industry for evidence that these are not deliberately chosen outcomes for many people. By our own standards, many of us would strive to make different choices from the ones we do in real life.

What heuristics might help explain such errors? Status quo bias may play a large role. People tend to stick with their current course of action, particularly when a change is costly. This is true whether the costs are paid in money or mental effort. When it comes to food choices, research has shown that we also rely heavily on subtle external cues or nudges that influence what and how much we eat (Thaler and Sunstein, 2008).

Rather than calculating the expected health outcomes, impact on appetite, and enjoyment of eating another mouthful of our food, we tend to eat until our plates are empty. In lab experiments with soup bowls that were refilled automatically without the knowledge of the participants, behavioral researchers determined that individuals ate 73% more than from a normal bowl (Wansink, 2006). Instead of searching through a restaurant menu for the meal that best balances our hunger and dietary desires, we are more likely to order items that are prominently placed on the menu—but only if someone at our table did not order the same item. In short, the framing of our options influences the choices we make.

How does all this relate to the business of government? Such findings suggest there may be large payoffs to making small changes depending on how options are presented. If employers change the default options for new employees to participate in a retirement plan unless they opt out, people save more than if the default is to not contribute unless you opt in. This default option does not restrict anyone's freedom of choice regarding savings, and can lead not just to greater individual savings but also lower costs to social assistance programs. Similarly, research has shown that people tend to make healthier food choices when asked to choose in advance than they often do in the "heat" of a restaurant visit or grocery-shopping trip, where external cues or sensory input are more likely to favor energy-dense or attractively packaged foods. If food assistance programs required participants to choose foods in advance, they might similarly make choices that lead to healthier diets.

Changing the position of items on a restaurant menu or in a take-away food display can alter the type as well as amount of foods purchased and consumed without limiting the individual food choice. This focus on influencing individual outcomes towards social goals has come to be known as choice architecture and using such behavioral nudges to improve outcomes has been termed libertarian paternalism. The approach is libertarian in that it can shift individual behavior without limiting freedom of choice, but it is paternalistic in that it inevitably involves some judgments about what those best outcomes should be. Thaler and Sunstein (2008) suggest that the paternalistic elements are most appropriate and politically acceptable when they reflect the outcomes that people want for themselves.

Cass Sunstein, a legal scholar and leading proponent of behavioral economics, is now the Administrator of the Office of Information and Regulatory Affairs, the unit in the Office of Management and Budget that is in charge of reviewing and approving the major regulatory actions of all other agencies. In this position, commonly referred to as the "Regulatory Czar," he has the opportunity to utilize his knowledge of behavioral economics when evaluating the efficacy and value of a wide variety of government actions. With specific regard to obesity, these insights may shed light onto both the opportunity to exploit heuristics for low-cost improvements to our diets and the limitations of new food policies that seek to influence rational choice.

The Limits of Menu Labeling

One of these new food policies is the mandate regarding menu labeling. This policy addresses the call for more information about the foods we are consuming. Since 2007, chain restaurants in New York City have posted the calorie content of each food item next to its price on menu boards. During the fall of 2008, California started requiring menu labeling in restaurants with more than 20 outlets. However, studies have shown that increasing nutrition information alone may not be efficient in promoting healthier food choices. While providing calorie information might have some small positive effects on the food choices of some dieters, it might affect others negatively by leading them to increase their calorie consumption.

In the neo-classical economic framework, individuals should use the menu labeling information to choose a healthy meal that will maximize their future well-being. However, behavioral economists point out three reasons why improving access to information might not promote healthier food choices. First, individuals tend to overeat due to self-control problems and menu labeling is not able to address this issue. Second, this information provision could actually distract an individual, since people have only a limited attention span to digest information. Thus, consumers might not have the ability or time to compare menu label information. Third, dietary information could produce perverse effects on calorie consumption, such as promoting higher calorie intake. A subset of consumers might over-estimate calorie contents and thus seek low-calorie food and beverage options in order to lose weight. However, by viewing the accurate nutrient information in restaurants, these dieters might recognize their over-estimation and adjust their food choice to a higher-calorie meal.

Downs, Loewenstein, and Wisdom (2009a) showed that such perverse outcomes are not just theoretical possibilities. They collected sales receipts of consumers who left either a coffee shop or two outlets of a

hamburger restaurant in New York. In addition, the researchers provided the suggested calorie intakes per day or per meal to randomly selected individuals entering these three restaurants. This information was intended to help diners make use of the posted calorie information (Downs, Loewenstein, and Wisdom, 2009b). Sales receipts showed that this information led to an unwanted effect on some consumer's calorie consumption, since dieters significantly increased their calorie intake relative to nondieters.

Big Changes at Low Cost?

Various results from behavioral economic experiments can help to shape low-cost yet effective health policies. Such studies have observed children and students in lunchrooms, consumers in grocery stores, or families in a laboratory setting. These findings suggest that fairly simple and inexpensive changes can lead to substantial differences in dietary behavior. Moreover, even small changes in diets can yield meaningful effects if sustained over long periods of time.

A particularly promising line of research centers on the impulse purchases of chips, desserts, and candy that often occur at the check-out of lunchrooms or grocery stores when waiting in line for the cash register. In order to promote healthy food choices, restaurants, cafeterias, and supermarkets could replace these high-calorie food options with a variety of fruits. Just and Wansink (2009) highlight some of the opportunities for positive change in school lunchrooms. When school cafeterias placed fruit at eye level at the check-out and candy at more obscure places, the consumption of fruit significantly increased while consumers purchased less candy. In addition, offering a variety of low-calorie foods will further increase the consumption of these food items. Thus, a salad bar could be moved to increase its accessibility. In addition, the presentation of healthier food choices might be improved by adding more lights or changing the displays. High-calorie foods should not be eliminated completely from the menu, given that these items typically form an important source of revenue for the food service providers and retailers, and removal of these items may cause students to rebel.

Ehmke et al. (2008) analyzed family decision processes related to food consumption and exercise. Parents with higher body mass indices (BMIs) tend to give their children more money to spend on junk food. In the lunchroom setting, this problem could be addressed by restricting the use of prepaid debit cards to healthier foods (Just and Wansink, 2009). At home, families should focus on the negative effects of their current lifestyle, which means giving something up in their current unhealthy lifestyle in order to achieve a "culture of health." Behavioral research suggests that this "culture of health" is easier accomplished by giving up unhealthy lifestyle choices instead of focusing on adding in more healthy ways of life (Ehmke et al. 2008).

Promise and Pitfalls of Behavioral Economics

Nudges look like promising tools in the fight on obesity. These behavioral economic approaches might be relatively cheap, flexible, and easy to implement, as they are often based on simple tweaks of existing food programs (Just and Wansink, 2009). These actions might impose some cognitive but no material cost to the consumer (Thaler and Sunstein, 2008).

Clearly, there are pitfalls of behavioral economic instruments. Nudges are not mandates and they will never lead to 100% compliance among consumers. There will always be individuals who continue to choose a high-calorie food option over the healthier alternative. Placing the high-calorie food at some disadvantage in the marketplace might lead to a significant reduction in its consumption but it will not eliminate its consumption. The only way to achieve full compliance among consumers is to eliminate the high-calorie food items from the marketplace all together (Just and Wansink, 2009; Thaler and Sunstein, 2008). But given that such mandates are both politically unlikely and involve real restrictions in consumer freedom, choice-preserving nudges are very attractive tools.

There are also some concerns that experimental results may not translate into effective practices and results, as most of these behavioral economic studies only observe the impact of manipulating one single meal. It might be possible that consumers will compensate for their observed food choice later during the day by consuming more or fewer calories (Downs, Loewenstein, and Wisdom, 2009b). While cafeteria studies have shown that the amount of healthy foods sold in that setting can be increased by rearranging the sales line, we still do not know much about what types of consumers are changing their behavior more readily. Thus, the responses may be muted for at-risk groups which would be of most interest when designing health policy options. Specific experiments that are targeted towards at-risk groups could be conducted in lab settings, but

one might argue that consumers may behave differently outside of this closed environment.

Reducing obesity rates, particularly among children, has become an important part of the policy agenda in Washington, D.C. Policymakers interested in finding solutions to improve food policy have been focusing on behavioral economics. In April 2010, the Economic Research Service of the U.S. Department of Agriculture held a two-day conference on how behavioral economics can improve federal food policy. This fall, the agency will announce the funding of a university-based research center on behavioral and experimental economics methods. These activities show that the expectations for behavioral economic tools in finding constructive solutions are high, as the potential payoff to public health is large.

Indeed, these high expectations have even begun to cause concerns among some of the leading practitioners of behavioral economics. In a recent *New York Times* column, Loewenstein and Ubel (2010) caution policy makers against relying on behavioral economics instead of facing "painful but more effective solutions rooted in traditional economics." They argue it will still be necessary to implement some additional changes to the agri-food system in order to achieve public health goals. Even if nudges alone are not enough to trim our waistlines and health care budgets to the desired level, they may nonetheless be an important ingredient in the recipe for a healthier society.

For More Information

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