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"Demystifying" Behavioral Economics: What The Experts Say

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Why Does Behavioral Economics Need to Be Demystified?

The development of the body of knowledge known as Behavioral Economics (BE) constitutes a major step forward in our understanding of human decision-making. While many points in time could be selected as the beginning of BE (even as far back as the 1970's) many peg Daniel Kahneman's winning of the Nobel Prize in 2002 for raising general awareness of the discipline.

As will be discussed below, BE has had a number of major contributors, who have come at the field from a number of different angles. As you might expect, many of the more notable contributions have been made by Psychologists and other behavioral scientists. The BE books that will be discussed below each bring something to the Behavioral Economics party. What you will see if you take the time to read some or all of these books is that literally thousands of experiments have been conducted over the last two decades to flesh out various aspects of BE, and as a result of these experiments you will see that a number of key principles of the field have been developed and tested. You will also see that the principles of BE have already been turned into action, being used to "nudge" people into making the right decisions in key areas such as wellness and healthcare.

At its roots, Behavioral Economics is really sort of straightforward. Google it and here is what you get:

be•hav•ior•al ec•o•nom•ics
noun

1. a method of economic analysis that applies psychological insights into human behavior to explain economic decision-making.
2. "Behavioral Economics helps explain why people under-save for retirement"

Simple, right? So what about BE needs to be "demystified?" A couple of things. First, we need to demystify what BE actually is, what are its key principles and how and where should it be applied. More specifically, this white paper is aimed at taking the mystery out of Behavioral Economics for professionals who are involved in pharmaceutical marketing and marketing research.

Second, we need to demystify what BE is not. Here's why. In recent years, pharmaceutical marketing consultants and marketing researchers have become enamored with BE as a bright shiny new thing. A comet onto the tail of which they want to grab for a quick ride skyward. Many of these practitioners have simply borrowed the term "Behavioral Economics," maybe one or two buzzwords like "heuristics," attached them to some unrelated qualitative or quantitative methodology and started to sell their services based on this chicanery. Thus, we need to demystify what BE is not after we demystify what it actually is.

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The Key Contribution of Behavioral Economics

Cut through the thousands of pages that have been written about Behavioral Economics, and you come down to one simple fact. More specifically, while classical economics maintains that our decisions are fully informed and rational, BE recognizes that this is typically not the case. In fact, our decisions are most often made with incomplete information, insufficient time and very little analytical thought. While making decisions in this way may not be rational, it is adaptive.

Each of us has so many decisions to make every day, and throughout our lifetime, that if we took the time to make each decision on a fully informed basis, we would never get anything done.

Not surprisingly, decisions made with incomplete information/time/thought often lead to errors. However, the second major element of BE's contribution is the realization that these errors are predictable, understandable and systematic. Thus we can become "Choice Architects," helping people to make better decisions by simplifying the task for them.

Drilling down on this a little bit and getting a little bit more organized, BE helps us to better understand our decision making by recognizing that:

- Decisions are not made "rationally"
- The irrationality in our decisions is non-random, adaptive and predictable
- Decisions are often made with incomplete information
- Decision makers employ "heuristics," which are mental shortcuts
- Decision makers are prone to "biases," and that these biases are systematic

You see two major pieces of BE terminology. One is "heuristics." In a nutshell, a heuristic is a decision-making shortcut. Heuristics are tricks we all employ, without our even realizing that we are doing so, to help us to make decisions in the absence of full information. Many heuristics have been identified and researched, and some of the most important ones will be touched on later in this paper.

The other key terms is "biases." Biases are "spins" we put on facts, again in the absence of full information, to help us to make our decisions based on past experience rather than on the particular matter at hand. We will look at some of the major examples of these as well.

Behavioral Economics Book Club

Over time, I have learned that the best way to demystify any topic for pharmaceutical marketers and marketing researchers is to expose them to a few of the many books that have been written on and around the topic. Therefore, I have curated, below, a portfolio of books that I have selected from all of the books I have studied on the topic. These books cover basically the entire gamut of things that need to be said about BE. Although in the best of all worlds, you should read each of these books in its entirety, that will take you several weeks if you are quick reader. Therefore, I've tried to extract the most important points from each of these books, and to present them to you as painlessly as possible. While there is obvious repetitiveness to books written on the same topic, each of the volumes presented below brings something special to the party. Let's take a look!

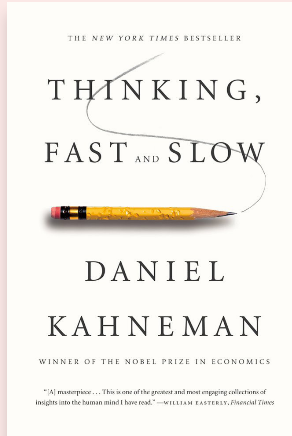
Thinking Fast And Slow is probably the most seminal book in the field of Behavioral Economics. It introduces us to a new way of thinking about thinking, and cites hundreds of academic studies to make its points.

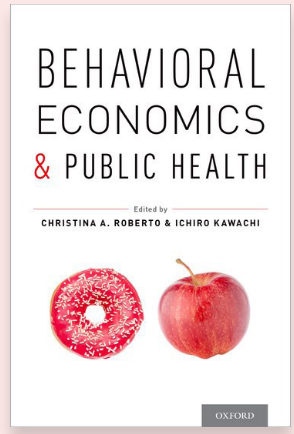
So let’s get down to it. In this book, Kahneman demonstrates that there are different “Systems” at work in our various decision-making choices. System One is fast thinking, System Two is slow thinking. Given that, you would probably guess that System One makes easy decisions and answers easy questions. You would be correct.

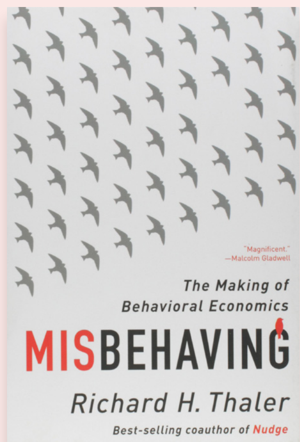
System One also operates automatically, without what we would perceive to be a lot of mental effort. It generates impressions, feelings and inclinations. When endorsed by System Two, these become beliefs, attitudes and intentions. System One is very important for our survival, since it is the triage mechanism that separates the surprising from the normal.

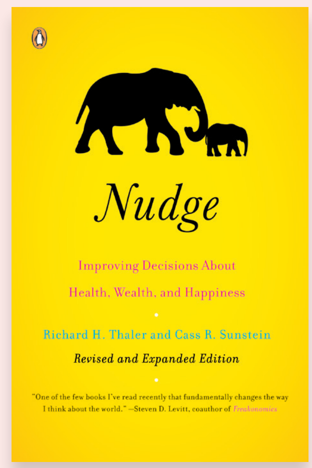
An important acronym that describes System One’s modus operandi is WYSIATI. Translated, “What You See Is All There Is.” In other words, System One thinking is operating so quickly and so automatically that it doesn’t have time to think about what information might be missing as it goes about making a decision. It decides based solely on what is manifestly obvious.

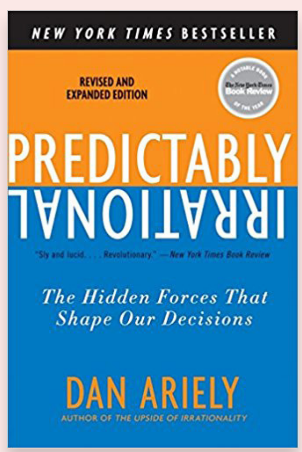
Relatedly, System One exaggerates consistency. If it likes one attribute of what it is deciding upon, it rapidly comes to believe that it will like everything else as well (and vice versa). Known as the “Halo Effect,” this attribute of System One thinking has long bedeviled personnel selection decisions, marketing research studies and other areas of endeavor where multiple attributes get glopped together in decision-making.











System One is also biased to confirm and believe. The fastest decision that can be made is “Yeah, that’s what I thought.” And that is the choice that System One makes automatically.

Something else that System One thinking brings to the party is the tendency, if it can’t quickly answer a question that has been posed, to substitute another easier question and answer it. For example, consider the question “How much does a house in Oshkosh, WI cost?” Likely you don’t know the answer to this one. I certainly don’t, and most people wouldn’t. So. We all trot out a heuristic, a decision short cut. In this case, most people will switch to the question “How much does a house cost?” which they may have a better shot at answering.

Finally and importantly, System One focuses more on change than on absolute values. “Prospect Theory” is the general term that Kahneman employs to refer to how people value choices, again often by considering gains and losses rather than absolute value.

System Two, slow thinking, operates entirely differently, and is trotted out to answer harder questions and to make tougher decisions. It must be purposefully engaged and takes mental effort. We are aware that we are thinking, and thinking hard! One of the things that System Two does is to ride herd on System One, cross validating its quick decisions if the stakes become higher.

Biases and heuristics come into play in System Two big time. Remember the Oshkosh house example? What if I told you that getting the answer right would win you a $100,000 prize? You would probably kick aside the quick “How much does a house cost?” trick that System One gave you and flip the switch to turn on System Two. You would also probably activate a heuristic called “Anchoring and Adjusting.” In doing so, you would first answer the question about how much does a house cost, but you would then adjust this number to reflect your impression that real estate in Oshkosh is probably less expensive than it is in many parts of the country.

A really interesting bias to be found lurking in System Two is the “Endowment Effect.” This is a bias that finds us placing greater value on things that we already own than on things we might acquire. For hard to get concert tickets, for example, research finds that we would charge more to sell ones we already have than we would pay to buy them. A bizarre version of this kicks in at auctions. If we have already pictured ourselves owning the object being auctioned before the gavel falls, the Endowment Effect kicks in and makes us bid higher than we normally would.

“Inertia” is another key bias in our decision-making. It is always easier to make a decision that leaves things the way they are. Doing so also provides comfort and does not require an explanation to ourselves and to others the way making a decision to change does.

“Availability” is yet another bias that can impact our decision-making. What that means is that things that are more easily recalled are more likely to be selected as a response. Which are more common, words with “k” as the first letter or words with “k” as the second letter? It is easier to come up with words that meet the first criterion than the second, so we tend to make that choice without having any real idea if it is correct.

“Priming” is another important concept that Behavioral Economics has uncovered. I give two groups of subjects lists of numbers to memorize. Then I ask each group to estimate the temperature in the room. The group that memorized a list of higher numbers (80’s and 90’s) estimates a higher temperature than the group that memorized lower numbers (60’s and 70’s). In general, what happens in our minds before a decision is made, even if irrelevant, affects the decision.

Obviously, there is a lot more information available in the 499 pages of this book, but what’s presented above are the big pieces that you need to know to demystify Behavioral Economics.

In addition to Daniel Kahneman, Thaler is a best recognizable thought leader in modern Behavioral Economics, and his book, **Misbehaving** is another one of the seminal books in the field. Since it is the second book on the topic we are discussing, suffice it to say that many of the points that were made in our discussion of the previous book reappear in these pages. We won’t go over them again, but rather will simply highlight several additional points that Thaler brings out in this work.

For example, he begins the book with an interesting juxtaposition of ‘Homo Sapiens’ vs. ‘Homo Economicus.’ Homo Economicus is the perfectly rational decision maker contemplated by traditional economists. A fully informed expert in statistics, with unlimited computing power and time. Thaler’s point? He doesn’t exist!

Homo Sapiens, on the other hand, is the real deal in decision making. Overall, he is notable for taking into consideration SIF’s (Supposedly Irrelevant Factors) in his decision-making. Hint. As discussed above, these factors turn out not to be so irrelevant after all!

Relatedly, Thaler does a great job of comparing “utility theory” with “prospect theory.” Utility theory, the backbone of classical economics, holds that a particular amount always has the same value, no matter what the situation or who the perceiver. $1 is always $1. Prospect theory, on the other hand, brings into play all of the psychological factors that typically play major roles in the decision making process. These factors can make the $1 be perceived as being of much greater value, or of much less. What is the situation? Who is the decision maker? Etc. Prospect theory is the backbone of Behavioral Economics.

Thaler also introduces the term JND (just noticeable difference). JND, as the name would imply, is the metric for how big of a difference is required in order to be noticed by the decision maker, and thus factor into the decision. In other words, how much bigger is really BIGGER?

To the biases already discussed, he adds the concept of “Hindsight Bias.” That is our tendency, after an outcome is known, to obtain reinforcement by telling ourselves and others, “I always knew that would happen.”

Nudge (co-authored by Thaler) happens to be one of my favorite Behavioral Economics books, mainly because its focus is not Behavioral Economics. Rather, the focus of this book is the practical utilization of the principles of Behavioral Economics to improve “Decisions About Health, Wealth and Happiness.”

To the discussions presented above, Thaler brings several additional and important concepts. One, for example, is the notion of “Choice Architect.” “A choice architect has the responsibility for organizing the context in which people make decisions.” In other words, if the Choice Architect sets the situation up correctly, he can subtly move a decision maker to make a decision that is in his best interest, our best interest, or hopefully both. For example, as we have discussed, structuring a choice in such a way that what the Choice Architect considers to be the “right decision” is the “default decision” greatly increases the chances of the decision maker making that choice.

Thaler describes the Nudge approach as a form of “Libertarian Paternalism.” “Libertarian Paternalism is a relatively weak, soft and nonintrusive type of paternalism because choices are not blocked, fenced off or significantly burdened.” In other words, rather than a government or other institution issuing a mandate (I.e., We can get you to stop drinking. We will simply institute prohibition. No booze available. Trust me, it is for your own good!), nudging leaves it up to the decision maker to make a carefully orchestrated free will choice.

Which takes us to the definition of “nudge.” A nudge is “any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing the economic incentives.”

The bottom line is for those who want to change decision-making behavior rather than just study it, this little book is a great resource, written by one of the grand masters of Behavioral Economics.

Since this white paper is intended to demystify Behavioral Economics for professionals in the healthcare marketing vertical, we would be remiss if we did not include this book, **Behavioral Economics and Public Health** in our portfolio.

Drawing on all of the basics of Behavioral Economics that we have previously discussed, this volume explores how these principles apply to public health. As the authors see it, there are two major areas in which Behavioral Economics is especially relevant here. The first is in the area of prevention. Echoing a thought expressed in some of the other books in our portfolio, Roberto and Kawachi believe that much of the lack of healthy behavior we see today can best be understood in terms of people making bad decisions in ways that can be predicted based on the principles of Behavioral Economics. A second area of application of Behavioral Economics principles related to public health that the book also reviews is that of compliance.

Across the pages of this book, you can see a repeated theme. In order to get people to take better care of their health, we need to stop barraging them with information and threats, and start to base our messaging to them on Behavioral Economics. Communicating to System One, the authors believe, is the key to public health messaging.

For example, we need to understand that most people fall victim to the Planning Fallacy. That is, they overestimate their ability to perform on future tasks. It is no problem that I am overeating on this cruise and gaining 8 pounds in the process. I will simply go on a strict diet and lose all of that weight when I get home. Right!

A significant problem in public health is the Optimistic Bias. That is, people tend to believe that their risk of a negative outcome is lower than average. Yeah, I know a lot of people die from the complications of smoking. But I am young and healthy, so that’s their problem and not mine. Right!

A key issue in public health is the Present Preference Bias. Long-term outcomes are discounted as we focus on doing what we want right now, and avoid doing what we don’t want in the present.

A bias with one of the cuter names discussed in this book is the Peanuts Effect. Here, we tend to ignore the impact of small losses, and fail to recognize that their cumulative negative effect can be significant. Hey, I only smoke one cigarette every so often. That can't be much of a health risk, right? Sure!

We've discussed the importance of inertia before, but under the banner of public health we need to go back one more time to review the Status Quo Bias. Here, the easy way out is to leave things exactly as they have been. I've never had a colonoscopy before and I am fine. I don't know a good gastroenterologist or really understand what is involved in the procedure. I don't think I need to get a colonoscopy this year either!

Also very relevant in the area of public health is the Default Option. One of the key techniques to use in getting people to do the right thing is to make it the default option. Doing this makes it seem like the "normal choice." Again, the classic example of this is organ donation. If it requires opting in, relatively few people choose to do so. If it is the default option, the majority of people go with it.

Another important topic touched on in this book that is key to public health is the Affect Heuristic. If I like participating in a particular unhealthy behavior, I perceive its risk as being relatively low.

A key discussion in this book centers around the topic of "beliefs." What people believe can be a major driver of prevention and compliance. Or not! For example, a study reported in this book examined what people believe causes obesity. Choices were poor diet or lack of exercise. Although the primary cause of obesity is poor diet, an astoundingly large number of people believe that lack of suitable exercise is what causes people to be fat! That is troublesome for several reasons. First, this belief allows people to continue to eat incorrectly without realizing the consequences. Second, it is extremely difficult to get obese people to begin exercising in any meaningful way. Third, even a "good" exercise program does not burn enough calories to matter if a poor diet remains unchanged.

All of this should tell public health communicators interested in reducing obesity what they need to do. More specifically, before launching communications campaigns about what an ideal "plate" looks like in terms of its food contents, we need to convince people that it IS the food that matters. Exercise is a great thing to enhance overall health, but it alone it is not the ticket to combating obesity.

Another important topic covered in this book is "Implementation Intentions." An implementation intention is doing something to show that you are serious about doing something. The act of joining Weight Watchers, for example, shows that you have moved beyond thinking about losing weight and are ready to do something about it.

A related topic is Deadline Effects. Establishing chronological checkpoints along the way to accomplishing a goal shows a commitment that you will actually get there, and helps you to stay on track along the way.

A very troublesome reality discussed in this book is the concept of "habit." While Behavioral Economics is a field that deals with decisions, habits are behaviors that are largely free of decision making. By definition, habitual behavior is simply repeated without any actual decision being made at each repetition. Since many of the behaviors that constitute the foci of public health are habitual, they need to be recognized as being especially difficult to change. Habits that are manifested as addictions are even more difficult to change, since decision making in the traditional sense is not involved.

In summary, this book joins **Nudge** in helping us to get Behavioral Economics outside the realm of dollars and cents and into the realm of practical decision making in all-important areas such as health care.

This final book in the portfolio, **Predictably Irrational**, brings us full circle in our discussion of Behavioral Economics. The other books that we have discussed do a fine job of convincing us that decision making is not nearly as neat and tidy as traditional economic theory would have us believe. The utility of $1 is not always a dollar in prospect theory.

BUT.

That does not in any way mean that decision making is random. Rather, "Irrational behaviors of ours are neither random nor senseless. They are systematic, and since we repeat them again and again, predictable." That statement is the ribbon that ties all of Behavioral Economics together and makes its principles actionable.

It tells us that we must understand the biases and heuristics that drive decision making. Only by doing so can we truly understand, and shape, decision making behavior.

Besides dealing with the principles that we have already covered, Dr. Ariely throws some new pieces into the Behavioral Economics puzzle. He discusses, for example, the impact that "Social Norms" have on decision making. Nowhere in utility theory or prospect theory do we see the notion of "I'll do it because it is the right thing to do, even though I don't want to do it and it's not in my personal best interest." That's a social norm.
Importantly, Dr. Ariely explains that social norms and market norms can't coexist. A decision needs to be governed by one set of principles or the other.

Several other important concepts are also explored, Arbitrary Coherence being a good example. It is fascinating that once an arbitrary decision is made, it can become the standard for future decisions. Take the price of pearls. Given that they have no intrinsic or functional value, what should their price be? As any of us who have visited a jewelry store know, this question had been answered long ago by a totally arbitrary setting of a price. Fascinating is the fact that this price has since become a standard part of the jewelry purchase decision.

Also discussed is the impact of "herding." According to the author, we "self-herd" when we make decisions in such a way as to be consistent with our past behavior. We "herd" when we make decisions simply by following the decisions of others.

In summary, this book issues a challenge to us to develop an organized understanding of Behavioral Economics and to begin to apply this understanding in our prediction and control of behaviors that are of interest to us.

So that's it. Hopefully the books pictured above, that you saw as a random collection of screen shots 8 some odd pages ago, now constitute a mosaic that ties together your understanding of Behavioral Economics in such a way as to "demystify" that body of knowledge for you. To complete the demystification process, however, we need to talk about what behavioral economic is not.

What Behavioral Economics IS NOT!!!

As previously alluded to, there is something unfortunate happening in the bio-pharma marketing and marketing research space.

Some consulting organizations are borrowing the term "Behavioral Economics," and applying it to a bizarre array of proprietary qualitative and quantitative methodologies that they are attempting to hawk to unsuspecting clients. Scratch beneath the surface of these methodologies, however, and you will find NONE of the philosophies and principles discussed above.

Rather, the Behavioral Economics terminology is simply being used as a bright, shiny new thing to attract customers, taking advantage of a fad. That's a real shame. Let me be clear on this point as a part of the demystification process. Behavioral Economics is an enhanced understanding of decision-making. It is NOT a proprietary marketing research methodology!

If you want a complimentary copy of any of the books that we have discussed here to enhance your understanding of Behavioral Economics, just drop me a note (richard.vanderveer@think-gen.com) and I will get them right out to you.

In order to tackle all of this on a holistic basis, I am leading an initiative at ThinkGen that we refer to as **Mindset Marketing Research℠**. MMR is a new approach to develop ways to really understand our customers, their segments and how to market to them.

These are exciting times to be in our industry. My ThinkGen colleagues and I look forward to working with you to take full advantage of all of the changes!

About The Author:

Dr. Richard Vanderveer has been a recognized leader in the field of pharmaceutical marketing and marketing research for over four decades. The origins of his career began at Temple University, where he received a Ph.D. in Industrial and Organizational Psychology. While at Temple, he honed his formal survey research skills as a Project Director for the University's Institute for Survey Research, which conducted large scale survey research for the Federal Government and other clients." Dr. Vanderveer then moved into the private consulting sector, becoming Director of Custom Research at IMS. A series of business roles followed. He is perhaps best known for his role as the founder of Physician Micro-Marketing Incorporated, where he developed processes for pharmaceutical companies to use in targeting and customizing their promotional efforts to the specific mindset of the individual physician. His organizational career culminated in his role as CEO of GfK US Healthcare, where he directed and inspired a group of 225 marketing research professionals to leadership in his chosen field. In parallel, Dr. Vanderveer's efforts rapidly took on an international scope. Since retiring from his post at GfK, Dr. Vanderveer has had the luxury of studying the healthcare marketing scene at large, looking for "the next big thing" in pharmaceutical marketing. As the result of years of research, he has developed a world view that he calls "Mindset Marketing." More specifically, he sees successful marketing being the result of a "lock and key" approach, where the pharmaceutical marketing message (the "key") must fit perfectly into the mindset of the customer (the "lock") if results are to be optimized. While most of pharmaceutical marketing research has historically focused on sharpening the "key," little attention has been dedicated to gaining an in-depth understanding of the "lock," i.e., the customer mindset. With his colleagues at ThinkGen, Dr. Vanderveer is looking to correct that shortfall.

About ThinkGen

ThinkGen provides customized market research solutions for healthcare companies. The foundation for our success is based on our knowing the science behind the research, asking the right questions, and finding and reporting relevant insights.

We view customer insights through the lens of our combined years of both in-depth marketing research as well as pharmaceutical marketing experience to deliver actionable insights for you, our client. In short, we deliver outcomes that generate results.

ThinkGen partners with iMarketResearch, an advanced quantitative market research consulting firm based on the foundations of Behavioral Economics and related decision-making sciences. iMarketResearch was founded by Milos Graonic, PhD. in 2014. Since graduate school, Milos has researched Behavioral Economics topics and has built tools that address how pharmaceutical marketing and market research professionals can apply BE to their everyday business and research challenges. The tools and techniques he developed have already been put to the test and have proven invaluable when applied to foundational research studies such as segmentation, positioning, decision heuristics, and forecasting.

ThinkGen's partnership with iMarketResearch supports and strengthens our fundamental belief that ALL research studies should seek to understand the true mindset of our customers.

If you would like more information on ThinkGen and iMarketResearch's approach to applying behavioral economics to your business challenges please contact **Kathy O'Connell** at **215-872-7795**/ Kathy.OConnell@think-gen.com

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