COGNITIVE CREATIVITY

An Analysis

A close up of a logo

Description automatically generated

Parker Adams

Behavioral Economics 410

Dr. Bantam

March 11, 2021

Contents

[Decision Systems 3](#_Toc530162511)

[System Tendencies 4](#_Toc530162512)

[System Biases 5](#_Toc530162513)

[Prospect Theory 5](#_Toc530162514)

[Stages of Prospect Theory 6](#_Toc530162515)

[Probability Analysis 6](#_Toc530162516)

[Conclusion 7](#_Toc530162517)

Cognitive Creativity

An Analysis

The study of behavioral economics encompasses a vast array of topics. Simply put, behavioral economics examines the reasons individuals often make less-than-optimal decisions and attempts to predict the circumstances under which those decisions occur. In addition, the study of behavioral economics explores how the presence of risks affect optimal decision-making. Many scholars have emerged in this field, but few are as prominent as Daniel Conner, Nobel Prize winner, researcher, professor, author of a textbook on creative thinking. In this book, Conner explores the human psyche and presents findings related to economic decision-making. A wealth of knowledge, “Cognitive Creativity” explores three main areas of behavioral economics:

* **The irrationality of humans**
* **The concept of prospect theory**
* **The nature of well-being**

# Decision Systems

According to Conner, the human brain is divided into two systems, which determine the way thoughts and opinions are formed, and decisions are made (157). The first system, System 1, can form thoughts quickly and make snap decisions using association and metaphor, producing a rough draft of reality. System 2, on the other hand, is much slower and more deliberate. Drawing on System 1’s rough draft of reality, System 2 is able to arrive at reasoned beliefs and explicit choices. A drawback to System 2, however, is that it is lazy and tires quickly. Instead of thoroughly analyzing information provided by System 1, System 2 is usually content to accept the simple but sometimes unreliable information about reality that System 1 provides. According to Conner in “Cognitive Creativity,” although “System 2 believes itself to be where the action is, the automatic System 1 is the hero of this book”.

|  |  |  |  |
| --- | --- | --- | --- |
| Systems of Decision Making | | | |
| **System Theory** | **Characterized by** | **Percentage Employed** | **Probability Factor** |
| System 1 | Quick thinking | 68% | 0.62 |
| System 2 | Deliberate decisions | 32% | 0.39 |
| Average Probability | | | 0.51 |

Table 1: Decision-Making Strategies

## System Tendencies

Humans often fall prey to cognitive biases, which are fallacies in reasoning and judgment because of holding on to one’s individual preferences and beliefs, regardless of any contrary information that is presented. As such, humans can make irrational decisions that do not provide the most value to the decision-maker. System 1 is generally responsible for maintaining cognitive biases, due to System 2’s tendency toward laziness. For example, an “anchoring bias” is a commonly known cognitive bias. In this particular bias, the human mind has a tendency to trust too heavily in the first piece of information provided, thanks to System 1’s ability to come to certain conclusions quickly. In fact, System 1 often operates just under the radar of consciousness. Often, an individual will come to certain beliefs or form different opinions without consciously considering why those beliefs or opinions have been formed. As such, humans are sometimes predisposed to making decisions that do not make the most sense or provide the most value.

## System Biases

Another cognitive bias that can cause humans to make irrational decisions is known as theory-induced bias (James). According to Conner, theory-induced bias occurs when an individual has accepted a theory and uses it as a tool in thinking, he or she becomes unwilling to notice any flaws in the theory. Persuading a person to disbelieve a theory is significantly more difficult than convincing someone to believe a theory. Often, individuals believe that because a solution to a problem worked once, it will work every time. As such, theory-induced blindness usually causes individuals to disregard valuable and more economical solutions to problems.[[1]](#footnote-1)

In “Cognitive Creativity,” Conner argues that human reasoning, when left to its own devices, is likely to engage in many systematic errors and fallacies. Individuals should attempt to recognize cognitive biases and attempt to work around them, to think and make decisions as rationally as possible. Humans are much more apt to make decisions based on instinct rather than rationality and overcoming the tendency to rely on instinctual or “knee-jerk” thoughts and decisions is the first step in the journey toward rational thinking and decision-making.

# Prospect Theory

Another topic covered in “Cognitive Creativity” is the concept of prospect theory. Simply defined, prospect theory examines the way individuals make choices between probabilistic alternatives involving risk, when the probabilities of outcomes are unknown. This theory suggests that people make decisions based on the perceived, potential value of gains and losses, instead of actual outcomes. Additionally, prospect theory proposes that individuals determine the value of gains and losses using different techniques, or “heuristics.” Instead of modeling optimal decisions, prospect theory in behavioral economics attempts to model real-world decisions and choices. As such, the theory can adequately explain the decision-making process of most individuals.

## Stages of Prospect Theory

In prospect theory, the decision-making process is broken down into two stages. The first phase, called “editing,” is the process of examining outcomes of a decision. Once the outcomes are determined, they are ordered according to the individual’s aversion to risk. Depending on the person, certain outcomes may be riskier than others, and may subsequently be avoided. On the other hand, some outcomes may be deemed by another individual as less risky and may be preferred. During the editing phase, a decision-maker sets a reference point and considers greater outcomes as gains and lesser outcomes as losses. In the second phase, which is called “evaluation,” an individual determines a value based on the probabilities of possible outcomes and chooses an alternative that has the highest utility for the individual decision-maker.

## Probability Analysis

Prospect theory can be illustrated in problems related to probabilities of certain outcomes. For example, if a person was offered a 25% chance to win $500, or a 75% chance to win $50, different individuals would make different choices, depending on their tolerance for risk. Additionally, everyone’s risk tolerance may increase or decrease, depending on the amounts involved or whether the outcome could cause the person to become better or worse off. For instance, many people buy both lottery tickets and insurance policies. Most individuals are okay with spending a couple of dollars for the chance to win millions, while at the same time purchasing insurance policies to protect against large losses on expensive items. In prospect theory, risk tolerance is the key motivator in the decision-making process for individuals.

# Conclusion

In the last pages of “Cognitive Creativity,” Daniel Conner explores the facets of happiness and examines ways to maximize well-being. According to Conner, each person is comprised of two “selves.” The first self is known as the “experiencing” self, while the second self is known as the “remembering” self. Typically, the remembering self is stronger than the experiencing self. For example, if a person watches a great movie in a theater, but during the last 10 minutes of the movie, another person spills soda on the moviegoer, the moviegoer will likely remember the entire movie experience in a negative light. Often, people confuse memories with experiences, and as a result, some experiences are remembered in negative ways, even though most of the experience was pleasurable. Generally, the way an experience ends is better remembered than the way an experience was lived. To maximize happiness, a conscious effort must be made to remember an experience and not simply the negative parts.

According to Conner, an individual’s “emotional state is largely determined by what they attend to, and they are normally focused on their current ability and immediate environment”. For instance, someone could be stuck in traffic, but remain happy because they just received some great news. On the other hand, a person struggling with the loss of a loved one could watch a funny movie but still feel depressed. To circumvent this, individuals can work to stay present in the moment, and try not to let negative emotions color happy experiences. Additionally, Conner notes that individuals are prone to focus on only one aspect of a decision or event. The potential for error increases as an individual’s focus is homed in to one facet of a decision or experience. Often, a decision or experience is made up of many different aspects. When an individual is asked to identify what would make them happy in life, they often reply with an answer consisting of one thing, such as money, health, or love. Happiness is made up of many different factors. No sole thing such as wealth can make a person truly happy.

Daniel Conner does an excellent job exploring and communicating the inner workings of the human mind. He presents an excellent argument that humans are typically irrational and do not make decisions that provide the most economical value. In addition, humans are often subconsciously subject to cognitive biases, because of holding onto one’s preferences and beliefs. As such, Conner discusses strategies for individuals to overcome cognitive biases and make the most economical choices. Finally, Conner touches on the nature of happiness and examines ways for individuals to maximize happiness, based on the inner workings of human consciousness.

Submitted by Parker Adams

Works Cited

Conner, Daniel. *Cognitive Creativity*. Boston: Delmar Publishing, 2016. Print.

James, Leo. "Decision-Making Strategies." *Journal of Behavioral Economics* 21 April 2020: 45-52.

1. For more information on theory-induced blindness, visit http://cognitivecreativity.com/theory. [↑](#footnote-ref-1)