

## Chapter 9

# Detecting and Avoiding Cognitive Biases

### ABSTRACT

*Cognitive biases affect the decision-making process. These cognitive biases can help us to make a right or effective and quick decision, but many times they can produce wrong, illogical, or unfounded decisions or judgments. For this reason, this chapter will describe some programs, games, techniques, and therapies to detect and reduce them. These programs can be used both in the clinical population and healthy population. Therefore, the first step is being aware of our biases and the second step would be doing practical exercises to reduce and avoid them in our decision making. Practicing these exercises does not help us to always choose the right option, but they inhibit the wrong answer.*

### INTRODUCTION

If we remember the definition of cognitive bias, this is a pattern of deviation in judgment, in which the inferences that we make about other people and/or situations can be illogical” (Haselton, Nettle & Andrews, 2015), we notice that these cognitive biases can cause us significant problems in our life. As we have seen in the previous chapters, these bias can help us to make a right or effective and quick decision, but many times they can produce that we make wrong, illogical or unfounded decision or judgments. Therefore, cognitive biases can lead us to behave in irrational and no optimal way. For example,

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it is observed that men take more risks, show more likely overconfidence bias and finally, they reach making final decisions faster than women. As a result, men have more probability of jumping to conclusions, that is, will reach to make a hastily decision even when there is little evidence to take (Huq, Garety & Hemsley, 1988). This reasoning bias would be more intuitive, so as a result in ambiguous contexts where all information is not available, men could commit more mistakes (Juárez Ramos, 2014). Imagine an investor man who must make quick decisions when is buying and selling shares on the stock. This man often gets great benefits for their greater tendency to risk taking and decide quickly, but in many of them he has made a bad investment because it does not take into account all the variables. However, women are more cautious about the risk and better calibrated long-term impacts (Barber & Odean, 2011). For example, Mittal and Vyas (2011) examined gender differences in attitudes and preferences of risk while investing. Men engaged in more risk taking and were more overconfident than women. On the other hand, women tended to put in their funds in low risk – low return investments.

In this line, other typical mistakes are produced by confirmation bias. The confirmation bias is the tendency to selectively search for or interpret information in a way that confirms one's preconceptions or hypothesis (Jonas, Schulz-Hardt, Frey, & Thelen, 2001). This bias is very common in legal field. For example, a jury has to do an analysis of the different hypothesis and chooses the most likely. However, people sometimes focus only their attention in evidence that confirming their hypothesis and giving more weight to this evidence, and moreover, disconfirming evidence is rejected by them. Consequently, the sentence can be wrong because it is biased.

Another example of this bias could be produced when a police must find out who is the murderer of a woman. It is known that most of the murders are produced by family, friends or couples, that is, the closest circle of the victim. When the police began to investigate his first hypothesis is that the husband was who murder her (by statistics is the most common) and also because he feels that there is something strange in him that he does not like. Surely the police will be fixed on the movements of the husband than any other possible suspect and he would find evidences that incriminate him, leaving aside the evidences that exculpate him. As a result, police is focused on her husband but the murderer is the neighbor and he has enough time to escape. Finally, an ironic cognitive bias is that we notice the biases of other people before than ours. This bias has been called blind spot bias which is the tendency

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