Chapter 2
Cognitive Biases:
Definition and Different Types

ABSTRACT

The cognitive bias would be a pattern of deviation in judgment, in which the inferences we make about other people and/or situations can be illogical. To continue understanding more about the phenomenon, in this chapter a complete list of cognitive biases are displayed. Within these cognitive biases, some were produced by the processing of information, social or group influence, heuristics, expectations of the people, personality traits, etc. Furthermore, within the list of cognitive biases, a more exhaustive explanation of the most important studied cognitive biases will be explained. In addition, the author creates a table with an alphabetical list of each cognitive bias found in scientific literature with a brief definition.

INTRODUCTION

The name of cognitive bias was introduced by Tversky and Kahneman in the early 70s. In a general definition of cognitive bias would be a pattern of deviation in judgment, in which the inferences we make about other people and/or situations can be illogical (Haselton, Nettle, & Andrews, 2005; Tversky & Kahneman, 1974; Kanheman, 2011; Kahneman, Slovic, & Tversky, 1982).

As it has said in the previous and later chapters, cognitive biases can be produced by limited information processing (See Chapter 1, see Chapter 4 also), moral or social motivations (See Chapter 1, see Chapter 5 also).

For example, in our society every day is more difficult to escape from the influences of others. The opinions are expressed and exposed in various media, internet and social networking websites among other ways. In this case individuals fail to account for possible repetition in the information, which many times they receive, it is because of they are subject to persuasion bias (Marzo, Vayanos & Zwiebel, 2003).

Also, they are produced by use of heuristics (See Chapter 1, see Chapter 2 also). For example, Zero sum heuristic is the tendency to assume that the gain of one group (in terms of all resources) is equal to the loss of the other group, that is, the gains and losses are correlated (Meegan, 2010). If we try to think rationally, we will observe that not always exist the correlation between gains and losses. In fact, in many cases it is inexistent. We only must think in the different countries of the world. The gains of one country are not always another country's losses.

For all this, it is necessary to make a general description of the cognitive biases found in the literature to have a general knowledge of them and see how they affect decision making process. Therefore, knowledge of cognitive biases is the first step in becoming aware of them. However, due to the large number of biases, this chapter is just going to explain in detail some of them, especially those that affect decision making process (see section two). Later, in the section three it will find a list of cognitive biases with its brief definition.

LIST OF COGNITIVE BIASES

In this section it will find a list of some important cognitive biases with their explanation and their implications.

Typical Cognitive Biases

Following, it has been enumerated different types of bias:

Anchoring: The tendency to rely too heavily, or "anchor", on one trait or piece of information when making decisions (Kaheman, 2011). For example, when we go to a grocery store and just compare the price among the same fruit and not the other elements such as quality, if this fruit is ecological or not ....

Furthermore, anchoring heuristic is used in numerical prediction when a relevant value is available. For example, in an experiment conducted by Tversky and Kahneman, the participants were asked to try to estimate in just

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