

Deciding Advantageously Before Knowing the Advantageous Strategy

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Decision-Making Under Uncertainty

The article selected for analysis *Deciding advantageously before knowing the advantageous strategy* focuses on how people respond to critical situations (Bechara, Damasio, Tranel, & Damasio, 1997). Deciding advantageously in a given scenario requires a person to have overt reasoning on given knowledge, such as facts related to a proposed situation or knowing that there are certain outcomes for actions that are based on previous experiences (Bechara et al., 1997).

The Iowa Gambling Task Experiment

The authors of the article studied how people responded to a given situation by conducting an experiment in which the participants were given a deck of cards. A gambling scenario evokes real-life decision-making situations as people are uncertain of what they might get by turning each card since there are penalties, rewards, and uncertainty involved in the game (Bechara et al., 1997). The players were given four decks along with a loan of \$2000 replica of U.S bills. The game rules were simple; the participants had to turn each card. The cards carried a reward of \$100 in deck A and B and \$50 reward in decks C and D. There was a twist however, in the game, by turning some cards the players were faced with penalties (Bechara et al., 1997). The uncertainty of penalties and rewards led the players to think over the scene before turning the cards from either of the four decks. The results showed that normal participants analyzed the risks of getting penalties from the given decks, while players with bilateral damage to the ventromedial prefrontal cortices did not review the situation and kept playing (Bechara et al., 1997). The researchers concluded that sensory situations require people to make decisions, which leads to different events. The experiment showed that the autonomic responses are proof of complex processes of nonconscious signaling, which highlights that the brain accesses the previous experiences based on rewards, punishments, and emotional states. The damage to ventromedial cortices functions by using specific kinds of records based on past experiences (Bechara et al., 1997).

Critical Thinking and Logical Reasoning

Before delving into the comparison of the article at hand with other critical approaches, critical thinking should be elaborated upon for a better understanding of the concept. Critical thinking is referred to as the ability to think straight and logically about what an individual has to do and what he

or she has to believe in. Furthermore, critical thinking is based on an individual's capability to indulge in reflective and independent thinking (Peter & Gittens, 2015). A person who has critical thinking ability is able to apprehend the rational link between ideas. In addition to this, he or she is able to identify a topic, formulate ideas based on the topic, and assess arguments (Peter & Gittens, 2015). Solving problems for such an individual is an easy task, and he or she is able to reflect on the validity of other people's beliefs and values. However, it should be noted that not everyone can be a critical thinker. Being a critical thinker does not mean that the person is able to accumulate information or that he or she has a good memory. Instead, to be a critical thinker means having the ability to assess different situations and come up with a logical solution (Peter & Gittens, 2015).

Neural Systems and Prior Experience

The article discussed in this paper focuses on how sensory representations of any given situation are evoked by the activation of neural systems that utilize non-declarative knowledge associated with an individual's past experiences of similar scenarios (Bechara et al., 1997). On the other hand, the cognitive psychology approach asserts that critical thinking is based on an individual's capacity to consciously ponder over and assess his or her own thoughts. This school of thought believes that critical thinking is based on analytical skills, and the critical thinker makes reasonable judgments through his or her skills. While the article focuses on information being influenced by past experiences, the cognitive psychology theory asserts that people can assess situations based on rationality and reasoning.

Developing Advantageous Decision-Making Skills

By assessing the information from past experiences and utilizing reasoning and logical thinking, I can become a strong critical thinker. Knowledge from previous scenarios can be useful in determining the outcome of any situation, while logic and rationality can help assess the situation and act accordingly (Peter & Gittens, 2015). As mentioned earlier, to be a critical thinker, one must rely on one's thought processes before acting on something (Peter & Gittens, 2015). Rationality is one of the core components of critical thinking. It should also be kept in mind that rationality and emotions both play an important role in analyzing a real-life situation. One of the strategies that a person can use to become a critical thinker is that of solving problems on a daily basis. To carry out this process, the individual has to identify the problem and assess it so that he or she knows what they are dealing with. Careful analysis is the next step, which involves interpreting the information and drawing logical references from it. After interpreting the information, the individual has to decide on the possible actions to take and come up with a strategic approach to deal with it. To be a strong critical thinker, one has to identify a situation first and then construct the possible outcomes before commencing acting on it (Peter & Gittens, 2015). Assessing the situation makes it easier to reach a beneficial situation instead of plunging right into it and being overburdened with technicalities (Peter & Gittens, 2015). By utilizing these strategies, it becomes easier to tackle any situation and reach a positive

outcome.

References

Bechara, A., Damasio, H., Tranel, D., & Damasio, A. R. (1997). Deciding advantageously before knowing the advantageous strategy. *Science*, 275(5304), 1293-1295.

Peter, F., & Gittens, C. A. (2015). Think Critically.