

## **Influence of Emotions in Decision Making. Review of Empirical Studies**

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**Abstract:** *The emotions are present in the consumer’s decision making, but the big question that all researchers are asking themselves is, in which way they influence? Understanding this is a difficult matter, because there are different stimulus involved in the process. The rational thinking and the feelings are mixed in a way that is difficult to distinct ones for the others. The classical vision of emotions as problems that disturb the correct decision making has been totally aparted from the publications, nowadays all researchers admit that the contribution of emotions is positive and allows faster and better solutions to the problems. During different decades, researches have made studies to understand how emotions influences decision making. This paper presents a review of the different contributions made during several years with empirical studies.*

### **I. Introduction**

On the early eighties different authors (Zajonc 1980) began to expose emotions as a key factor in consumer’s decision making. Until this period of time, most papers presented emotions as troubles that didn’t allow the correct process, that were the rational and cognitive thinking. With this change, an important number of researchers asked themselves how feelings are involved in mental processes and specially in a task so important to marketing as the decision making.

The nineties were the period of time were the classical view about the right way to make decision changed. The cognitive reasons began to be seen as a part of the emotional thinking, so was in the other side. Damasio (1994) exposed that the emotions were present in all decision making because both the emotional and the rational way of thinking uses the same brain structures.

From the beginning of this century, the development of different techniques associates to the neuromarketing have helped to investigate the way feelings are present in consumer behavior. The new objectives related to the presence of emotions in decision making are based on the several studies that have made this processes more familiar and easier to be understood.

### **II. Empirical contributions**

Authors	Main contributions
Zajonc (1980)	It highlights the importance of emotions in decision making. Preferences can be formed on the basis of simple familiarity, that is, mere exposure. The unconscious form of remembering usually manifests itself to consciousness as a feeling.
Mackie y Worth (1989)	There are two ways to form judgments about complex issues, one is slow but very precise, the other is fast. The slow but precise way is essentially based on logic, but the fast way relies heavily on emotion. Reason and emotion can be conceived as two complementary mechanisms of the human brain to make decisions.
Morris et al. (1998)	The main brain region associated with unconscious recognition of a negatively charged countenance is the right amygdala.
Hsee (1998)	It exposes the evaluability hypothesis, which states that separate object evaluations are often influenced by attributes that are easy to evaluate rather than those that are important. Preferences are constructed ad-hoc and can be easily influenced with subtle contextual manipulation.
Finucane et al. (2000)	They suggest that people tend to use emotions, which increase the efficiency of judgment, through emotional reactions to stimuli. People consult their emotional list, which contain the positive or negative labels associated consciously or unconsciously. Just as imagination, memory, and similarities serve as aids to probabilities judgments, emotions also serve as an aid to judgment. Using an emotive impression may be easier and more efficient than weighing the pros and cons or looking at the memory of many relevant examples, especially when the judgment required or the decision process is complex.
Mac Gregor et al. (2000)	The mistakes that occur in using market predictions result in part because of judgmental strategies on the evolution of values that fail. The accuracy of predictions and their judgments is influenced by cognitive biases that increase by simplifying the processing of complex information.
Isen et al. (2004)	Positive thinking wraps the positive material in memory, making it faster and more accessible in the mind. It also has a broader and more diverse range of responses to neutral words and associated thoughts
Bagozzi (2011)	It raises a model of brand love with seven elements: brand-own integration, passion-driven behaviors, positive emotional connection, long-term relationship, overall positive valence attitude, certainty and confidence in attitude (strength), and anxiety for early separation.
Vrticka et al. (2011)	The regulation of emotion includes various mechanisms intended for the emotional modulation of conscious responses, including cognitive reevaluation or inhibition of the expression of emotions

	and behavior, expressive suppression.
Martín y Delgado (2011)	The use of emotion-regulation strategies during the presentation of a reward stimulus influences the decision-making process itself. Exercising cognitive control over emotional responses manages to modulate neural responses associated with reward processing and illustrates the importance of cognitive strategies in reducing risk behaviors.
Jones et al. (2011)	In game decisions, the psychophysiological and neural aspects are modulated by a sense of urgency to respond, which influences the decision times and active responses of the heart rate, based on the value expected in each bet. This interaction is related to changes in striatal activity.
Sokol-Hessner et al. (2012)	Emotion regulation strategies can alter physiological and behavioral responses to emotional stimuli and neural correlates of responses in regions such as the amygdala or striatum. In decision-making, the regulation of emotions centered on the re-evaluation of strategies that encourage the adoption of a different perspective, reduce the fear of loss.

### III. Discussion

Damasio (1994) and other authors as Bechara et al. (1997) presented in the middle nineties the theory of the somatic marker, that exposed that the rational brain and the emotional brain use the same structures. This theory suggested that emotions are present in all the decision making processes.

This started different empiric studies, as those made by Ledoux (2000) and Simon (2000), in which they suggested too different brain speeds for different processes, depending on their nature.

After reviewing different authors and their contributions during the first decades of the century, we can observe that emotions have begun to be the main part of decision making, the most important tools to achieve the goals that consumer planned before. This shortcuts, as some of the researchers define them, let the decision makers take better and faster decisions, and, instead of spending a lot of time evaluating good and bad consequences of the different possible decisions, emotions allow consumers to reach the gains faster.

The neuromarketing is the science that researcher markets focusing in the feelings and the human brain, trying to reach beyond the conscience. The study of emotions helps to understand in which way the brain processes the different stimulus, and reaches the conclusions that make consumers buy or not a product or service. All the different studies during this decades have helped to develop an appropriate background knowledge, so that the neuromarketing can keep on studying the brain processes that rule the decision making.

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