

## **ABSTRACT**

Advances in neuroscience research and developments of the techniques used in human brain study currently have a strong impact on marketing research, as in the last decade a new field of research called neuromarketing emerged.

After a concise literature review, an algorithm of consumer decision making is proposed. In order to explore the processes taking place in the consumer's mind as the subject experiences different stimuli, the experimental study used both neuroimaging tools ( electroencephalography and functional magnetic resonance imaging) and a behavioral profiling instrument in order to evaluate the effects of moderate beer consumption on consumer perception and autobiographical memory.

The empirical approach targets the mnemonic performance, the link between moderate beer consumption and memory, the connection between behavioral patterns and experienced engagement, and the link between moderate beer consumption and ability of participants to concentrate. Results claim that moderate beer consumption has no effect on the mnemonic performance of remembering the information recently presented nor on the performance of remembering autobiographical information, both with positive emotional valence. Also, moderate beer consumption did not affect the ability to concentrate on the stimuli presented to subjects. On the other hand, subjects' behavior patterns influenced both the performance of updating the information recently presented and the extent to which beer consumption and remembering information with a positive emotional valence is associated with reward. It can be concluded that consumer's reactions become decoded using neuroimaging and the analysis of brain activity. The conducted experiment captures a specific case where the effect of a given stimulus (moderate beer consumption) on memory and on concentration can be deciphered, breaking in this way the neural code of consumer decisions and reactions.

Results may have an impact on both theoretical and practical level, and in terms of marketing, they can be used in beer advertising campaigns, insisting on the connection between remembering and induce pleasant emotional states.