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## TOWARDS NEUROENTREPRENEURSHIP? EARLY EVIDENCE FROM A NEUROSCIENCE STUDY (SUMMARY)

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≈ SUMMARY ≈

**TOWARDS NEUROENTREPRENEURSHIP?  
EARLY EVIDENCE FROM A NEUROSCIENCE STUDY**

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**Principal Topic**

This study complements and extends traditional entrepreneurship research interested on the “mind” of the entrepreneur by looking at their brain in action rather than to its observable manifestations. Here, we argue that Entrepreneurship research would benefit from using tools, techniques, and methodologies from Neuroscience and present the results of a study that confirms that claim.

**Method**

We present here an exploratory study of the brain cortical organization of entrepreneurs (vs. control group) during a simple task with and without emotional interference and observed through Event Related Potential Methodology. ERP measures the brain response to a series of stimuli that can be of different kinds (e.g., sensory, cognitive or motor) depending on the objective of the research. During ERPs, the amplitude of the signal provides information about of three relevant dimensions of these processes: the extent of the neuronal activity of the brain, information over the timing of the process and its sequence, and the areas of the brain active at any moment.

**Results and Implications**

Entrepreneurs can be differentiated from the control group by two cognitive processes unaffected by emotional interference: (a) an early one associated with motor response initiation, mostly localized around supplementary motor areas, and (b) a late one linked to integrative cognitive processes which serve to analyze and evaluate a given response and mainly happening in the anterior frontal regions. Our results indicate that entrepreneurs make a faster decisions compared with controls (shorter reaction times), both behaviourally and neurologically, but take longer to finalize the analysis of the cognitive dimension of that decision. These findings would indicate that entrepreneurs’ brains process the information differently than non-entrepreneurs by a) using different areas of the brain for a similar task, b) showing more / less brain activity than control depending on the moment and, as a consequence, c) are able to make decisions faster, but need more time to elaborate cognitively the decisions made. These differences may confer an advantage to entrepreneur in situations where quick and accurate decision making is required.

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