95/02 - "I just had this feeling...": A Somatic Marker Approach to Understanding Intuitive Decision Making"
Instituição/*Institution:* The University of Northampton - UK
Duração/*Duration:* 2003/04 - 2005/12
Investigador/*Researcher:* Prof. Richard Broughton

Abstract: In the search for physiological indicators of precognitive intuition recent work has shown that physiological responses of the emotional system appear to anticipate future emotional shocks. In conventional neuroscience Damasio and colleagues have shown that similar physiological responses play a role in decision making. In an experiment in which the participant learns to avoid 'risky' decisions the Damasio team demonstrated that the emotional system learns which decisions are risky before the participant is cognitively aware of the risk. Damasio has suggested that this role of the emotional system may underlie conventional intuitive decisions.
It is argued that if precognitive intuition exists as a human ability the efficiencies of evolution could have created a system that merges precognitive information input with existing (emotional) systems that support the decision-making process.
The first of two experiments to examine intuitive decisions making was a replication of the basic Bechara-Damasio experiment that additionally explored individual differences. Fifty participants completed the MBTI and NEO-FFI, and a computerized version of the Iowa Gambling Task (IGT) while skin conductance responses (SCR) were monitored. The second experiment, with 24 participants, was similar to the first, but the IGT was modified to be a test of true precognitive intuition (by randomizing the card deck placement).
In the first experiment the IGT behavioural results (card-selection) demonstrated a significant learning effect, but not as early in the run as expected. SCR results were broadly similar to that found by the Damasio team but failed to reach significance. None of the personality factors significantly discriminated IGT behavioural performance, though the NEO-FFI openness to experience factor was suggestive that participants high on openness preferred risky choices. MBTI judging-perceiving facet was negatively correlated with anticipatory SCRs suggesting that

judging oriented participants produced more SCRs. IGT behavioural performance most closely represented recent research that shows university education may attenuate emotional learning in the IGT, and it is suggested that something similar may be operative in this experiment.
The second experiment showed no overall evidence of precognitive intuition either in the behavioural or the SCR data. MBTI facets extroversion-introversion and judging-perceiving correlated significantly with the number of punishments received, with the extraverts and perceiving types receiving fewer punishments than introverts and judging types; however these significances must be treated cautiously.

114/02 - "The Measurement and Characterization of Charge Accumulation and Electromagnetic Emissions from Bioenergy Healers"
Instituição/*Institution:* Field and Matter Interactions Research Laboratory, Duke University - USA
Duração/*Duration:* 2003/05 - 2005/11
Investigadores/*Researchers:* Prof. William Joines, Prof. Stephen Baumann

Abstract: In this research study the subject under test is asked to focus and to direct their mental energy into a region of space. This energy may be in the form of healing intent directed toward another person, nearby or at a distance, or the subject may choose to focus or concentrate their mental energy onto one of the instruments measuring voltage or light. During the subject's directed or focused intent we measure charge build-up and decay that may occur on the skin surface. For this we use from 1 to 18 electrodes. To record even slight variations over time, the voltage or charge at electrodes arrayed on the body is measured using a very sensitive voltmeter (Keithley model 6514).
These measurements on volunteer subjects are conducted in an electrically shielded darkroom, where we also measure faint amounts of light that may be emitted from the subject. For this we use a cooled (-30 deg C) photomultiplier tube system that counts photons of light. In our study we also monitor the outputs from an argon-cooled IR camera and a gauss meter that are located near the subject.