THE TIME COURSE OF SUGGESTIBILITY: A NOVEL APPROACH TO STUDY THE TIME COURSE OF MENTAL EVENTS

Lucas Jeay-Bizot, Ryan Guglielmo, Tomáš Dominik & Aaron Schurger

Department of Psychology, Chapman University, CA, USA

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Background: Understanding the temporal dynamics of intention formation is crucial for uncovering the neural basis of decision-making.

Aims: Here, we leveraged the suggestibility of subjective reports to implicitly track the time course of intention formation.

Methods: Forty-two participants were led to believe that their brain activity was monitored by a sophisticated AI which could predict their upcoming actions. In reality, random predictions were presented during their deliberation process, and participants reported whether these predictions were correct.

Preliminary Results: Notably, predictions shown early in deliberation were reported as accurate more often than chance, with this effect diminishing as the decision moment approached, β=-0.084, SE=0.040, t(43.818)=-2.130, p=0.039. This pattern suggests that suggestibility decreases as the intention strengthens over time. The onset of intention, estimated using this method, aligned more closely with neural data compared to traditional explicit reporting methods. Our findings highlight the utility of suggestibility as a tool for investigating the formation and time course of mental events and offer a promising avenue for studying the interplay between subjective experience and neural activity.

Keywords: Decision, Volition, Consciousness, Deliberation, Suggestibility

E-mail contact: schurger@chapman.edu