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Authors

Pirrone, Angelo
Parnamets, Philip
Marshall, James
et al.

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Choice magnitude and decision time: investigating magnitude sensitivity in value-based decision making

Angelo Pirrone

University of Sheffield, UK

Philip Pärnamets

Lund University, Sweden

James Marshall

University of Sheffield, UK

Tom Stafford

University of Sheffield, UK

Abstract: From an evolutionary perspective, it has been proposed that decision making should be sensitive to the overall magnitude of the alternatives under consideration in order to resolve costly deadlocks and thus improve long-term reward intake. We provide initial evidence that the overall magnitude of the alternatives affects decision making, by speeding up decision time in order to maximise a speed-value trade off. Implications for current computational models of decision making, in particular for the Drift Diffusion Model, are discussed.