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James Currie, Dheeraj Buruju, Jennifer S. Perrin, Ian C. Reid, J. Douglas Steele,
Nick Feltovich

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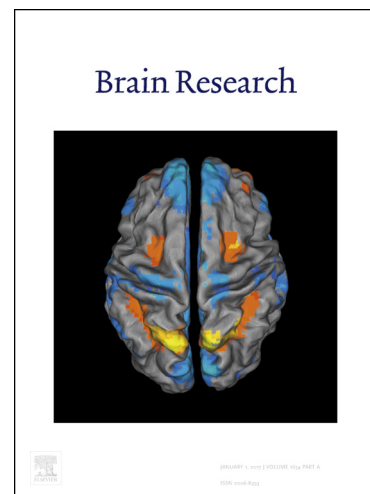
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TITLE PAGE

Schizophrenia illness severity is associated with reduced loss aversion

James Currie ^{a,b,*}, Dheeraj Buruju ^b, Jennifer S. Perrin ^b, Ian C. Reid ^{a,b}, J. Douglas Steele ^c, Nick Feltovich ^d

^a University of Aberdeen, Division of Applied Medicine, Clinical Research Centre, Royal Cornhill Hospital, Aberdeen AB25 2ZH, UK

^b NHS Grampian, Royal Cornhill Hospital, Aberdeen AB25 2ZH, UK

^c University of Dundee, Division of Neuroscience, Ninewells Hospital & Medical School, Dundee DD1 9SY, UK

^d Monash University, Department of Economics, Clayton VIC 3800, Australia

ABSTRACT

Loss aversion, whereby losses weigh more heavily than equal-sized gains, has been demonstrated in many decision-making settings. Previous research has suggested reduced loss aversion in schizophrenia, but with little evidence of a link between loss aversion and schizophrenia illness severity. In this study, 20 individuals with schizophrenia and 16 control participants, matched by age and sex, played two versions of the Iterated Prisoners' Dilemma, one version with only positive payoffs and another version in which negative payoffs were possible, with the second version being derived from the first by subtracting a constant value from all payoffs. The control group demonstrated significantly lower cooperation rates under negative payoffs, compared with the version with only positive payoffs, indicative of loss aversion. The patient group on average showed no loss aversion response. Moreover, the extent of loss aversion in patients was found to be negatively correlated with schizophrenia illness severity, with less ill patients showing loss aversion more similar to controls. Results were found to be robust to the inclusion of potential confounding factors as covariates within rigorous probit regression analyses. Reduced loss aversion is a feature of schizophrenia and related to illness severity.

Keywords

Psychiatry

Decision-making

Game theory

Experimental economics

* Corresponding author at: Clinical Research Centre, University of Aberdeen, Royal Cornhill Hospital, Aberdeen AB25 2ZH, UK.

Email address: j.currie@abdn.ac.uk (J. Currie).

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