

PREDICTING LOTTO NUMBERS: A NATURAL EXPERIMENT ON THE GAMBLER'S FALLACY AND THE HOT HAND FALLACY

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Abstract

We investigate the 'law of small numbers' using a data set on lotto gambling that allows to measure players' reactions to draws. While most players pick the same set of numbers week after week, we find that those who do change, react on average as predicted by the law of small numbers as formalized in recent behavioral theory. In particular, players tend to bet less on numbers that have been drawn in the preceding week, as suggested by the 'gambler's fallacy', and bet more on a number if it was frequently drawn in the recent past, consistent with the 'hot-hand fallacy'. (JEL: D03, D81, D84)

Keywords: behavioral economics, decision biases, gambler's fallacy, hot-hand fallacy, lotto gambling.

The editor in charge of this paper was Stefano DellaVigna.

Acknowledgments: We gratefully acknowledge the constructive comments of five anonymous referees and the most competent and helpful guidance by associate editor Stefano DellaVigna. We are also indebted to insightful comments of seminar audiences at the University of Copenhagen, Tilburg University, UCSD Rady School of Management, University of Exeter, University of Alicante, and Paris School of Economics, and ESA 2009 in Washington DC and IMEBE 2011 in Barcelona.

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