LEICESTER JUDGMENT AND DECISION MAKING ENDOWMENT END OF PROJECT REPORT, OCTOBER 2016

PROJECT TITLE: Coordination, Judgment, and Decision Making

PRINCIPAL INVESTIGATOR

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CO-INVESTIGATOR

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START DATE: 1 October 2011

DURATION (MONTHS): 60 months

Amount: £100,000 (£247,822 FEC) Grant Number RM43G0176.

SUMMARY REPORT:

The project ran for five years with the assistance of a part-time research assistant (Catherine Lawrence, Diana Pinto, and Eva Krockow respectively). In total eleven experiments were completed, three on Stackelberg reasoning, two on Centipede games, two on qualitative analyses of reasoning in games, one on ambiguity in repeated Ellsberg urns tasks, one on repeated Prisoners Dilemma games, one on moral reasoning in Chinese vs British students, and one (in collaboration with NIBS) on payoff size in games.

JOURNAL ARTICLES ARISING FROM GRANT:

- Colman, A. M., Pulford, B. D., & Krockow, E. M. (in preparation). Repeated prisoner's dilemma game. Krockow, E. M., Colman, A. M., & Pulford, B. D. (in press). Cooperation in repeated interactions: A systematic review of Centipede game experiments, 1992–2016. *European Review of Social Psychology*.
- Pulford, B. D., & Colman, A. M., (in preparation). Ambiguity aversion in a repeated Ellsberg urns task. Pulford, B. D., Pinto, D. G., & Colman, A. M. (in preparation). Protocol analysis reveals promiscuous reasoning in dyadic experimental games.
- Pulford, B. D., Colman, A. M., Lawrence, C. L., & Krockow, E. M. (2016). Reasons for cooperating in repeated interactions: Social value orientations, fuzzy traces, reciprocity, and activity bias. *Decision*. Advance online publication. doi: 10.1037/dec0000057
- Pulford, B. D., Krockow, E. M., Colman, A. M., & Lawrence, C. L. (2016). Social value induction and cooperation in the Centipede game. *PLoS ONE*, 11(3), 1–21, e0152352. doi: 10.1371/journal.pone.0152352
- Colman, A. M., & Pulford, B. D. (2015). Psychology of game playing: Introduction to a special issue. *Games, 6*(4), 677–684. doi:10.3390/g6040677
- Colman, A. M., Pulford, B. D., & Lawrence, C. L. (2014). Explaining strategic coordination: Cognitive hierarchy theory, strong Stackelberg reasoning, and team reasoning. *Decision*, 1(1), 35–58. doi: 10.1037/dec0000001

- Colman, A. M., Pulford, B. D., & Lawrence, C. L. (2014). Multi-heuristic strategy choice: Response to Krueger. *Decision*, 1(1), 62–63. doi: 10.1037/dec0000003
- Gold, N., Colman, A. M. & Pulford, B. D. (2014). Cultural differences in responses to real-life and hypothetical trolley problems. *Judgment and Decision Making*, *9*(1), 65–76. http://journal.sjdm.org/12/121101/jdm121101.pdf
- Pulford, B. D., Colman, A. M., & Lawrence, C. L. (2014). Strong Stackelberg reasoning in symmetric games: An experimental replication and extension. *PeerJ*, 2:e263. doi: 10.7717/peerj.263

Book Chapter

Colman, A. M., Krockow, E. M., Frosch, C. A., & Pulford, B. D. (2017). Rationality and backward induction in Centipede games. In N. Galbraith, E. Lucas, & D. E. Over (Eds.), *The thinking mind: A Festschrift for Ken Manktelow* (pp. 139–150). London: Routledge.

Software

Pulford, B. D. (2013). *Strategy generator for experimental games* [Software]. Unpublished instrument. Retrieved from http://www2.le.ac.uk/departments/psychology/ppl/bdp5/strategy-generator/view

Research Dissemination

- Colman, A. M., Pulford, B. D., & Pinto, D. (2016). *Protocol analysis reveals promiscuous reasoning in common interest games.* FUR2016 conference, University of Warwick, UK, June 27-29, 2016.
- Pulford, B. D., Pinto, D. G., & Colman, A. M. (2016). Protocol analysis reveals promiscuous reasoning in dyadic coordination games. International Conference on Thinking, Brown University USA, August 4-6, 2016.
- Colman, A. M., Pulford, B. D., Kölle, F., & Loomes, G. (2015). *Extending the investigation of different models of strategic thinking*. Network for Integrated Behavioural Science Coordination Workshop, University of Nottingham, September 9-11, 2015.
- Pulford, B. D., Colman, A. M., & Lawrence, C. L., & Krockow, E.M. (2015). Reasons for Cooperating in Repeated Interactions: Playing the Centipede Game. 16th International Conference on Social Dilemmas, Hong Kong, June 23-26, 2015.
- Pulford, B. D., Pinto, D., & Colman, A. M. (2015). *Cooperative behaviour in experimental games: Qualitative methods speak volumes*. Invited speaker, Kingston University Interdisciplinary Group on Decision, Thinking and Risk Research, March 25, 2015.
- Pulford, B. D., Krockow, E. M., Pinto, D., & Colman, A. M. (2014). Verbal protocol analysis of strategic choices in static and dynamic dyadic games. Network for Integrated Behavioural Science Coordination Workshop, University of Nottingham, December 13, 2014.
- Colman, A. M., Kolle, F., Loomes, G., & Pulford, B. D. (2014). *Incentives and reasoning in experimental games*. Network for Integrated Behavioural Science Autumn Workshop, September 16-18, 2014.
- Colman, A. M., Frosch, C. A., Pulford, B. D., & Krockow, E. (2014). *Rationality in Centipede games*. Invited paper, Reasoning, Cognition and Life, A Conference in Honour of Professor Ken Manktelow, University of Wolverhampton, May 16, 2014.
- Pulford, B. D., Colman, A. M., & Gold, N. (2014). Cultural differences in life and death decision making. Keynote paper at the Reasoning, Cognition and Life conference, University of Wolverhampton, May 16, 2014.
- Colman, A. M., Pulford, B. D., Krockow, E. M., Rose, J., & Lawrence, C. L. (2013). *Team reasoning versus Nash equilibrium: Experimental evidence*. Keynote paper at the 3rd Conference of the European Network on Social Ontology, Helsinki, October 23-25, 2013.

- Colman, A. M., Pulford, B. D., & Lawrence, C. L. (2013). *Explaining Strategic Coordination*. Paper presented at the ESRC Network for Integrated Behavioural Science, Nottingham, September 12-14, 2013.
- Pulford, B. D., Colman, A. M., & Lawrence, C. L. (2013). *Explaining strategic coordination: Cognitive hierarchy theory, strong Stackelberg reasoning, and team reasoning.* Paper presented at the Experimental Psychology Society Meeting, Bangor, July 3-5, 2013.
- Colman, A. M., Pulford, B. D., & Lawrence, C. L. (2013). *Explaining strategic coordination: Cognitive hierarchy theory, strong Stackelberg reasoning, and team reasoning.* International Conference on Social Dilemmas, Zurich, July 10-13, 2013.