

## LEICESTER JUDGMENT AND DECISION MAKING ENDOWMENT END OF PROJECT REPORT

**PROJECT TITLE:** Comparisons, Confidence, and Causality in Decision Making

### PRINCIPAL INVESTIGATOR

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**START DATE:** 1 October 2016

**DURATION (MONTHS):** 24 months

**Amount:** £26,039 (£134,293 FEC) Grant Number RM56J0001.

### SUMMARY REPORT:

The project ran for two years with the assistance of a part-time research assistant (Eva Krockow). The project resulted in the completion and publication of research proving the existence of a *confidence heuristic*, which was published in the prestigious *Journal of Experimental Psychology: General*. We disseminated this research at three conferences and wrote an article about it in the *Conversation*.

The grant also supported the completion of the research into gender differences in repeated prisoner's dilemma games, which was published in *Acta Psychologica* and immediately had significant on-line impact and twitter discussion, resulting in a high Altmetric score of 181 from 246 tweeters with a potential readership of 389,719 people.

A separate research activity was the review and evaluation of literature on shared decision making in medical consultations of children and adolescents with chronic health. Initiated by a student dissertation, this project resulted in a narrative literature review article, which is currently in press with *Patient Education and Counseling*.

A significant amount of time was spent analysing transcripts of strategies in experimental games and developing an integrated theory of coordination in decision making. A draft manuscript is nearing completion.

### JOURNAL ARTICLES ARISING FROM GRANT:

- Pulford, B. D., Pinto, D. G., Colman, A. M., & Krockow, E. M. (in preparation). Towards an Integrated Theory of Coordination in Decision Making: Qualitative Evidence from Dyadic Games.
- Pulford, B. D., Colman, A. M., Buabang, E. K., & Krockow, E. M. (2018). The persuasive power of knowledge: Testing the confidence heuristic. *Journal of Experimental Psychology: General*, 147(10), 1431–1444. <https://doi.org/10.1037/xge0000471>
- Krockow, E. M., Riviere, E., & Frosch, C. A. (2018). Improving shared health decision making for children and adolescents with chronic illness: A narrative literature review. *Patient Education and Counseling*. <https://doi.org/10.1016/j.pec.2018.11.017>

- Colman, A. M., Pulford, B. D., & Krockow, E. M. (2018). Persistent cooperation and gender differences in repeated prisoner's dilemma games: Some things never change. *Acta Psychologica*, 187(6), 1–8. <https://doi.org/10.1016/j.actpsy.2018.04.014>
- Colman, A. M., & Krockow, E. M. (2017). Game theory and psychology. In D. S. Dunn (Ed.), *Oxford bibliographies in psychology*. New York: Oxford University Press.

#### **RESEARCH DISSEMINATION:**

- Krockow, E. M., Pulford, B. D., Colman, A. M., & Buabang, E. K. (2019). *Persuading with confidence: Evidence for the Confidence Heuristic*. Invited Seminar at the Metacognition lab, University College London, UK, January 23, 2019.
- Krockow, E. M. (18 July 2018). The confidence heuristic [Podcast interview]. In The Conversation (producer), *Anthill 27*, London, UK.
- Krockow, E. M., Colman, A. M., & Pulford, B. D. (2018). Confused about who to believe when information clashes? Our research may help. *The Conversation*. <https://theconversation.com/confused-about-what-to-believe-when-information-clashes-our-research-may-help-102519>
- Pulford, B. D., Colman, A. M., Buabang, E. K., & Krockow, E. M. (2018). *Persuading with confidence: Evidence for the Confidence Heuristic*. Paper presented at the FUR2018 conference, University of York, UK, June 25–28, 2018.
- Pulford, B. D., Colman, A. M., Buabang, E. K., & Krockow, E. M. (2018). *Persuading with confidence: Evidence for the Confidence Heuristic*. Poster presented at the M2D (models to Decisions) 2018 conference, University of Cambridge, UK, June 11–14, 2018.
- Pulford, B. D., Colman, A. M., Buabang, E. K., & Krockow, E. M. (2018). *Persuading with confidence: Evidence for the Confidence Heuristic*. Paper presented at the Experimental Psychology Society Meeting, Leicester, April 18–20, 2018. 16.