

# Newcastle Experimental Economics Workshop



**9 - 10 November 2023**



Version: 2023-10-31

# Programme

## Thursday, 9 November 2023

12:30-13:25	Registration & lunch
13:25-13:30	Welcome remarks
13:30-15:00	Submitted talks 1 (Session chair: Matt Walker) <ol style="list-style-type: none"><li>1. Deterring extraction from the commons: evidence from an experiment <i>Anomitra Chatterjee (London School of Economics)</i></li><li>2. Position uncertainty in a sequential public goods game: an experiment <i>Chowdhury Mohammad Sakib Anwar (University of Winchester)</i></li><li>3. Using milestones as a source of feedback in teamwork: Insights from a dynamic voluntary contribution mechanism <i>Boon Han Koh (University of Exeter)</i></li><li>4. Reciprocity and the tragedies of maintaining and providing the commons: a replication and an extension to income inequality <i>Michalis Drouvelis (University of Birmingham)</i></li></ol>
15:00-15:15	Coffee/tea
15:15-16:45	Submitted talks 2 (Session chair: Jytte Seested Nielsen) <ol style="list-style-type: none"><li>1. Microplastics, seafood, and consumer preferences <i>Manuel Barrientos (Durham University)</i></li><li>2. Gender-inclusive language and economic decision-making <i>Helena Fornwagner (University of Exeter)</i></li><li>3. Empathy, motivated reasoning, and redistribution <i>Tingyan Jia (University of Leicester)</i></li><li>4. Identifying payoff- and risk-dominance effects in coordination games <i>Stephan Jagau (University of Nottingham)</i></li></ol>
16:45-17:00	Coffee/tea
17:00-18:00	Keynote lecture 1 "Selective information sharing and group delusion" <i>Marie Claire Villeval (CNRS, Lyon)</i>
19:00	Dinner at The Magic Hat Café

## Friday, 10 November 2023

8:45-9:00	Coffee/tea
9:00-10:00	Keynote lecture 2: "Cooperation and the role of institutions: Some insights from public goods experiments" <i>Peter Martinsson (Technical University of Denmark &amp; University of Gothenburg)</i>
10:00-10:15	Coffee/tea
10:15-11:45	Submitted talks 3 (Session chair: Darren Duxbury) <ol style="list-style-type: none"><li>1. Behavioural spillovers unpacked <i>Julien Picard (London School of Economics and Political Science)</i></li><li>2. Preferences for market-based allocation mechanisms <i>Renaud Foucart (Lancaster University)</i></li><li>3. "Duels between duals," an experimental comparison of compensation auctions <i>Aleksei Chernulich (Durham University)</i></li><li>4. Trade, voting, and ESG policies: theory and evidence <i>Daniel Friedman (University of California, Santa Cruz &amp; University of Essex)</i></li></ol>
11:45-12:00	Coffee/tea
12:00-13:10	Submitted talks 4 (Session chair: Sue Chilton) <ol style="list-style-type: none"><li>1. Reminders to promote exercising: a large-scale experiment <i>Claire Mollier (Nanterre University)</i></li><li>2. Mental illness discrimination <i>Matthew Ridley (University of Warwick)</i></li><li>3. Heuristics and biases in risky choice under cognitive load restrictions <i>Konstantinos Georgalos (Lancaster University Management School)</i></li></ol>
13:10-14:00	Lunch

## Workshop venue

The workshop will be held at the Urban Sciences Building Room G.003 (ground floor). The Urban Sciences Building is located in the newly developed city centre innovation district next to the Newcastle University Business School. It is in walking distance of Newcastle Central Station (approx. 15 minutes). The closest Metro stop is "St James" (approx. 5 minutes). For public transport information see: <https://www.nexus.org.uk/>

Room G.003  
Urban Sciences Building  
Newcastle University  
1 Science Square  
Newcastle upon Tyne  
NE4 5TG

## Dinner venue

We booked the Magic Hat Café for dinner on Thursday, 9 November 2023, from 7.00pm. The Magic Hat Café is located in the city centre and is committed to providing fresh, colourful and delicious meals in a sustainable way. Walking from The Catalyst to the Magic Hat Café will take approximately 15 minutes.

Magic Hat Café  
Higham House  
Higham Place  
Newcastle upon Tyne  
NE1 8AF

<http://www.themagichatcafe.co.uk>



## Notes for chairs and presenters

Each presentation will last approximately 22 minutes. You can divide this time between your presentation and the discussion as you prefer. However, we recommend leaving at least 5 minutes for the discussion. Each session has a designated chair who is responsible for timekeeping and moderating the discussions. A computer with MS Windows will be available in the room. Your presentation should be in PowerPoint or PDF format. Please bring your presentation on a USB flash drive and copy your slides onto the computer before the start of your session.

## Lunch and coffee breaks

Buffet lunch will be served in the lobby in front of Room G.003. Tea and coffee will be available during breaks. We encourage you to bring a reusable water bottle which can be refilled at the water fountain.

## Internet

Please select the Wifi network "Eduroam". You will need your University username and password to sign in.

## Code of conduct

We would like to inform all participants that the RES Code of Conduct will apply to this event. More details can be found here; <https://res.org.uk/about-us/code-of-conduct/>

## Acknowledgements

Funding from the Royal Economic Society and Newcastle University Business School is gratefully acknowledged.

## Contact information

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# Abstracts

## **Keynote lectures**

Selective Information Sharing and Group Delusion

*Marie Claire Villeval (CNRS, Lyon) with A. Suvorov and J. van de Ven*

*Abstract:* Although they usually make more rational decisions than individuals, groups also sometimes make mistakes. We investigate experimentally one possible source of group delusion leading to sub-optimal decision-making: the selective and asymmetric sharing of ego-relevant information among team members, especially if individuals do not correct sufficiently for this bias when evaluating the strength of their team.

Cooperation and the role of institutions: Some insights from public goods experiments

*Peter Martinsson (Technical University of Denmark & University of Gothenburg)*

*Abstract:* Public goods are at the core of many environmental challenges, from recycling to fighting climate change. Cooperation is needed to ensure their provision. The main problem is that individual and social interests are in conflict; thus, there is an incentive for individuals to free-ride. Different forms of formal and informal institutions have been suggested and tested experimentally to mitigate the issue of free-riding and the decrease in contributions to public goods over time. Insights from public goods experiments testing different forms of institutions are discussed with a focus on findings from studies conducted in developing countries.

## **Submitted talks 1**

Detering extraction from the commons: evidence from an experiment

*Anomitro Chatterjee (London School of Economics)*

*Abstract:* Resource management programs use monitoring and sanctioning mechanisms to enforce rules to mitigate social dilemmas like over-extraction from common property resources. Existing literature on enforcement in strategic choice environments is sparse and provides mixed evidence regarding the effectiveness of probability of detection versus severity of sanctions. In a controlled laboratory experiment using a resource extraction game, I exogenously vary these two classic deterrence parameters while keeping expected penalties constant. I test their relative efficacy under four alternative compliance regimes that vary harvest quota levels and the relative financial incentives for compliance. I find that higher probability of monitoring is more effective at reducing harvest from the common pool than an equivalent increase in severity of sanctions. Further, a combination of fines and rewards with imperfect monitoring is more effective than fines alone at reducing socially detrimental harvest. The results are driven by lower harvest by free-riders in the presence of exogenous monitoring and sanctions. Overall, the paper suggests that regulators should invest in detection infrastructure rather than focusing on setting more stringent penalties. To mitigate crowding out of intrinsic motivation, deterrence mechanisms in social dilemmas should be targeted to situations characterized by greater free riding than where baseline norms of cooperation are strong.

## Position uncertainty in a sequential public goods game: an experiment

*Chowdhury Mohammad Sakib Anwar (University of Winchester) with Konstantinos Georgalos*

*Abstract:* Gallice and Monzón (2019) present a natural environment that sustains full co-operation in one-shot social dilemmas among a finite number of self-interested agents. They demonstrate that in a sequential public goods game, where agents lack knowledge of their position in the sequence but can observe some predecessors' actions, full contribution emerges in equilibrium due to agents' incentive to induce potential successors to follow suit. In this study, we aim to test the theoretical predictions of this model through an economic experiment. We conducted three treatments, varying the amount of information about past actions that a subject can observe, as well as their positional awareness. Through rigorous structural econometric analysis, we found that approximately 25% of the subjects behaved in line with the theoretical predictions. However, we also observed the presence of alternative behavioural types among the remaining subjects. The majority were classified as conditional co-operators, showing a willingness to cooperate based on others' actions. Some subjects exhibited altruistic tendencies, while only a small minority engaged in free-riding behaviour.

## Using milestones as a source of feedback in teamwork: Insights from a dynamic voluntary contribution mechanism

*Boon Han Koh (University of Exeter) with Nisvan Erkal and Nguyen Lam*

*Abstract:* Many economic activities rely on teamwork where groups of individuals work together for a common goal by pooling their resources or skills. However, cooperation within teams can be challenging due to the social dilemma problem which arises when individual incentives interfere with operational effectiveness. We study teamwork in a dynamic public goods game setting where individuals make multiple contribution decisions to a team project and face strategic uncertainty about the behavior of their team members. We examine whether providing feedback about the team's progress at regular intervals (time-based feedback) or based on the achievement of milestones (milestone-based feedback) is more beneficial for increasing aggregate contributions. Our results reveal that providing milestone-based feedback leads to a significant increase in aggregate team contributions as compared to time-based feedback. This impact is largely driven by conditional cooperators. Findings from a follow-up experiment reveal evidence of a goal effect, a signaling effect, and an information effect arising from the use of milestones on the behavior of conditional cooperators.

## Reciprocity and the tragedies of maintaining and providing the commons: a replication and an extension to income inequality

*Michalis Drouvelis (University of Birmingham) with Zeyu Qiu*

*Abstract:* Social cooperation frequently necessitates exercising restraint that is beneficial to the group as a whole but imposes costs on individuals, to maintain a public good, or it requires individuals to incur costs by being generous in order to establish one. Will people's cooperative behaviors vary between maintenance and provision dilemmas? In our first experiment, we conducted an exact online replication of the laboratory experiment by Gächter, Kölle and Quercia in *Nat. Hum. Behav.* in 2017 (Gächter S, Kölle F, Quercia S. Reciprocity and the tragedies of maintaining and providing the commons. 2017. *Nat. Hum. Behav.* 1(9): 650-656). Using a more representative non-student sample, we replicate their results and find low levels of cooperation are systematically more likely in maintenance than provision. We also identify reciprocity as the reason behind cooperative differences. In a separate second experiment, we extend both of these results when examining the case of income inequality where individuals' endowments are unequal. Our findings thus offer novel evidence generalizing previous results showing that



dilemma-specific reciprocity is required to avoid 'tragedy of the commons' in broader sets of games and populations.

## **Submitted talks 2**

Microplastics, seafood, and consumer preferences

*Manuel Barrientos (Durham University) with Felipe Vásquez, Roberto Ponce, Rodolfo Nayga and Stefan Gelcich*

*Abstract:* Microplastics are an emerging pollutant that has captured consumers' attention because of their potential effects on human health and the environment. Considering the relevant role of seafood in food security, this increasing concern can be detrimental to meeting future global food demand. In this study, we conducted a discrete choice experiment to investigate Chilean consumers' preferences for technology aimed at reducing the amount of microplastics in mussels. We used a split-sample approach and randomly varied contextualization information about the potential effects of microplastics on human health, the environment, and both together. We found that most attributes were relevant to consumers, and information treatments increased their willingness to pay for them. The health treatment increased the price premium for 90% of depuration efficiency by 56%, and the environmental treatment increased it by 21%. Moreover, this additional information also increased the probability of non-purchasing behavior by 22.8% in the health and environment treatment. These results are relevant to validating investment in research and development related to MP pollution mitigation measures.

Gender-inclusive language and economic decision-making

*Helena Fornwagner (University of Exeter) with Loukas Balafoutas, Emily Hauser and Oliver Hauser*

*Abstract:* Providing inclusive environments has become a primary tenet of modern societies. One attempt at inclusivity has been through gender-inclusive language (GIL), yet little is known about its effects on relevant economic behaviours that could reduce important gender gaps in the labour market. GIL avoids the masculine "default" (common to many languages) by either explicitly mentioning both masculine and feminine (pro)nouns or by replacing them with non-gendered (pro)nouns. Here we study the causal impact of GIL on competitiveness and leadership in the laboratory, with two different language samples - English and German - which differ, among other things, in the extent to which gender is embedded linguistically. We vary GIL in experimental instructions across three treatments (N=2,205): a masculine baseline condition, a condition with feminine and masculine (pro)nouns, and a condition with non-gendered (pro)nouns. We find that female-identified and male-identified participants compete, stand for leadership, and vote on leader candidates similarly across all treatments, regardless of whether or not GIL is used, in either language. Furthermore, we find no treatment differences in participants' feelings of inclusiveness in their group, or their perceived entitlement to compete or become a group leader. Overall, there is a lack of support for GIL having short-term causal effects on competitive and leadership behaviours and inclusion perceptions. These findings offer practical guidance to policy-makers interested in such behaviours, and we conclude by encouraging further work on the effects of GIL on other economic and social behaviours that are less immediate and may emerge more gradually.

Empathy, motivated reasoning, and redistribution

*Tingyan Jia (University of Leicester)*

*Abstract:* Through theoretical and experimental analysis, this study explores the role of empathy in economics and its implications for redistribution. Empathy is defined as accurately simulating others' feelings, distinct from altruism. Self-interested wealthy individuals may choose not to be empathetic towards the poor to justify limited redistribution. However, diverse personal experiences counteract this self-serving motivated reasoning, promoting greater empathy and redistribution. I formalize the mechanism with a model and conduct a laboratory experiment with exogenous variations in experience and information to validate the model's predictions. Empirical results affirm the motivated reduction of empathy and underscore the mitigating effect of experience.

Identifying payoff- and risk-dominance effects in coordination games

*Stephan Jagau (University of Nottingham)*

*Abstract:* Five decades after Harsanyi and Selten's seminal work on equilibrium selection, we remain unable to predict the outcomes of real-life coordination even in simple cases. One reason is that experiments have struggled to quantify the effects of payoff- and risk-dominance and to separate them from context factors like feedback, repetition, and complexity. This experiment is the first to demonstrate that both payoff- and risk-dominance significantly and independently impact coordination decision-making. Three innovations characterize the design: First, payoff- and risk-dominance are disentangled using orthogonal measures of strategic incentives and welfare externalities. Second, a no-feedback, choice-list format minimizes deviations from oneshot incentives. Third, beliefs about others' behavior are elicited next to decisions. Surprisingly, beliefs do not only drive the effect of risk dominance but also the one of payoff dominance. This is in line with subjects viewing efficient coordination as a "team"-problem.

### **Submitted talks 3**

Behavioural spillovers unpacked

*Julien Picard (London School of Economics and Political Science) with Sanchayan Banerjee*

*Abstract:* Past research indicates that our previous pro-social actions affect future ones. As such, which pro-social deeds make us willing to do more? Do nudges fostering these pro-social deeds crowd out this behavioural spillover? We focus on a social norm nudge promoting vegetarianism in an online experiment (n=2775). We find that respondents choosing vegetarian food give more to pro-environmental charities. However, the social norm nudge crowds out donations among a population segment that initially responded positively to the nudge. Despite their popularity, social norm nudges may, therefore, be counterproductive. Our empirical strategy stems from a model describing how acting pro-socially affects individuals' willingness to do extra pro-social actions and how nudges can crowd out or crowd in this willingness. We identify these effects with an instrumental variable and explore heterogeneity with machine learning.

Preferences for market-based allocation mechanisms

*Renaud Foucart (Lancaster University) with Elias Bouacida*

*Abstract:* We consider the problem of allocating a scarce resource to individuals. A centralized market procedure eliciting individual valuations and yielding a unique price provides in theory the most efficient and equitable way of doing so. As compared to an individualized procedure where

the price can possibly differ among players, we show experimentally how such a market indeed protects subjects who make mistakes. We however find little support for a centralized market procedure. One reason is that the benefits from the market are concentrated on a minority of subjects, and many vote against their own monetary interest. The other is that subjects who can expect similar payoffs in both procedures show a strong preference against the market.

"Duels between duals," an experimental comparison of compensation auctions

*Aleksei Chernulich (Durham University) with Matt Van Essen and John Wooders*

*Abstract:* We study two auctions for solving the bargaining problem of allocating  $K$  homogenous goods among  $N$  bidders, when each bidder has an equal claim to a unit of the good. In the ascending compensation auction, a bidder who drops out of the auction surrenders his claim to a unit of the good and receives compensation equal to the price at which he drops out. In the descending compensation auction, a bidder who drops out wins a unit of the good and pays the price at which he drops as compensation to the  $N-K$  bidders not allocated a unit. The auctions are duals of one another and have a number of attractive theoretical properties. The auctions are ex-post efficient, payoff equivalent, and each has a connection with a Shapley value associated with the underlying allocation problem. We use an experiment to test the theoretical equivalences of these two auctions as well as to compare the relative performance.

Trade, voting, and ESG policies: theory and evidence

*Daniel Friedman (University of California, Santa Cruz & University of Essex) with John Duffy, Jean Paul Rabanal and Olga A. Rud*

*Abstract:* We model the interaction between shareholder trading and voting on an ESG policy under different sets of preferences, and then test the equilibrium predictions of our model in the laboratory. The model suggests, and laboratory results confirm, that low policy costs favor policy adoption and that intermediate costs lead to a lower rate of policy adoption under dispersed preferences than under polarized preferences. Observed share prices are higher than equilibrium predictions when the policy is adopted. This suggests that the cost to incumbent shareholders of adopting ESG policies may be less than anticipated.

## **Submitted talks 4**

Reminders to promote exercising: a large-scale experiment

*Claire Mollier (Nanterre University) with Beatrice Braut and Sarah Zaccagni*

*Abstract:* Using a field-experiment, our study aims to test if different types of reminders have a positive effect on the number of steps in the short and long period. This study, in collaboration with a step tracking application, benefits from a large sample ( $N = 20,187$ ) and allows us to send three types of messages to users, framed to emphasize different behavioral features: sunk-cost, peers and self comparison. The control group receives the basic reminder usually sent by the application. Our results approach that women walk less than men, but are more committed to the application. The average number of steps over the course of the experiment follows a downward trend, mainly due to the Christmas vacations. We find that the treatment effects differ according to the category of walker. Overall, users who walk less than 5,000 steps before the treatment's implementation are the one who benefit the more from the change of messages. Furthermore, women appear more disadvantaged by the peers comparison treatment, which could exert pressure on them.

## Mental illness discrimination

*Matthew Ridley (University of Warwick)*

*Abstract:* I study discrimination against people with symptoms of depression or anxiety, conditions which are very common, socially stigmatized, and linked to lower earnings and employment. In an online experiment, I find that people pay to avoid depressed or anxious coworkers in a simple communication-based problem-solving task—paying as much to avoid them as they do to work with the college-educated. A model of earnings-maximizing statistical discrimination with correct beliefs cannot explain these preferences: depressed or anxious coworkers are equally productive when exogenously assigned. Instead, I find evidence that discrimination is driven by incorrect beliefs about such coworkers as well as an increase in costly effort when working with them. A major motivation for tackling discrimination is often to encourage revelation of mental illness (thereby perhaps improving access to treatment or support); however, I find that people pay to hide mental illness in my setting even when insulated from rejection or any financial consequence of discrimination.

## Heuristics and biases in risky choice under cognitive load restrictions

*Konstantinos Georgalos (Lancaster University Management School) with Nathan Nabil*

*Abstract:* It is imperative to account for the domain, context, and environment of a decision when deciding upon which model of risky choice to adopt in any analysis. Certain domains or characteristics of a decision may leave an individual with an overwhelmed cognitive load; this in turn alters the strategy and underlying process used to tackle the decision. This paper analyses 6 data sets, in different domains (Gains, Losses, increased time-pressure, increased complexity) to see whether an adaptive toolbox of heuristics can better explain the individuals strategic process than cumulative prospect theory. We also provide a means of accurately estimating toolbox models using Bayesian Hierarchical Modelling (BHM). We show how BHM reduces overfitting by pulling data from the group level, whilst still accounting for individual decisions, which provides an explanation for the ambiguity associated with heuristics in the economics literature. We also find that, as an individual's cognitive load increases, either through increased time pressure or increased complexity in the decision-task, individuals switch from using CPT to using an adaptive toolbox of heuristics. Finally we formalise a metric to allow one to determine the objective complexity of any decision-task.

Notes

**Find out more:**



[conferences.ncl.ac.uk/neew](http://conferences.ncl.ac.uk/neew)